

RELATIONSHIP OF EMPATHY TRAINING  
ON EMPATHIC LEVEL OF NURSES  
AND PATIENT SATISFACTION  
WITH NURSING CARE

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TEXAS WOMAN'S UNIVERSITY

COLLEGE OF NURSING

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DENTON, TEXAS

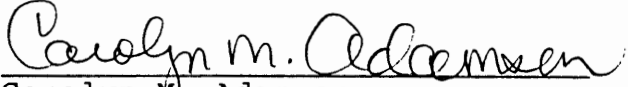
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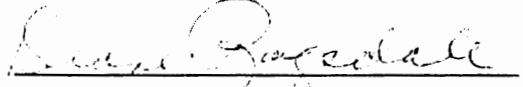

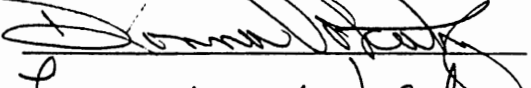
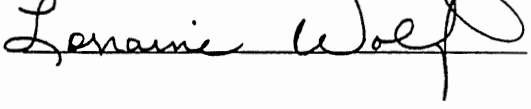
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To the Provost of the Graduate School:

I am submitting herewith a dissertation written by Mary Holt-Ashley, M.S., entitled "Relationship of Empathy Training on Empathic Level of Nurses and Patient Satisfaction with Nursing Care." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Nursing.

  
Carolyn M. Adamson,  
Major Professor

We have read this dissertation  
and recommend its acceptance:

Accepted

  
Provost of the Graduate School

DEDICATION

To

Ellis

"Character development is the  
true aim of education."

Wings of Silver

## ACKNOWLEDGEMENTS

The writer acknowledges these faculty members, family and friends who gave their support and assistance throughout this endeavor. It is to these individuals that I wish to express my sincere gratitude.

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## CHAPTER 1

### INTRODUCTION

Nursing, a dynamic process in which empathy is an important variable, is predicated on establishing nurse-patient relationships. Clay (1984) described nursing as a series of nurse-patient relationships characterized by the communication of awareness of which empathy is a consistent factor. According to Kalisch (1971), empathy is the ability to take on the role of another human being and to experience that role as if it were one's own. An empathic interaction involves both the verbal and nonverbal components of communication. This empathic interaction between client and nurse allows the nurse to identify client needs and to provide help. More significantly, Carkhuff (1969a) stated that if empathy is not present in an interaction, there is no basis for helping the client.

Since nursing is a helping profession, nurse-patient interactions must occur so that nurses can identify patients needs. The expression of empathy facilitates disclosure of patient needs. Both the patient and family may have multiple needs. According to Bergman (1983), these needs may be of a psychological, physiological

or sociological nature and vary depending upon the individual and the individual's state of health. In order to meet the patient's needs, the nurse has to be accurate and precise in the identification and interpretation of these needs. The nurse must be able to sense what the client is experiencing and feeling in order to generate individualized nursing care.

Nursing care for the patient is dependent upon the nurse's empathic level. In stressing this point, Layton (1979) asserted that without this competence, other skills and abilities of the nurse are less effective. More importantly, Rogers (1957) pointed out that effective therapy only occurs when the therapist is empathetic. If this is true, then the expression of empathy, like other tangible skills, should be investigated through scientific research in order to predict, describe and explain its effect upon the nurse-patient relationship. According to Forsyth (1979), such a process can add to nursing theory and may enhance professional relationships. For this study the investigator will explore the effects of empathy training on the nurse's empathic level and on patient satisfaction with nursing care received.

### Problem Statement

The problem for this study is expressed in two questions about empathy training and its effectiveness in increasing nurses' empathic level and patient satisfaction with nursing care.

1. Do nurses who receive empathy training classes demonstrate higher levels of empathy than nurses who do not receive empathy training classes?

2. Do patients who receive care by nurses who have had empathy training classes express higher levels of satisfaction with their care than patients who receive care from nurses who have not had empathy training classes?

### Justification of the Problem

Empathy demonstrated by a nurse affects the quality of the nurse patient interaction and according to Hills and Knowles (1983) ultimately influences the quality of care rendered to the patient. The use of empathy provides a facilitative condition for understanding the patient. A prerequisite to planning interventions is knowing what the patient wants and desires. As Giuffra (1980) stated, interventions based on humanistic interactions lead to therapeutic changes, whereas interventions based on instincts may lead to dysfunctional outcomes.

The goal of nursing according to LaMonica (1979) is to help patients achieve and maintain their health potential. In order to effect progress toward wellness or maintenance of wellness, LaMonica stated that the nurse must merge into the client's feelings, experiences and perceptions so that client-centered data obtained are the bases for individualized nursing care. This basic premise implies that empathy is an influential variable in promoting an environment conducive to the goal of providing care to the patient.

If use of empathy has such a profound affect on patient care outcomes, then nursing educators, administrators and researchers are compelled to seek more knowledge about the empathy levels of nurses. In addition to existing empathy levels, an issue of importance is the enhancement of nurses' empathy levels. Although investigators (Blocher, 1966; Carkhuff, 1969a, 1969b; Katz, 1963) have indicated that empathy has been studied from a psychological and sociological perspective, little research has been conducted regarding the significance of empathy in relationship to nurse-patient relationships and patient satisfaction with nursing care.

As early as 1956, Speroff reported the importance of empathy in interpersonal relationships. In later studies

(Elms & Leonard, 1966; Truax & Carkhuff, 1967) investigators studied the impact of the use of empathy on interpersonal relationships. The results of these studies indicated that empathy had therapeutic value in interpersonal relationships and that empathy could be developed through training.

Kalisch (1971) explored the role of empathy in nursing education. Four groups of students were studied using empathy training classes for the experimental groups and lecture discussion on human behavior for the control groups. The empathy training classes were 12.5 hours in length and consisted of didactic training, role playing, experiential training, and role modeling of empathy. Results of Kalisch's study indicated that the students who were in the experimental groups improved significantly from pretest to posttest in their scores on the empathy rating scale.

Further evidence that empathy can be taught was described by LaMonica, Carew, Winder, Haase, and Blanchard (1976). Thirty-nine nurses were divided into an experimental and two control groups. The experimental and one control group received the Carkhuff's (1969b) Index of Communication scale as a pretest and posttest; whereas control group three only received the scale as a

posttest. The experimental group attended the staff development program on empathy. A comparison of the pretest scores using the Mann-Whitney U revealed no significant difference between the groups. A Kruskal-Wallis was used to analyze the posttest scores. The findings revealed that the experimental group scores were significantly higher than either of the control groups.

In another study, Wallston, Cohen, Wallston, Smith, and DeVellis (1978) studied two groups of nurses to determine if training in appropriate responses to patients affected nurses' degree of person centeredness in their responses during client interactions. The 24 nurses in the experimental group and the 20 nurses in the control group responded to statements after listening to simulated topics containing patient disclosures. During the first phase, the experimental group responded to the statements independently but in the second phase the nurses were given a 450 word statement which provided illustrative examples for making helpful responses to patients. The control group did not receive an intervention between phase I and phase II. All responses were rated by a panel of judges. The t-test results indicated that the experimental group had significant improvement in the degree of person centeredness.



Although researchers have demonstrated that empathy training can increase nurses' empathic level, a paucity of research on training nurses to be empathic was found in the literature search. Therefore, it seems that more research is warranted. The aim of this study was to add to the body of knowledge on empathy as it relates to nursing and to examine the effect of nursing care provided by empathy trained nurses on the patient satisfaction level. In this study the investigator also examined nurses' levels of empathy in relationship to the demographic variables, age, education, length of practice and ethnicity.

#### Conceptual Framework

Ashley's empathetic process model, the conceptual framework for this study, was derived from Maslow's hierarchy of needs theory and the client-centered therapy theory by Carl Ranson Rogers. Corey (1977) termed Rogers' theory a humanistic approach which illuminates the experiences of patients and their subjective worlds. In the client-centered point of view a person is seen as basically rational, socialized, forward-moving and realistic. According to Corey this point of view is contrary to the

common concept that a person by nature is irrational, unsocialized, and destructive of self and others.

The development of the theory was in reaction to what Rogers considered the basic limitation of psychoanalysis. His approach to psychotherapy is termed "person-centered" in that the therapist facilitates personal growth by helping the client to discover self-capacities for solving problems (Corey, 1977). The client is responsible for discovering ways to encounter reality and to acquire appropriate behavior for self. In Rogers' opinion, the interaction between the client and therapist creates an interpersonal situation in which the client becomes aware of self and the therapist demonstrates an acceptance of the client as a competent person.

The therapist and the client release human feelings and share in a growth experience. Rogers (1975) conceptualized empathy by asserting that every human being exists in a continually changing world of experience in which a person is the center. As the client and the therapist interact, the patient experiences psychotherapeutic growth in and through this relationship which enables the client to experience a therapeutic change. The therapeutic changes experienced by the client are dependent upon the client's perception of the experiences

encountered in the interaction between client and therapist.

The goals of client-centered therapy for the client are general because the therapist does not choose specific goals for the clients; instead clients clarify their own. According to Rogers (1951) the client-centered goals are aimed at helping the clients experience responsibility and a reorganization of self. The clients becomes more open to experience and move towards self-actualization. These goals are dependent upon the therapist's ability to demonstrate and communicate to clients that they are congruent persons. The therapist accepts the individuals' feelings and personhoods and is able to sensitively and accurately perceive their internal worlds. The results are that clients will be able to use this relationship to become the persons desired to be (Corey, 1977).

People's needs in the empathetic process model are prioritized in the same order as Maslow's (1968) hierarchy of needs theory. Maslow stated that a person is a wanting animal with needs that are dependent upon what one already has and that these needs are basic and common to all humans. The level of importance of the needs motivates one to act. These needs are arranged in a hierarchical

order which means that a lower need must be satisfied before a higher need comes into play. Maslow explained that the immediacy of these needs follows an order sequence and the needs are described by Maslow as follows:

Physiological needs--include survival needs, such as food, warmth, sex, water and hunger.

Safety needs--encompass freedom from danger or protection from harm.

Social needs--embody affection, desire and the need to belong.

Self-esteem needs--include needs of awareness and desire.

Self-actualization needs--encompass the desire that one is becoming what one wants to be.

The empathetic process model was developed by this author using the central ideas of the aforementioned theoretical frameworks, the personal views of the author, and current published literature on the concept of empathy. The empathetic process model is classified as a developmental model (Appendix A) based on Fawcett's (1984) criteria. A developmental model is designed to focus on growth, development and maturation. There is notable change in the individual and each stage of growth is directional. This model is focused on the change at each

stage. These changes are differentiated by specific characteristics as outlined by Fawcetts' criteria.

The goal of the empathetic process model is to assist the client in attaining a maximum level of wellness. As required by Fawcett's criteria (1984), the model can be used to provide directions for changes and identifiable criteria to denote achievement at each stage.

The empathetic process model, in satisfying other aspects of Fawcetts' criteria, includes an explanation of how the patient moves from one stage to another through an orderly process. Developmental changes occur unidirectionally, but the client may regress to a former stage or fail to make progress to the next stage. In summary, these characteristics suggest that the nature of the model is developmental.

The concepts of the empathetic process model are defined as follows:

Person--a rational socialized unique human being with complex systems who has an inherent capacity to move forward to attain and maintain psychological, physiological and sociological well-being through a series of motivated behaviors.

Health--a continuous, motivated adaptive process wherein a person strives to maintain a maximum

physiological, sociological, and psychological balance as the environment continuously exerts positive or negative influences.

Environment--an interactive membrane composed of varying kinds of stimuli that continuously influence a person's adaptive behavior.

Nursing--an empathetic process based on a scientific and theoretical body of knowledge and skills for identifying, analyzing, systematizing, and meeting a person's needs in health or illness. The empathetic process consists of four stages: empathetic interaction, therapeutic change, actualization, and adaptation.

The empathetic interaction is a two-phase stage which embodies the nursing process. In the growth phase, the nurse penetrates the client's world and perceives that world through the eyes of the client. The nurse must possess the following attributes: (1) genuineness--being real, human, integrated, honest, true, and congruent (LaMonica, 1983; Rogers, 1957); (2) nonpossessive warmth--transference of energy between nurse and client without dominance control; (3) respectful attitude--accepting the client's world and unique feelings without being judgmental; (4) self-competence--knowledge, skills, judgment,

energy, and experience; and (5) caring--transference of feelings and emotions of concern.

The client's world is experienced in terms of (1) physiological, (2) psychological, and (3) sociocultural needs. The needs are categorized in order of client importance. The client may be in a primary, secondary, or tertiary setting. In the action phase, the nurse analyzes the client's needs. This analysis includes deviations or discrepancies based on the client's hierarchy of needs. The client's capacities which encompass strengths, weaknesses, and resources are then taken into consideration. Being open to the client's perceptions and feelings allows the nurse to focus on the preexisting, existing, or potential origin of the problems.

The locus of control is the planning stage for interventions. The process includes the following: (1) substitution of client as primary therapist, through education and training; (2) strengthening the external and internal environment of the client which includes significant others, medications, diet, community, and coping mechanisms; and (3) maintenance of an empathetic relationship. The nurse must validate these data with the client and based upon mutual acceptance, interventions are then planned.

Upon implementation of the interventions, the nurse moves away from the client so that an objective observation can be made in terms of a therapeutic change. During the therapeutic change, goals are realized. As Rogers (1961) described, the client begins to: (1) loosen up, (2) trust in self, (3) become part of the process, (4) accept treatment modalities, and (5) continuously move forward (adaptation). The nurse is now separate from the client, but is available to provide and plan alternatives should the client encounter problems or become unable to move forward throughout the stages of the empathetic process.

In the actualization stage, there are four client behaviors that emerge: (1) self-acceptance--the client knows self, works within any limitations, accepts own values, feelings, and self-worth; (2) self-directedness--the client establishes goals and active, independent participation is begun; (3) self-compliance--the client follows recommendations; and (4) self-motivation--the client seeks new experiences and information.

The last stage is adaptation. All deviations and discrepancies have been maximally resolved. Maximum balance in the psychological, physiological, and socio-cultural systems is achieved. The client understands



self, is positive about the achieved state of being and assumes responsibility for maintaining this attained level of wellness.

The empathetic process model is used to provide an orderly process for nurses interacting with clients to assess and analyze client-needs. The model contains provisions for the possibility that a client may not move forward toward adaptation as planned. Should adaptation not occur, the client may regress to a former stage of the empathetic process or remain in that stage until a more definitive plan is effectuated.

This empathetic process model was derived from Roger's and Maslow's theories. The model illustrates a process whereby nurses can identify, analyze, and design a plan of care for clients in primary, secondary or tertiary settings. The core ingredient of this process is empathy which facilitates a milieu for eliciting data necessary for providing interventions that enable the client to maximally adapt. This model served as the conceptual framework for this research.

#### Assumptions

For the purpose of this study the following assumptions were made:

1. The subjective world of clients must be used as the basis for empathizing with these clients (Rogers, 1975).
2. An interpersonal relationship between the client and nurse requires that the nurse possess specific attributes of genuineness, competence, nonpossessive warmth, caring, and respect for the client (Rogers, 1951).
3. Nursing is an empathic process (Stetler, 1977).
4. Use of empathy facilitates an environment conducive to adaptation (LaMonica, 1983).

### Hypotheses

The following research hypotheses were formulated to guide this research:

H<sub>1</sub>: Empathy levels of medical-surgical nurses who receive empathy training classes will increase after the empathy training session.

H<sub>2</sub>: Empathy levels of medical-surgical nurses who have not had empathy training classes will not increase from pretest to posttest.

H<sub>3</sub>: Empathy levels of medical-surgical nurses who receive no formal training classes will be lower than medical-surgical nurses who receive formalized classes.

H<sub>4</sub>: Patient satisfaction levels will be higher on the unit staffed by medical-surgical nurses who have had empathy training classes than on the unit where the medical-surgical nurses did not have empathy training classes.

H<sub>5</sub>: Patient satisfaction with nursing care will increase on the medical-surgical unit staffed by nurses who have participated in empathy training classes.

#### Definition of Terms

For the purpose of this study, the following definitions were provided:

1. Empathy training classes--a series of classes which include the techniques of role playing, lecture, discussion, and experiential training to demonstrate the empathic process to assist nurses in increasing their empathic level (Kalisch, 1971).

2. Inservice instructor--an individual with a master's degree in psychology and clinical experience in psychotherapy who provides empathy training to the participants.

3. Level of empathy--the ability to perceive the intellectual or imaginative apprehension of another

person's state of mind (Hogan, 1969, p. 307) as measured by a score of 0 to 39 on the Hogan Empathy Scale.

4. Patient level of satisfaction with nursing care--the degree to which patients express positive statements about their care as measured by scores obtained on the Risser's (1975) Patient Satisfaction Survey.

#### Limitations

This experimental research was conducted in a county hospital using both licensed vocational and registered nurses as subjects. The purpose of the research was to determine the effects of empathy training on empathic levels of nurses, and to determine if patients who received care from these nurses who participated in empathy training expressed higher levels of satisfaction with their care. Although randomization distributed some of the extraneous variables in the study, other extraneous variables existed which were beyond the control of the research. The limitations were as follows:

1. The administration of the Hogan Empathy Scale as a pretest and posttest to both groups of nurses prior to, during, or after work hours may have affected responses to the items on the questionnaires. Nurses may have been preoccupied with work responsibilities, thereby precluding

concentration on the test and resulting in greater errors of measurement.

2. Although the same two units were used for the administration of the Risser Scale as a pretest and posttest to patients in both the experimental and control groups, the sample of patients was different for each testing. Patients who had participated in the pretesting were discharged from the hospital. Therefore, seven weeks later, a different population of patients for both the experimental and control groups were given the Risser Scale as a posttest. As a result greater errors in measurement may have occurred.

3. Nurse assistants worked on both units but were not included in the study. The possibility of the assistants being identified as nurses may have negatively or positively influenced patient responses.

4. The results of the study were limited to patients and nurses in the same hospital.

### Summary

Empathy is the stepping stone to insight in client needs. In this chapter the impact of empathy use on nurse-patient relationships was discussed along with its importance in identifying, analyzing, and planning for

clients' needs. The justification for studying empathy was based upon its therapeutic value in promoting positive outcomes in clients. Studies reviewed supported the need for more research on empathy in order to add to the body of nursing knowledge.

The empathetic process model from which the study evolved provided a background for explaining the empathetic process as a means for assisting the patient in adapting to a maximal level of wellness. The relevance of empathy training on nurses empathic level and patient satisfaction was the framework for this research. The five hypotheses were derived from the review of the literature in conjunction with the conceptual framework.

## CHAPTER 2

### REVIEW OF LITERATURE

Empathy is a concept that has been used by psychologists, sociologists, counselors, psychiatrists and recently has become an established concept in the nursing profession. Use of empathy as a concept, skill or technique in the helping relationship according to Carkhuff (1969a) and Layton (1979) has benefited patients over the years. Included in this chapter of selected literature review are the background and delineation of empathy, interpersonal communication of empathy, the empathizer and therapeutic change and lastly, the measurement of empathy.

Further discussion includes the significance of empathy in the nurse-client relationship in nursing. Other presentations included in this chapter are methods of improving empathic level and variables which influence empathic level. These variables are divided into three categories: age, length of practice, and educational level.

Pertinent to this research was a composite overview concerning the effects of other selected variables on empathy. The last portion of the literature review

includes an examination of empathy and patient satisfaction.

### Background of Empathy

#### Delineation of Empathy

In pursuance of a definition of empathy, a review of literature revealed that an agreed upon meaning was difficult to establish. Conclusive evidence as to whether empathy is innate or acquired, active or adaptive, trait or state or even an independent concept is lacking. Hogan (1975) contended that the difficulty in defining empathy was due to its many different phenomenological referents. This lack of clarity was the impetus for examining the concept of empathy from multifocal viewpoints.

Etymologically, empathy has its roots in the branch of philosophy called esthetics. Szalita (1976) explained empathy as synonymous to the German word, einfuhlung, which means "feeling into." From this primitive basis, the term empathy was coined by Edward B. Titchener of Cornell (Katz, 1963) and adopted into the English language in 1912.

Post (1980) further described einfuhlung in relationship to art which includes two forms of empathy; active and passive. In active empathy, artists conceive their



work with a certain audience in mind; while passive empathy relates to the audience as it feels its way into the work of art. According to Post these two types of empathy are not symmetrical. However, Bachrach (1976) interpreted the phrase to "feel into" to mean "the ability of one person to 'experientially know' what another is experiencing at any given moment, from the latter's frame of reference, through the latter's eyes" (p. 35).

This basic definition of empathy which focuses only on its intrapsychic dimension has prevailed for almost a century and is generally accepted by numerous authors (Dymond, 1949; Kalisch, 1973; Kohut, 1977; Schafer, 1959). Empathy is seen as an inborn capacity to know another's inner feelings independently of visual and auditory perceptions. In contrast, other investigators have criticized the intrapsychic perception, saying empathy is more complex than this view would indicate.

Stetler (1977) maintained that the interpersonal dimension is equally important in the empathetic process. Therefore, the concept of empathy was conceptualized as: "A process whereby one individual (a helper) comes to understand the feelings and expressions of another in the here and now of a face-to-face encounter and successfully communicates this understanding to that individual"

(p. 432). Stetler further explained that unless the helper successfully communicates to the patient an understanding of the intrapsychic internalizations, there is very little value in the helper's internal knowledge of the patient's feelings.

Critiquing the basic definition of empathy from another aspect, Buie (1981) contended that the empathic process requires ordinary sensory preception and is not an inborn characteristic separate from other mental capacities. He asserted that empathy begins with subtle cues from the patient that the helper processes intrapsychically through certain mental capacities of memory, fantasy and awareness of self and impulses. Additional components of empathy expressed by Buie are the four internal referents: conceptual, self-experience, imaginative, imitation, and resonance.

According to Buie (1981), the empathizer's ego uses these four internal referents to encompass the empathic process. Conceptual referents are derived from experiences with other people or with self and from creative symbolism of myth, art and religion. The ego employs conceptual referents for empathy in a cognitive manner in which the empathizer does not experience the affect. Buie

emphasized this point since empathy is often referred to by other psychoanalysts as an affective process.

The second referent described by Buie (1981) is self-experience wherein the ego uses past and recent memories, impulses, affects, and bodily feelings. The main point of this referent, according to Buie, is that these experiences do not require the empathizer to participate in the process. There is a smooth flow of verbal and visual image association.

When the empathizer internalizes the patient's experiences for which the ego has no readily available referents, Buie (1981) as well as Kohut (1959) and Shapiro (1974) theorized that the ego resorts to imaginative imitation, the third referent. Imagination allows the empathizer to mimic the patient experiences. The last internal referent, resonance, is a natural response by the empathizer to the strong emotions of another. During this process, Buie explained that the analyst may experience feelings at a higher intensity than the patient, but no ideational content is received.

Germane to the complex definition of empathy is its delineation from the concepts of identification and sympathy. The American Heritage Dictionary of English Language (1981) defined identification and sympathy as follows:

(1) identification---"the act of identifying. . . . the state of being identified, an individual's recognition of a personal or group identity. The transferral of response to an object considered identical to another" (p. 654); and (2) sympathy---"a relationship or affinity between persons or things in which whatever affects one correspondingly affects the other. . . . the act or capacity for sharing or understanding the feelings of another person" (p. 1303). Empathy, according to Rogers (1957) is a sense of personal identification with the client and the communication of these feelings to the client.

Other analysts (Bachrach, 1976; Beres & Arlow, 1974; Greenson, 1967) have termed empathy as partial or temporary identification. Such identification was explained by Beres & Arlow (1974) as a temporary oneness with the object as perceived by the empathizer, but a sense of separation is experienced in order for the empathizer to feel with and about the patient. More clarification was offered by Berger (1984) between the terms identification and empathy. He classified identification as a derivative of an individual's personal needs and considered it to be defensive, automatic, and unconscious. In contrast to identification, Berger pointed out that empathy does not

encompass these characteristics since empathy may be only "temporary identification."

Owing to the differences in opinions, Buie (1981) stated that explanations of identification are based on definitions; therefore, the idea can be provisionally accepted that the empathic process is not based on identification. He suggested further study of the concepts, empathy and identification, in order to identify the unique attributes for each.

Empathy must be delineated from the concept sympathy. Katz (1963) acknowledged there was a distinct difference; the individual who empathizes takes on the personality of the other in order to try out that person's experiences. However, the person who sympathizes is preoccupied with the parallel between self feelings and the feelings of others. Katz stated that the sympathizer is not concerned with the objective reality and character of the other person; the focus is on the analogy between self and the other person. Katz further acknowledged that in common usage, both empathy and sympathy designate affection and warmth.

Gladstein (1977) clarified the difference between the two concepts by noting that sympathy necessitates the loss of objectivity in the interaction; in contrast, empathy

creates an emotional distancing of the therapist from the other person. Kramer and Schmalenberg (1977) classified empathy as an extension or refinement of sympathy. However, to defend his position on the two concepts, Berger (1984) elucidated that in sympathy, the therapist is more involved with the object or other person. In the empathic process, the therapist occupies the middle ground in relation to the object.

Zderad (1969) distinguished between clinical and natural empathy. She perceived natural empathy as a sense of identification and experiencing. Clinical empathy encompassed these two characteristics in addition to the therapist's ability to remove self from the interaction. Zderad explained that the removal of self allows the therapist the opportunity to obtain more objective data for accurate understanding of the other.

Another definition of empathy includes Blocher's (1966) division of empathy into two components. The cognitive entity involves psychological understanding while the affective part is the feeling with a person. Feshbach (1975) dichotomized empathy as a cognitive product mediated by emotional factors or as an affective product mediated by cognitive processes. She explained that empathy defined solely as a cognitive term has little

theoretical utility and does not encompass the affective dimension of empathy.

Barrett-Lennard (1976) addressed empathy as a relational concept. He defined the empathic process as occurring in three phases: attention, experiential and communication. Comparatively, these phases are similar to Zderad's (1969) description of the empathic process that occurs in the three phases of internalization, inner response, and reobjectification.

In the first phase, each individual has mutual respect for and values the other; that is, one is equal to the other in the social system. Zderad (1969) termed this feeling temporary identification. In the second phase, both writers described the empathizer as taking on the role or experiences of the other. Zderad explained this phase as being more unconscious than conscious. In the third phase of the empathic process, Barrett-Lennard (1976) focused on sharing and expressing empathetic understanding through verbal and nonverbal cues by the two people involved. However, Zderad called this stage detachment for the purpose of studying the empathized experience. The empathizer becomes aware of self in terms of the psychic union with the other person.

Zderad (1969) like Katz (1963) emphasized that phases of an empathic process do not necessarily take place in a prescribed order with every interaction. Zderad made this statement not to underemphasize the step by step process but to clarify the necessity of the total empathic process rather than the sequential order of events.

The biological and sociological origins of empathy provide explanations of the concept of empathy. Katz (1963) described the biologist as viewing empathy from an archaic mode of communication which is instinctive; unlike the social psychologist who usually defined empathy as the ability to develop social experience. From the biologist's frame of reference, one is born to understand and visualize the feelings of others. Katz explained that essential parts of the biological system of communication are the capacity to imitate, to play, and to derive emotional affiliation. People imitate or vibrate in harmony with others, and they also instinctively feel the need to relate to others for love.

From a social perspective, Katz (1963) stated that sociologists see empathy as adaptive rather than reactive. Both Katz (1963) and Hogan (1975) credited Mead's theory of role taking as a framework for understanding empathy. Hogan summarized the theory in two



points: (1) "people need positive and friendly attention (and dread social disapproval) and (2) they need structure in their everyday lives" (p. 15). The meaning implied from the statement is that people are driven to seek social interaction, but always within a "rule governed framework" (p. 15). He further explained the sociologist's viewpoint of empathy as being a mediating variable. Katz stressed that in Mead's theory, individuals imaginatively take on the role of another in order to anticipate behavior and to guide themselves in control of actions. Through role taking, people teach themselves to act more self-consciously.

Delineation of the concept of empathy has revealed that the interrelationship of multiple variables has a common factor. The factor is the empathizer's ability to understand a person in the helping relationship. In a therapeutic interaction, there must be an exchange of messages between the client and the therapist. Thus it is necessary to discuss the relationship of empathy in interpersonal communication.

#### Interpersonal Communication of Empathy

Empathic responses, according to Lane and Lane (1982), are basic to all communicative processes and are

the essential element in the interpersonal process. Hardin and Halaris (1983) stated that when empathy is viewed in relationship to interpersonal communication, empathy becomes a dynamic process. During the interaction, the empathizer enters the other person's frame of reference in an attempt to understand that person.

Communication of empathy is facilitated through verbal and nonverbal behavior. The therapist or empathizer must communicate both acceptance and understanding to the client through either or both channels of communications. Of equal importance, is the understanding of nonverbal interactions of the empathizer and client. Rogers (1951) and Carkhuff (1969a) identified responsive, listening and interchangeable communication behaviors as being empathic.

According to Schefflen's (1963) findings, changes in posture, eye contact, or position were employed by the communicator to stress a new point, an attitudinal change relative to the client or the analyst, and temporary removal of the analyst from the interaction. Other explanations of nonverbal body movements were identified by Argyle and Dean (1965) who reported that eye contact decreased as closeness between the two people interacting increased.

Mehrabian (1969) reported distance, eye contact, body orientation, arms-akimbo position, and trunk relaxation as indicators of the communicator's attitude toward the client. The use of either activity during an interaction may represent a different meaning to the client or therapist. In a study of verbal and nonverbal behaviors which facilitate empathic communication, Mansfield (1973) found that introduction of self to patient, head and body position, verbal behavior, response to nonverbal cues, facial expressions, and mirror images were significant elements in the communication of empathy.

Hardin and Halaris (1983) compared the occurrence and duration of engagement and defensive behaviors of five nurses and five patients. The engagement behaviors were direct gaze, slight smile, laugh, torso forward, gestures, and head nods to another. The defensive behaviors were identified as crossed arms and legs. Findings indicated that in comparison to the patients, nurses used two to three times more head nods and direct gazes during an interaction. Other findings were that nurses high in empathic level kept their legs still and in a crossed position. Conversely, low empathic nurses had more leg movement and they laughed twice as much as nurses who were high empathizers. However, in Hargrove's, (1974) study

latency and silence behaviors were more indicative of high levels of empathy.

Other means of nonverbal communication may be expressed through motor activity. Jacobs (1973) described these bodily movements of the analyst as unconscious responses to a client's associations which stimulate the analyst to observe self behavior. Hence, the observations may be useful in identifying the unconscious meaning of the patient's behavior and thereby, enabling the analyst to enter into client's moods and understand the nature of the conflicts.

Listening is another essential aspect of nonverbal behavior in which communication is conveyed to the client. Listening is an essential phase. Failure to listen in a helping relationship, according to Wallston and Wallston (1975) inhibits disclosure, while listening contributes to communication by conveying an understanding attitude to the client. During an interaction, therapists must listen, although according to Hein (1973) listening involves risk because of the vulnerability encountered by the clinicians or therapists. Each time therapists enter others' frame of reference and see the world through the eyes of the other persons, Hein maintained that the therapists surrender not only their worlds but also a part of

themselves to the other persons' thoughts and feelings. When this surrender occurs, there is the potential of the therapists being changed by the experience.

The significance of communication in the empathic process has been documented. Of equal importance in the empathic process is the role of the empathizer in effecting therapeutic outcome. This role is addressed in the next section.

#### The Empathizer and Therapeutic Change

The primary goal of a helping relationship is to induce change that is beneficial to the client. Careful examination of the therapies, the conditions under which change occurs, and the characteristics of the empathizer are necessary components of the empathic process that must be discussed in order to explain the phenomenon of empathy in producing therapeutic change. Studies (Berger, 1984; Truax, 1963; Williams, 1979) have been conducted to determine what conditions or factors impede or enhance the therapeutic change. The ensuing discussion addresses these prerequisites.

Katz (1963) identified insight and relationship therapies as methods of interventions for the clinician to use as a means for helping the client to adapt. Both

insight and relationship therapies have the same goal of restoring the client's ability to use self resources in order to become independent. Katz distinguished between the two therapies by denoting that in the insight method, the therapist uses a form of relationship called transference. In relationship therapy, the therapist actively participates in the process.

In the transference type of relationship, the interaction between the therapist and client is less social or personal but from Katz's (1963) viewpoint, the attitudes and feelings of the client towards the therapist are projections. Therefore, the helper, as a change agent, offers the patient facts and truths about those projections in order to restore that person to reality.

Comparatively, in relationship therapy, Katz (1963) characterized the therapist as a change agent who offers insight, personal energy, as well as actual empathic engagement with the client. The therapist uses technical and empathic skills to establish therapeutic encounters with the client. Activity is jointly initiated by the helper and the client, but during the insight process, the empathizer remains neutral and follows a defined pattern while the client acts and projects different roles upon

the therapist. Assuming a convert role, the therapist interprets these behaviors to the client.

Quite the opposite of the insight therapist, Katz (1963) declared that the relationship therapist actually participates in the roles the client engages in during the interaction. The therapist is not bound to fixed roles which characteristically distinguish this therapy from insight therapy. During relationship treatment, Katz explained, therapeutic outcome is derived from communication and coexperiencing. Conversely, in insight therapy, change is due to self insight by the client with assistance from the clinician.

These categories of therapies are not mutually exclusive and authors did not address the distinct advantages of either form. Seemingly the outcome of therapy depends upon the therapist (Carkhuff, 1969a; Fine & Therrien, 1977; Rogers, 1951).

Given the type of therapy that may be implemented during the helping process, the next consideration involves the conditions under which change may occur. Rogers (1957) outlined the following conditions that must exist and continue over a period of time in order for change to occur:

1. Two persons are in a psychological contact.

2. The client is in a state of incongruence and appears vulnerable or anxious.

3. The therapist is congruent and becomes a part of the relationship.

4. The therapist demonstrates unconditional positive regard for the client.

5. The therapist experiences an empathic understanding of the client's internal world and communicates this experience to the client.

6. The communication to the client of the therapist's empathic understanding and unconditional positive regard is to a minimal degree achieved.

In Roger's (1957) opinion, no other conditions are necessary if these conditions exist. Carkhuff (1969a) studied human relationships and unequivocally supported Roger's findings that the core conditions of empathy, respect, warmth, genuineness, self-disclosure, concreteness, confrontation, and immediacy of relationship must be demonstrated by the therapist in an interaction in order for the client to experience growth.

In an earlier study, Truax (1963) identified congruence, empathic understanding, and unconditional positive regard as essential characteristics of the therapist. Further study led Truax et al. (1966) to the



conclusions that genuineness and accurate empathy were under the direct control of therapist, whereas the level of nonpossessive warmth is established over time but the client has some influence on the level attained during an interaction.

Of the enumerated conditions necessary for a helping relationship, empathy has been empirically documented (Carkhuff, 1969a; Kalisch, 1973; Rogers, 1951) as the primary condition in a helping relationship. Layton (1979) described empathy as "a quality needed by all nurses" (p. 163). She explained that the practice of nursing is centered around the ability of nurses to communicate with patients and their families.

Findings from other studies (Fine & Therrien, 1977; Hargrove, 1974; Poole & Sanson-Fisher, 1979; Williams, 1979) indicated that patients' conditions improved when they experienced high levels of empathy from providers during interactions. To the contrary, low empathy skills have produced negative outcomes. In Korsch, Gozzi and Francis's (1968) analysis of an interaction between a mother with a sick child and a physician, the mother declined in initiative to carry out the physician's orders. During the interaction, the physician did not allow the mother to express her worries and hopes; the

mother withdrew from any communications or interventions offered by the physician. Other evidence of low empathy levels in empathizers leading to negative outcomes was reported by Graffam (1970) in the study of nurse-patient interactions. Nurses who interacted with distressed patients blocked communication by changing the subject or failing to assess the situation accurately, and leaving the patient's room immediately when the patient responded in an emotionally charged manner. Thereby the patients' needs were not met.

Most authors have reported that the outcome of therapy is dependent upon the empathic level of the therapist (Rogers, 1957). In support of these findings, Carkhuff (1969a) pointed out when a empathetic climate exists in a helping relationship, maintenance of this climate is generally the function of the therapist. In view of these considerations an examination of the characteristic of the empathizer was undertaken.

A description of the model therapist can be inferred from Rogers (1975) who expressed that the helping relationship is the genesis of a psychologically mature person who regards the client in a positive way. Katz (1963) further elaborated that the qualities of a good empathizer in human relations are like the qualities of a

good artist. Both have the need to be involved in emotions, to relax conscious control, and permit oneself to be projected into the framework of another object.

Other characteristics which enhance the empathic process are the similarities of the client and the therapist. Berger (1984) and Zderad (1969) declared that the more similar the client's and therapist's cultural backgrounds, ages, interests, upbringings and experiences, the more likely that the therapist's response will be congruent with what the patient is communicating. However, Berger cautioned that infrequently, similarities existing between the two can lead to blind spots in the therapist about the client.

Documentation of other personality characteristics related to the capacity for empathy were reported in a study by Streit-Forest (1982) using medical students as subjects. Using several scales to collect data, the author found that students spending leisure time with a hobby had more capacity for empathy than those watching television. Other findings included positive correlations of empathy and intention to work and positive attitudes toward the importance of doctor patient relationships. Students with high dogmatist scores tended to have lower empathy scores.

Another quality an empathizer should possess was documented by Zderad (1969) who emphasized the need for the empathizer to be healthy and have an integrated personality. In her judgment, these qualities are prerequisites for the empathizer to observe self ego, use the unconscious, and avail feelings.

Hogan (1975) stated that a degree of intelligence is necessary for empathic responding, however he theorized higher intelligence level is not associated with higher empathy levels. Kupfer, Drew, Curtis and Rubinstein (1978) suggested that medical students' empathy scores on the Hogan Scale were not significantly correlated with their Medical College Admission Test Scores. In a similar study, Hornblow, Kidson, and Jones (1977) found a lack of relationship between scores on Hogan's Empathy Scale and the Medical College Admission Test. Other investigators (Bergin & Jasper, 1969; Diseker & Michielutte, 1981) have confirmed the lack of relationship between intelligence and empathy. Also, Carkhuff, Piaget and Pierce (1968) found that as academic and intellectual skills of the clinical psychologist improved the empathic skills decreased.

Although empathy has been discussed from a philosophical and pragmatic point of view there are some

limitations in the use of empathy. Buie (1981) stated that by recognizing these limitations less errors will arise and empathy can be used more effectively. He postulated that there were three factors inherent in the nature of empathy that limit one's ability to empathically understand the inner experience of another person.

First, from Buie's (1981) point of view, empathic interactions require the empathizer to process physically expressed cues from a patient that tells the empathizer something about the patient's state of mind. If the patient is distrustful, consciously or unconsciously cues are withheld or distorted which inhibit the empathizer from gaining an understanding of these feelings. The lack of cues will block the empathic process.

Secondly, Buie (1981) stated that if the empathizer has limited or insufficient referents, the capacity for empathizing is limited. However, Buie emphasized that no empathizer can develop referents that are congruent with every experience of the patient. The last limitation of empathy is based on what Buie described as an inherent dependency of the concept on inference for understanding a client's feelings and thoughts. In using self-internal referents, there may be two or more referents that fit the cues expressed by the patient. The empathizer may not

accurately correspond to the patient's experience; thus an error is made.

The discussion of the delineation of the concept of empathy, the interpersonal communication of empathy and its limitations were expounded upon to reflect the background of empathy. Following this presentation, the measurement of empathy is discussed.

#### Measurement of Empathy

To provide a comprehensive conceptualization of empathy the empirical measurement of the concept will be discussed. Foremost to the study of empathy is availability of reliable and valid measures. Varied approaches and methodologies exist for measuring empathy; however, within the confines of this discussion, a brief overview of the classification, validity and criticism of empathy as a subjective or objective measurement is presented.

The selection of a scale to measure empathy depends upon the operational definition of empathy and the theoretical basis of this definition. Gladstein (1977) in a review of literature analyzed and organized empathy and existing measurements of empathy. He categorized empathy into three types. Then he identified three types of counseling outcomes and outcome studies that involved

counseling. Gladstein discussed the measurements of empathy.

Gladstein (1977) separated empathy into cognitive, affective and cognitive/affective categories in order to clarify the type of empathy processes. Cognitive categories simply involve role-taking where one person thinks like another. The affective categories refer to the taking on of feelings, attitudes or emotion of another. Gladstein stated that in the cognitive/affective classification both processes are incorporated into the measurement methodology.

Explanations of the three types of counseling outcomes were presented by Gladstein (1977) as in-counseling, out-counseling and evaluation of counselor. Briefly, in-counseling involves measurement of changes in the client before termination of services. Out-counseling is a measurement of client changes after termination of services, whereas evaluation of counselor includes criteria used to rate the effectiveness of the counselor. Another method of determining empathy outcome, according to Gladstein, is based on whether the client receives counseling for emotional disturbances or developmental problems. Gladstein termed the latter method psychotherapy and the former type, primary counseling.

Gladstein (1977) in an attempt to clarify the orientation of empathy measurements, classified the techniques as subjective, objective, or predictive measures. Subjective instruments were designed to elicit responses of the counselor or client's perceptions of the counseling sessions. From an opposite perspective, objective scales, according to Gladstein, measure external independent judgments of the session or counselor's response to standardized statements. In the last type of measurement, predictive empathy is assumed to exist if one person is able to predict the behavior of another in response to certain stimuli. Gladstein stated that Hogan's (1975) Scale predicted empathy based on personality scale items that describe an empathic man. Hogan used a role or cognitive view of empathy to predict how empathizers would respond in certain situations.

Another factor to consider when discussing the measurement of empathy is the validity of the instrument. This aspect of the measuring process allows the researcher to make conclusions regarding the predictability of the scores when measuring empathy. Gough (1965) devised a three-step procedure to assist the researcher in making inferences about instruments. First, the scale is examined for specific relationship to the criteria the



scale was designed to measure. The scale basis of measurement should be then viewed to determine if the items of scale meet the requirements of its conceptual or theoretical framework. The last step is the need to assess the scale's validity through other research.

The intended measurement of empathy by different types of scales often evokes controversy and criticism among researchers (Gagan, 1983). Owing to the voluminous debates concerning the measurement of specific tools, this discussion is limited to criticism as it relates in general to predictive and objective measurements of empathy.

Two weaknesses of the predictive scales as presented by Hobart and Fahlberg (1965) are: (1) the potential influence of cultural or subcultural norms may give rise to "stereotype accuracy" and (2) empathy tests with three or more possible answers have problems related to the intervals between one category and another and the tendency of the participant to choose a midscale or end-scale statements. An earlier criticism by Halpern (1957) was that the predictive method of measurement requires "a very special and cumbersome set of conditions--namely, the existence and cooperation of a group of acquaintances of the subjects" (p. 104).

Some arguments against the objective measurement of empathy were found in a report by Chinsky and Rappaport (1970), who concluded that data collected from an objective scale such as Truax's Accurate Empathy Scale do not use the client's responses. This type of scale measures empathy from the therapist viewpoint. Therefore ratings may reflect another quality rather than what the scale is attempting to measure. More controversy concerning empathy scales is derived from Hornblow, Kidson and Jones (1977) who concluded, that lack of correlation between one scale and another reflects differences in theoretical viewpoints and definitions.

Empathy has been operationalized in several different ways by researchers in an attempt to achieve accurate assessment of the concept. Nonetheless, Northouse (1979) concluded that no single measurement has been exclusively documented as the better instrument. The next discussion will describe empathy in the nurse-patient relationship.

#### Empathy and Nurse-Client Relationships

Nurse-patient relationship in its simplest form evolves from an interaction between client and nurse for the purposes of attaining client-centered goals. Evidence of a helping behavior can be derived from the

conceptualization of nursing. Peplau (1952) described nursing as a significant therapeutic interpersonal process while Henderson (1966) defined nursing as a helping profession.

In helping professions, empathy has been singled out as a significant factor in the helper's behavior (Carkhuff, 1969a; Kalisch, 1973; Rogers, 1961). However, Gagan (1983) pointed out that the empathic process in nurse-patient relationships has not been empirically documented, although a vast amount of literature exists concerning the role of empathy in psychologist-patient relationships and doctor-patient relationships. Further, the author noted that the elements of exploration and confrontation in psychologist-patient relationship are not found in patient-nurse relationship which focus on the functions of support and nurturance. Gagan emphasized the need to undertake studies to determine the precise characteristics of the empathic process within nurse-client relationship.

Findings in nursing literature on the concept of empathy have revealed that nurses have low empathy skills. As early as 1962, Mathews found that two-thirds of the 122 nurses studied did not respond positively to statements related to person-positive or person-centeredness. Later,

in a study of nurses who worked in acute and chronic care settings, LaMonica, Carew, Winder, Haase and Blanchard (1976) measured empathic levels using Carkhuff's (1969a) Index of Communication Scale as pretest and posttest. The nurse's responses to the items on the scale were rated by two judges using Carkhuff's Empathy Scale. Results indicated that these nurses had extremely low levels of empathy.

In another study, Forsyth (1979) found that when nurses rated themselves using the Hogan Scale only 50% scored high in empathic level. However, when the same nurses were rated by patients using the Barrett-Lennard Scale, 98% were reported to be highly empathic. Forsyth hypothesized that the differences in ratings may be related to the client's perception of all nurses as being empathic or a distortion of client perceptions.

Gagan (1983) stated that the accuracy of findings in studies in which patients are used as raters of empathy in nurses is questionable. The rating of nurses' empathic levels may be affected depending upon whether the rater is an inpatient or an outpatient. Gagan explained that a hospitalized patient is dependent upon the nurse for physical care, whereas an outpatient in a psychiatric setting is not dependent upon the therapist for physical

care. Therefore, the inpatient may feel restricted in expressing feelings about the nurse's empathic level.

Patients as raters of nurses' empathic level were not used in Sparling and Jones' (1977) study, yet evidence of differences in the nurses' empathic level were reported. The investigators compared the scores of psychiatric nurses and medical-surgical nurses using the Carkhuff's Index Scale. The psychiatric nurses were found to score higher in empathy than the medical-surgical nurses. Low empathic level of nurses does not negate the importance of using empathy in nurse-client relationships. Based on nursing's goal to assist the client to achieve a maximal level of wellness, empathy without debate, is a necessary component of the interaction between client and nurse. This assertion is supported by Kalisch (1973) who judged empathy to be the basis for therapeutic interaction between the client and nurse.

Positive outcomes were reported by Williams (1979) who investigated the effectiveness of high and low levels of empathic communication offered by two nurse therapists in changing the concept of 73 aged clients during group therapy. Empathic level of the nurses' therapists was rated by two judges using Truax's Accurate Empathy Scale. Results indicated that clients experienced an increase in

self-concept as measured by the Tennessee Self-Concept Scale (TSCS) when the nurses provided high levels of empathic understanding and answers to their concerns. Lindell (1979) also used the TSCS and found that patients who were offered high levels of congruence by nurses during group therapy experienced positive changes in self concept.

Empathy in nurse-patient relationships is of particular importance when gathering data. Viewing clients from their own internal frame of reference and concentrating on their personal experiences of reality can, according to Collins (1977) facilitate the nursing process. The nursing process as outlined by Sundeen, Stuart, Rankin and Cohen (1981) is founded on the helping interpersonal relationship in which the nurse interacts with client to set goals. Together as partners, the nurse and client direct their efforts to maximize client's strengths and sense of integrity.

Another consideration when viewing empathy in nurse-patient relationships is the level of empathic response offered by the nurse. Jette (1983) described three levels of successful empathic responses of the nurse. The first level is responding to situations and occurs when the nurse responds to the situation and facts

as stated by the client. A response at this level is the least effective method since the nurse only focuses on the interaction. Unlike the first response, the second level of responding to feelings and concerns reflects the client's feelings. Hence, the empathic response is begun. In the third, responding to values, the nurse shows a deep awareness of the other person's values and beliefs. Both the second and third levels of empathic responding are seen as being more effective in establishing a relationship and understanding the patient.

Corresponding to Jette's (1983) description of empathic responding, Clay (1984) described behavior components in her model of empathic nurse-patient interactions in a similar manner. Behavior components, two and three, have the same functions and degree of effectiveness as those reported by Jette. In addition to the three levels of behavior, Clay included analysis as a fourth step and the steps were defined as hierarchical in nature. To further investigate the function of these behaviors in the use of empathy, Clay developed an instrument that included these behaviors. The author explored the usefulness of the scale in recording empathic behaviors during client-nurse interactions by using a sample of nurse teachers as raters and by using selected

videotaped nurse-patient interactions that were rated by other experienced nurses. The nurses' empathy level during the interactions in the videotaped session and clinical setting was assessed based on the number of categories employed by the rater and the nurses' empathy level as measured by an empathy scale. Using Spearman's formula, correlations of  $r_e = + 0.87$  and  $r_e = + 0.96$  were established for each respective group.

The level of empathy responding according to Dudlt, Griffin and Patton (1984) affects patient's expectation. A patient would become discouraged and disappointed if the nurse was perceived as being tolerant rather than empathic. Therefore, the authors stressed the need for the nurse to express high levels of empathy when interacting with a client. They stated when a nurse endures or puts up with a client, a lack of regard for the client's feelings and needs is communicated. This outcome could be detrimental to the client, and according to Carkhuff (1969a) when a helper does not possess a high level of empathy, client growth will not take place.

Empathy in nurse-patient relationships can be summarized using Collins' (1977) statement: Empathy "is a specific type of data gathering preparatory to taking actions" (p. 21). From empathic encounters nurses are



able to plan and implement interventions to effect positive outcomes for patients. The level of empathy affects the outcome of the interaction, therefore the next section will include a review of literature concerning methods of improving empathic levels.

#### Methods of Improving Empathic Level

Empathy is a crucial factor in helping relationships, yet all helping professions acknowledge deficits in empathy levels of their colleagues. Several authors (Carkhuff, 1969a, 1969b; Kalisch, 1971; Rogers, 1951) reported that empathic levels can be taught or enhanced through training and teaching. The following discussion will include an explanation of programs related to improving empathic levels.

In employing role playing as a method of training empathizers, Stetler (1977) used actress patients to role play with nurses in a simulated encounter. The actress patients rated the nurses using the Barrett-Lennard (1962) Empathy Scale and the nurses were rated by judges. There was no difference in verbal and vocal behaviors between high and low empathizers. Stetler related that using simulated patients increased the potential of the patient evaluating the nurse more truthfully. An actual patient

may not express true feelings about the nurse because of dependency on the nurse for care. Role playing (Lindberg & Jette, 1983) is based on the assumptions that a learner anticipates and acts out a situation prior to its occurrence so that person will be able to deal with the matter appropriately. Based on Bandura's (1969) concept of modeling, a person acquires and performs individual or sets of behaviors by observing and imitating a model who demonstrates the behavior.

Fine and Therrien (1977) divided 43 medical students into control and experimental groups to test the effects of the Basic Interview Technique Training classes on empathy skills. The experimental group participated in the training in which the teachers and students rotated roles of the patient, evaluator, and doctor in order to develop the students' empathic level. Using an analysis of the Truax Accurate Empathy Scale pretest and posttest scores, students who received the training functioned at a higher level of empathy than the control student group who did not attend the classes.

Using role playing technique and videotaping which involved the participants and teachers, Benedek and Bieniek (1977) investigated the effects of the Interpersonal Process Recall training (IPR) on general and

child psychiatrists and other physicians. The IPR course consisted of a film and videotape and a student manual on Influencing Human Interactions. Techniques for responding to patients in such a manner as to encourage the expressions of feelings were taught. Laboratory experiences included role playing and responding to filmed simulation exercises in which the participants imagined themselves as the persons in the film. Results indicated that the majority of the physicians demonstrated growth in empathy, self awareness and interview skills as observed by their supervisors during the laboratory training.

Studies whose authors compared role modeling with didactic methods of training were reviewed. For example, Eskedal (1975) found that a videotape of a positive counselor-client relationship had more effect on students acquisition of skills than a group discussion of skills necessary for developing positive relationships. Using samples of student nurses, Kalisch (1971) compared empathy levels of students who received didactic training, role playing and experiential training with the two control groups of students who received lectures and discussions on human behavior. Analysis of the pretest and posttest scores indicated that the experimental group of nurses had

a significantly higher level of improvement in empathy than the control groups.

Payne, Weiss and Kapp (1972) used audio modeling, didactic and experiential factors as techniques in teaching two groups of medical students. The experimental group was subdivided to receive the supervisory methods of modeling-didactic and modeling-experiential training. The control group was subdivided to receive no-modeling and modeling training but without any type of supervision while listening to the tapes. Analysis of the group responses revealed that supervision-didactic training was a more effective means of increasing empathic levels, whereas no improvement was seen in the participants who received the experiential method of training. There were no changes in performance in the groups that were independent of supervision. These findings were supported by Hills and Knowles (1983) in a study of nurses empathy levels. Comparison of scores from Carkhuff (1969a) Scales indicated that nurses in a supervised practice group scored higher than nurses who were unsupervised.

Other methods of facilitating the learning of empathic skills include practice with actual patients in addition to role modeling or didactic training. According to Ward and Stein (1975) the use of real patients adds

authenticity to the interchange between the two people interacting. In their opinion the use of actual patients is a necessary requirement for learning subtle interview process skills. In an attempt to teach medical students interviewing skills, Diseker and Michielutte (1981) used lecture and small group practice sessions with peers and teachers to enhance medical students' empathic levels. Real patients were not used in the practice sessions. Scores on the Hogan scale did not improve after completion of the course.

In Ward and Stein's (1975) study, resident physicians' "emotional distance abilities", increased after they completed training in which practice sessions with patients and seminar teaching of interpersonal skills were the mode of teaching. The physicians were observed by supervisors who critiqued each interview along with each participant. Feedback as to the appropriateness of the interaction was given to each physician by the supervisor.

Programmed instructions as a method of teaching empathy has resulted in varied outcomes. Ware, Strassman and Naftulin (1971) conducted a study to compare the effects of programmed films and the traditional lecture method of teaching interview skills to physicians.

Results indicated that the traditional method increased the participants interviewing skills while the programmed film training provided only theoretical knowledge. Saltmarsh (1973) investigated the effects of this method of teaching on improving empathy skills of counselors. The experimental group attended the programmed instruction class while the participants in the control group attended discussions on effective counseling. Both groups received the Michigan State Affective Sensitivity Scale as post-tests only. The results indicated that the experimental group demonstrated higher performance.

Several investigators (Dalton, Sundblad, & Hylbert, 1973; Kuna, 1975) have compared the combination effects of modeling, practice, didactic instructions, or other methods of teaching with a single intervention such as lecture, or videotaping. Results indicated that the combination method was more effective as compared to the use of the lecture or videotaping method. Another methodology of teaching empathy using transactional analysis, role playing and lecture discussion was investigated by Payton, Beale and Meydrech (1975). The study group was comprised of 10 allied health supervisors who were pursuing master's degrees in health related fields. The group was administered a pretest and posttest. Scores

indicated that there was significant enhancement of empathic responding of all participants after training.

This overview of facilitative measures for improving empathic levels demonstrates the use of a variety of approaches. There are variables that affect the teaching and learning of empathy. These variables are the focus of the following discussion.

#### Variables Which Influence Empathic Level

Selected demographic variables are thought to have an effect on empathic levels. Forsyth (1979) investigated the influence of age, length of practice as a nurse and educational levels on empathy level of nurses. An overview of studies that investigated the influence of these variables on empathic levels of nurses and the relationship of other variables and empathy in other helping professionals will be presented.

#### Age

Chronological age is probably one of the most common criteria used to categorize human relationships (Dudlt, Griffin & Patton, 1984). The authors explained that certain observable behaviors are identified for particular age groups; however mental age should be considered in

conjunction with chronological age. Individuals of the same age may differ in mental age. Dudlt et al. viewed age as a unique problem in the nurse-client relationship. The authors contended that a patient may have difficulty in disclosing private information or expecting skillful care from a nurse who is considered young. However, when the client is older than the nurse, the client may attempt to control the nurse, thereby a parent-child relationship exists. Another consideration, pointed out by the authors was a client who is the same age as the nurse may find self-disclosure with the nurse easier. Because of age similarity, the client may ask the nurse for special privileges.

Barber, Stokes and Billings (1977) defined maturity as a biological development that permits new behaviors. Although emotional maturity may be judged on the basis of chronological age, Fuerst, Wolff and Weitzel (1974) stated that in doing so, false conclusions may be drawn. When age is viewed in conjunction with experiences, the relationship is more towards the concept maturity rather than chronological age. In Forsyth's (1979) study of age and empathic levels of nurses, older nurses between 50 to 59 years had lower empathy scores than the 30 to 39 year old nurses. There were no differences in empathic levels



of the 30 to 65 years old and the 20 to 29 years old nurses in Stetler's (1977) and Sparling and Jones' (1977) investigations.

Conclusions drawn about age as a factor in affecting empathic levels in nurses are not conclusive. Thus it seems more research is warranted. The next variable to be discussed is the influence of length of practice on nurse empathic level.

#### Length of Practice

The number of years in practice as a nurse has been examined as related to empathic levels. Clay (1984) stated that nursing is a series of nurse-patient relationships for the purpose of communicating to the patient an awareness of their needs but several investigators (Forsyth, 1979; Kalisch, 1973; Mathews, 1962) have found that nurses demonstrate low empathic levels when interacting with clients. Considering the importance of both findings raises questions about the effect of length of practice on nurse empathic levels. The search of the literature revealed only two studies that measured the concept of empathy as related to length of practice. Forsyth (1979) found that nurses who had been practicing less than two years obtained higher empathy scores than

nurses who had practiced longer. Contrary to Forsyth's findings, Sparling and Jones (1977) found that there were no significant differences in empathic levels as related to years of practice in nursing.

The lack of studies investigating the effect of length in practice on nurse empathic levels, indicate the need for further study. Another variable, educational level, has been thought to affect empathy levels in nurses; therefore an examination of past literature concerning its effects is necessary.

#### Educational Level

Nurses receive different training, but the common boundary of every nurse is interactions with clients in a helping relationship of which empathy (Kalisch, 1973; Rogers, 1951; Katz, 1963) is the core ingredient. The question that evolves is: Does level of education have an affect on empathic level? An examination of three studies that were used to investigate empathy in nurses and its relationship to level of education revealed different findings.

Forsyth's (1979) investigated empathy levels of head nurses who were diploma educated and nurses who had baccalaureate degrees. The diploma educated head nurses

obtained lower scores on the Hogan Empathy Scale than the nurses who had baccalaureate degrees. These findings suggested that education correlates with high empathy level. Non-significant findings were reported by Kunst-Wilson, Carpenter, Poser, Venohr and Kushner (1981) who studied empathic levels of undergraduate and graduate nursing students using Kagan's Affective Sensitivity Scale. The subjects' age and amount of prior nursing experience were controlled; however the results of the study showed that self-perceived empathic level were not related to educational level but was related to actual empathic level.

Differences in empathic levels in relationship to level of education was also investigated by Layton (1979) in a study of junior and senior baccalaureate nursing students. Several combinations of modeling, labeling and rehearsal (videotaped) were used to teach empathy to four experimental groups. No pretesting was done, however after training the participants in the four experimental groups and one control group were tested using the Empathy Test, Barrett-Lennard (1962) Relationship Inventory Scale and Carkhuff (1969a, 1969b) Empathic Understanding in Interpersonal Scale. Only the junior students' level of empathy improved on the posttest and the three weeks

follow-up test. Explanations concerning the juniors improvement in empathy over the seniors were offered by Layton from three perspectives. She reasoned the juniors success to findings in Payne, Winter and Bell's (1972) study on modeling as a better technique for students with less experience; therefore Layton presumed a more comprehensive or powerful method of teaching empathy to students who have more experience was needed.

A second point of explanation why juniors excelled at a higher level of empathy, was because the seniors had already established interview styles that were difficult to undo. Again, Layton (1979) acknowledged her conclusions were based on findings in Perry's (1975) study where subjects reverted to previous counseling techniques after attending a teaching program as evidenced by behavior on post interview test. The last plausible reason for the differences in junior and senior scores, according to Layton, was the juniors compensated for their lack of skills and experience by exhausting every effort to communicate with the patients.

Conclusions drawn from the three available studies of nurses in which empathy levels were compared to level of education are not definitive. Moreover, schools of nursing, based on LaMonica's (1979) writings are suffering

from a lack of courses in empathic skills as part of their curricula. Another ineptness of nursing schools related to deficits in empathy training, is the tendency not to enrich students' creative abilities. As a result both factors may impede empathy skills.

The four variables, age, length of practice, ethnicity and educational level, were the focus of this section of the research paper. In viewing empathy from a broader perspective, there is empirical evidence that other variables affect empathic levels. A brief discussion of those variables is presented.

#### Other Variables and Empathy

Little research has been done on the influence of sex as a variable on empathy. McDonald (1977) used Hogan's Empathy Scale to measure empathy in male and female nursing students and in male and female non-nursing students. Male nursing students' empathy mean scores were higher than all others mean empathy scores of the four groups. Female non-nursing students scored slightly higher than female nursing students. Black and Phillips (1982) used four empathy scales to study empathy in student teachers. The control group was composed of both female and male students. There were two experimental groups; one female

and one male. Both experimental groups received the empathy training classes, whereas the control group participated in a course on personal growth. The results of the study indicated that males empathic levels were significantly higher than females.

Hill (1975) investigated the relationship between sex and experience and found female counselors more empathic than males counselors. Kipper and Ben-Ely (1979) reported female high school students scored higher in empathic levels than the male high school students before and after empathy training as measured by the Accurate Empathy Scale. Yet, when Elizur and Rosenheim (1982) compared the empathy scores of female and male students of various health professions, no significant differences were found.

Further investigation of variables that affect empathic levels included a study of superiority of one profession over another profession. Elizur and Rosenheim (1982) compared empathy levels of medical students and university health science students after they had completed empathy training. The authors also investigated empathy levels of medical students and students in the psychosocial professions. Results indicated that medical students reported higher levels of empathy than the health

science students but lower levels of empathy than students in the psychosocial sciences.

Khajavi and Hekmat (1971) investigated the effects of psychiatric training on the level of empathy. A comparison of empathy level among members of the psychiatric team which included psychiatrists, psychiatric social workers, psychiatric nurses, and activity therapists and a control group of surgeons indicated that the psychiatric team scored significantly higher on Hogan's Empathy Scale than the surgeons. Members of the psychiatric team did not differ from each other on empathy scores.

Further findings of a profession as a variable in empathy were reported by Diseker and Michielutte (1981) who investigated empathy levels of medical students at two different schools. The authors compared the students scores from Hogan's Empathy Scale with scores from a previous study using physician assistants and faculty members. The findings suggested that medical students from one school scored at a comparable level with the medical students from the other school. When the group of medical students from Diseker and Michielutte's study was compared to faculty members and physician assistants, the medical students had lower empathy scores.

The discussion on the effect of variables on empathy levels has provided insight into the study of empathy. There appears to be support that empathy is affected by certain variables but more research is needed in order to draw conclusions. The relationships of empathy to patient satisfaction is the focus of the preceding discussion.

#### Empathy and Patient Satisfaction

The outcome of nurse-patient relationships starts from the moment of interaction and may last from minutes to hours or may spread over a life time. The dimensions of the therapeutic relationship are founded on empathy which according to Rogers (1961) have the intent of promoting growth, development, maturity and improved coping. According to Ware (1977) the desired outcome of a therapeutic relationship is measured by the quality of care from nursing and medical interventions. But another essential criterion of this therapeutic interaction, is patient satisfaction.

The importance in assessing patient satisfaction stems from a variety of humanistic needs (Carey & Posavac, 1982); consumer and federal legislation demands (Fleming, 1979) quality control (Donabedian, 1969; Fleming, 1979) and the supply and demand for health care manpower



(Andersen, 1979). All of these elements are concerns to nurses who provide a large percentage of patient services. However, Mangen and Griffith (1982) expressed this viewpoint: "The promotion of the role of the consumer depresses the status of patient by introducing a misleading supply-and-demand interpretation into what is a process of complex negotiation between the therapeutic agent and patient" (p. 477). Based on these concerns, the method of measuring and analysing patient satisfaction should be well scrutinized.

Patient satisfaction has been studied and measured as an independent and dependent variable. Ware (1977) explained the purpose of the dependent variable measurement as a means of evaluating provider services and facilities, whereas the independent variable measurement can be used to predict consumer behavior. The study of patient satisfaction with nursing care, according to Greene (1976) is usually reflected as a component of patient satisfaction resulting from several dimensions within a health care facility. No authors have directly addressed patient satisfaction in relationship to empathy levels within nurse-client relationships. However,

investigators (Daeffler, 1975; Mayer, 1982; Ventura, Fox, Corley & Mercurio, 1982) have investigated the relationship of primary nursing to patient satisfaction.

In measuring patient satisfaction, a dilemma exists as to whether patient satisfaction is process or outcome criteria. Data from studies, according to Ware (1977) point to satisfaction scores as valid dependent variables. The ratings were usually associated with characteristics of providers and services. Of the available studies of nurses, most of the authors (Harris, 1981; Mayer, 1982; Ventura, Fox, Corley & Mercurio, 1982) used outcome measurements to evaluate services provided. The exception was Field (1982) who employed patient satisfaction scores to predict patients' behavior.

In an effort to determine characteristics of the provider that influence patient satisfaction with medical care, Ware (1977) proposed a taxonomy of patient satisfaction. The major dimensions are listed below with a brief description in accordance with Ware's proposed recommendations.

1. Art of care: The amount of caring the patient receives in terms of behavior characteristics demonstrated by the provider.

2. Technical quality of care: Competence of the provider as related to standards of care and to provide diagnosis.
3. Accessibility/convenience: Time and effort the patient uses to be seen by a physician or for information to be given to patient over the phone.
4. Finances: The ability to pay for services through flexible plans.
5. Physical environment: Pleasant, comfortable, and attractive environments which provide directions and available facilities and equipment.
6. Availability: The supply and demand of doctors, nurses, and other allied health workers.
7. Continuity of care: Care is received from the same doctor, nurse, and other health care team members.
8. Efficacy/outcomes of care: The care received is measured in terms of benefits from the client's perception.

These characteristics or at least some appear in Mangelsdorff (1979) and Marram's (1973) patient satisfaction instruments that measure primary nursing care. Risser (1975) measured patient satisfaction with care by focusing more on the dimensions of interpersonal relationships, personality, and professional competence of the provider. She considered them to be more relevant to

satisfaction with nursing care. For this reason, the Risser Scale was selected for this research to examine patient satisfaction with nursing care in relationship to empathy levels in nurse-client relationships before and after empathy training.

The Risser Scale's (1975) components of interpersonal relationship, personality, and professional competence closely relate to the dimensions of an empathic relationship which require that the nurse possess interpersonal skills. Reflecting on Rogers' (1951) and Carkhuff's (1969a) qualities of empathy, respect, warmth, genuineness, self-disclosure, concreteness, confrontation, and immediacy of relationship as requisites for a helping relationship, inferences may be drawn among these characteristics and patient satisfaction. Meaning, if a nurse possesses such qualities, and patient satisfaction is derived from experiencing these conditions during an encounter with a nurse, perhaps there is a positive relationship between empathy and patient satisfaction.

Focusing on the components of patient satisfaction measurements, Fleming (1979) reported that categories of quality of care and courtesy and consideration of nurses, were highly correlated. She stated that this relationship implies what the public views as good care. Harris (1981)

compared patients' opinions with nurses' evaluation of the care patients received. Both patients and nurses listed responses which denoted patients were satisfied with their care.

More inferences are drawn from studies investigating the relationship between patient satisfaction and primary nursing. The conclusions drawn are based on characteristics of an interpersonal or helping relationship. For example, Daeffler (1975) found that patients had fewer complaints on units where primary nursing was practiced. In another study, Mayer (1982) reported that patients on units where primary nursing was implemented knew their nurses by name and seemed more satisfied with their nursing care according to the scores on the Risser Scale.

Overall satisfaction with health care is generally reported as positive (Fleming, 1979; Korsch, Gozzi & Francis, 1968; Mangen & Griffith, 1982). Obtaining favorable information concerning patient satisfaction according to Carey and Posavac (1982) may not always mean everything is fine. Also in Carey and Posavac's opinions, satisfaction is not dependent on any one factor, however, findings from their survey indicated that the public perceived quality nursing services to be of high priority.

Although, little is written about empathy in conjunction with patient satisfaction, the information presented suggests that a relationship exists between what patients perceive as being satisfying and the correlates of an empathic encounter. Authors have conducted a few studies to document patient satisfaction with primary nursing but since the bulk of patient services is provided by nurses, more research is needed to support empathy's role in effecting patient satisfaction.

#### Summary

The review of literature was used to examine the background of empathy from several investigator's viewpoints to provide clarity about the use of the concept. Empathy has been discussed in relationship to interpersonal communication which provided insight into its verbal and nonverbal component in enhancing the interaction between the empathizer and client. Other considerations discussed included characteristics of an empathizer and the effect of those factors upon therapeutic change. The type of therapies provided and the characteristics of a therapeutic interaction were reviewed.

Further information was provided concerning the measurement of empathy in terms of categories and

orientation of measurement. Complementary to this discussion was the criticism of the different measurements of empathy. Empathy and nurse-client relationships were expounded upon to provide the structure for which this research is derived. The outcome of low and high empathic levels were identified in an attempt to generate factors which impede or enhance the helping relationship.

To provide possible solutions for low empathic levels, several methodologies were discussed with emphasis on those teaching approaches wherein empathic level improved. Variables that influenced empathic level were listed along with empirical evidence of their affect upon empathy.

The last portion of the literature review presented an overview of patient satisfaction and empathy. Studies relating to patient satisfaction measures were discussed in order to draw inferences about empathy and patient satisfaction. The results of the literature review provided a composite approach to understanding empathy as a concept, technique and a skill. Thus, a theoretical base was established for assisting in the analyses of collected data.

### CHAPTER 3

#### PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

This experimental study was conducted to investigate the effectiveness of empathy training in increasing the empathic levels of medical-surgical nurses. In addition, the investigator sought to determine whether patients who received care from nurses who had empathy training expressed higher levels of satisfaction with their care. The dependent variables were empathy level as measured using the Hogan Empathy Scale (1975) and patient satisfaction level as measured using the Risser Patient Satisfaction Scale (1975). The independent variable was empathy training. Extraneous variables included age, length of practice, ethnic group, and educational preparation. This chapter included a description of the nature of the investigation.

The experimental approach used in this study included a two group before and after design for the empathy variable and a completely randomized factorial design (CRF 22) for patient satisfaction with nursing care. Experimental and control nurse groups received the Hogan Empathy Scale



(1975) as pretest and posttest, but only the nurse experimental group received empathy training classes.

The other group of subjects were patients. Both the control and experimental groups of patients were administered the Risser (1975) Patient Satisfaction Scale as pretest and posttest. Only the experimental group of patients had nurses providing care for them who had received empathy training classes.

#### Setting

The setting for this experimental study was a 532 bed county hospital located in a large metropolitan area in southeastern Texas. The hospital provides multiple services in the decentralized areas of operative, outpatient, emergency, and inpatient nursing services. Only the inpatient nursing service department was used in this study. Inpatient nursing services include 17 units which are comprised of general medical-surgical, pediatric and psychiatry units in addition to four critical care units. All of the general nursing units range from 13 to 64 bed capacity, whereas the critical care units range from 10 to 13 beds.

Each unit has team nursing in which nurse assistants, registered professional and licensed vocational nurses

provide patient care; however nurse assistants were not included in the study. The number of registered professional and vocational nurses varies from 8 to 40. For the purposes of this study, pediatrics, psychiatry, and the intensive care units were excluded from study along with the two units which were used in the pilot study. After agency approval, nurse data were obtained in the hospital classrooms while patient data were collected at the patient's bedside.

#### Population and Sample

A random sampling technique was used to select two medical-surgical units for the study. The sample was drawn via the lottery method from the population of ten inpatient nursing service units. Once the sample was chosen, a coin was flipped to decide which group of nurses would receive the experimental treatment. The unit which was labeled heads was assigned to the experimental group while the second unit was designated the control group. All registered professional and licensed vocational nurses and English speaking patients from each unit who agreed to participate were included in the study. The medical-surgical unit of the experimental group had a staff of 28 nurses while the unit of the control group had 32 nurses.

The patient sample consisted of all patients on the units of the control group and the experimental group of nurses who agreed to participate in the study. The number of patients in both the experimental and control groups differed for the pretest and posttest. The same patients were not still hospitalized during the posttesting because of the eight weeks time interval between pretesting and posttesting. Fifty patients were on the unit of the experimental nurse group during the pretesting and 52 different patients during the posttesting. For the control nurse group, 60 patients were on the unit during the pretesting and 54 different patients for the post-testing using the Risser (1975) Patient Satisfaction Scale.

#### Protection of Human Subjects

The following guidelines were followed to protect the rights of the subjects:

1. The study design followed the criteria of the Human Subject Review Committee of Texas Woman's University (Appendix B).
2. Agency approval was obtained from the hospital (Appendix C).
3. Nurses were told that participation in the study was on a voluntary basis and that their participation or

lack of participation would in no way influence their employment status at the hospital. They were also told that they could withdraw from the study at any time without penalty (Appendix E).

4. Patients were told that participation in the study would in no way influence care received during hospital stay. They were also told that participation was voluntary and that they could withdraw at any time without penalty (Appendix I).

5. All subjects were requested not to place signatures or any identifying marks on the pretest or posttest. Each test for the nurse sample was coded to allow for comparison of pretest and posttest scores. The code lists were kept in the possession of the investigator until data collection was completed, then all lists were destroyed.

6. All findings are reported as group findings and are available to participants upon request.

### Instruments

For the purpose of this study three instruments were used. The Hogan Empathy Scale was used as a pretest and a posttest for the nurses in both the experimental and control groups. The empathy training classes were

administered to the experimental group of nurses (Appendix I). The Risser Patient Satisfaction Scale was given as a pretest and posttest for patients in both groups. A Demographic Data Sheet developed by the investigator was used to collect data on selected variables and was attached to the Hogan Empathy Scale.

#### Demographic Data Sheet

The Demographic Data Sheet, attached to the Hogan Empathy Scale, was designed to elicit responses from the participants about their age, length of practice as a nurse, educational level, ethnic background, and the unit where employed. Participants were requested to circle or complete the blank with the most appropriate response (Appendix E).

#### Hogan Empathy Scale

After approval from the authors (Appendix D), the Hogan Empathy Scale (Appendix E) was used to obtain empathy data from the nurses participating in the study. According to Hogan (1969), the instrument measures an individual's empathic disposition. Later in 1975, Hogan clarified that the tool measures empathy in interpersonal conduct. Although Haier (cited in Hogan, 1975) concluded that the scale measures trait empathy Hogan emphasized

that the distinction between whether the tool measures trait or state empathy is not important. Both measures have the same consequences for the client as long as the counselor understands the client and cares about the client's welfare.

Hogan (1969) used a Composite Q-Sort description of an empathic person as given by staff members at the Institute of Personality Assessment and Research (IPAR) of University of California at Berkeley to develop the tool. The Composite Q-Sort ratings given by the 211 persons were correlated at  $r_e = .90$ . The ratings were compared to the subjects' responses to criteria of what constitutes a highly empathic person. The combined Minnesota Multiphasic Personality Inventory (MMPI) and the California Psychological Inventory (CPI) item pool were compared with individual responses.

Hogan's measurement of empathy was derived through "the use of a role or cognitive view of empathy to predict how high empathizers will behave in certain situations" (Gladstein, 1977, p. 74). In the development of the instrument, Hogan (1969) selected five items which were highly characteristic of an empathic person. The following statements reflect those characteristics:

1. Is socially perceptive of a wide range of interpersonal cues.
2. Seems to be aware of the impression he makes on others.
3. Is skilled in social techniques of imaginative play, pretending and humor.
4. Has insight into own motives and behavior.
5. Evaluates the motivation of others in interpreting situations. (p. 309)

Hogan (1969) contended that the aforementioned items are relevant to an empathic person since insight, perceptiveness and social acuity are embodied in the content. Hogan listed five items that were uncharacteristic of an empathetic person. These are stated as follows:

1. Does not vary roles; relates to everyone in the same way.
2. Judges self and others in conventional terms like "popularity", "the correct thing to do," social pressure, etc.
3. Is uncomfortable with uncertainty and complexities.
4. Extrapunitive; tends to transfer or project blame.
5. Handles anxiety and conflicts by, in effect, refusing to recognize their presence; repressive or dissociative behavior tendencies. (p. 309)

The scale according to Hogan (1969) is based on the framework of moral development which predicts ability to adopt the moral point of view. In order to evaluate the scale, Hogan used Gough's (1965) criteria for analyzing the psychological meaning of test scores. The three criteria used included: (1) the relationship of the scale to its appropriate criteria, (2) the underlying basis of

measurement of the scale, and (3) a search of unusual or unexpected relationships.

According to Hogan (1969) the scale predicts ability to adopt the moral point of view. The second criterion was met as evidenced by peer ratings and test correlates. High scorers tended to be socially acute and sensitive, whereas low scorers tended to be hostile and insensitive. The last criterion was evaluated by comparing the empathy scores of prisoners and military officers to demonstrate that differences in empathy scores cannot be fully explained in terms of intellectual ability. In Hogan's opinion, military officers were more intelligent than the prisoners, the difference cannot be explained by intellectual endowment.

The original tool contained 64 items of which 31 were from the CPI, 25 from the MMPI and 8 from the IPAR. For the purpose of this study the shorter version of the scale which has 39 items was used. This version contains 31 California Psychological Inventory (CPI) items and 8 Institute of Personality Assessment and Research statements (IPAR). According to Hogan (1975) the instrument provides a "convenient means" for investigating the role of empathy in interpersonal conduct. Further use of the 39 item tool was implemented by Forsyth (1979) using a



sample of nurses to explore empathy in nurses-client relationships.

Reliability. The reliability of the Hogan Empathy Scale was established using a test-retest correlation. Reliability estimates were calculated by using the Spearman Brown step-up formula. Correlation coefficients of  $\underline{r}_e = .68$  to  $\underline{r}_e = .86$  were obtained while the average correlation was  $\underline{r}_e = .80$ . Hogan (1975) reported that the 39-item scale correlated strongly with the 64-item scale at  $\underline{r}_e = .90$ . According to Fox (1976) the minimum acceptable level of reliability is  $\underline{r}_e = .70$ .

The reliability of the instrument was further tested using a variety of subjects. Applying the Kuder-Richardson<sub>21</sub> formula, with military officers Hogan (1969) obtained a coefficient of  $\underline{r}_{xx} = .71$ , whereas in college undergraduates, the average test-retest correlation was  $\underline{r}_{xx} = .84$ .

Validity. Concurrent validity was established using five groups of college students who were rated by staff members of the Institute of Personality Assessment and Research at the University of Berkeley at California. According to Hogan (1969) the staff defined social acuity as the ability to respond empathetically and intuitively

to other persons. Validity of the scale was established with 51 boys and 70 girls ranging between 13 and 15 years of age who were junior high school students. Based on the definition of social acuity, two teachers rated the students for social acuity. The means and standard deviation of the scores for the socially acute children were: boys, 33.0 and 4.1; girls, 36.2 and 5.3. The means and standard deviations of scores for the nonsocially acute children were: boys, 27.2 and 4.3; girls 30.6 and 5.5. Hogan (1975) reported that the scale routinely yields correlations above 0.4 with rated empathy, rated social acuity and skills at playing charades.

Interpretation. Each item on the Hogan Empathy Scale is scored using a true or false response. Hogan (1969) designed a protocol to determine the appropriate answer for each statement (Appendix F). A score for each participant is obtained from the number of correct responses. Predictive empathy as measured by the scale is based on what is characteristic of an empathic person. Greif and Hogan (1973) explained a score high in empathy as indicative of an individual who is oriented to another and is acceptant of the other person's beliefs. Three major themes underlying the scale scores were identified by

Greif and Hogan as: "Empathic persons are characterized by a patient and forbearing nature, by affiliative but socially ascendant tendencies, and by liberal humanistic political and religious attitudes" (p. 284). In evaluating the empathy scores, Hogan (1975) emphasized that high scores on the scale may indicate an excess of role taking. Another focal point, trait empathy, may infer over identification with resulting loss of objectivity. Nevertheless, Hornblow, Kidson and Jones (1977) confirmed the validity of the scores to measure a general tendency to handle interpersonal relations effectively which is the essence of this research.

#### Empathy Training Classes

The empathy training classes consisted of 7-hours of empathy training extended over a 3-week period of time (Appendix G). Each class was held twice a week at two different times to ensure that nurses on all three shifts in the experimental group had the opportunity to attend. The first 2-hour class was a lecture discussion type in which characteristics of the client-centered approach, the therapeutic process, the role and function of the nurse, and the relationship between the nurse and client were discussed. This information is the crux of Rogers' (1951)

client-centered approach. Rogers (1957) stated that empathic level can be developed through training which is facilitated by learning with the assistance of an empathic teacher.

The second class was a 3-hour class which consisted of role playing by the instructors of psychotherapeutic interviews. The participants responded verbally and in writing about the interviews. Feedback was offered to the participants as to the appropriateness of their responses. The participants were then paired to role play a patient and nurse interacting. They wrote their responses and brought them back for discussion. This class was similar to Kalisch (1971) training methodology.

The third session was a 2-hour class based on Kalisch's (1971) experiential training. The method of training was similar to sensitivity training in that the participants discussed personal feelings and problems regarding their reactions to the simulated interviews. The empathy training instructors, employees of the hospital, demonstrated to the participants appropriate empathic responses to the interviews.

### Risser Patient Satisfaction Scale

After approval was obtained from the publishers (Appendix H), the Risser Patient Satisfaction Scale was administered to the patient subjects to measure satisfaction with nursing care (Appendix I). The instrument contains 25 items which are divided into three categories. The first category is the technical-professional behavior of the nurse and consists of seven items. The second category contains seven interpersonal-educational items which concern the exchange of information between patient and nurse. The last category has 11 items and relates to the interpersonal trusting of the nurse by the patient.

The instrument was developed to evaluate quality patient care from the patient's perspective in a primary setting. Items used on the scale were obtained from interviews with patients and nurses, other measures of attitudes toward nurses, and from published literature to make up the initial pool of 58 items. Risser (1975) piloted the instrument with a group of 10 patients. An item analysis was performed after the tool was administered to 78 patients, then the number of items was reduced to 27. The revised scale was administered to 60 patients

and two more items were eliminated due to low correlation. However, Hinshaw and Atwood (1982) revised the scale to measure patient satisfaction with nursing care in an inpatient setting. They revised one item on the scale. In the item "The nurse gives good advice over the phone". the phrase "over the phone" was deleted (Hinshaw & Atwood, 1982).

Reliability. An internal consistency estimate of reliability was derived by use of Cronbach's alpha and Scott's homogeneity ratio. Calculated alpha reliability was  $\underline{r}_e = .912$  and homogeneity ratio was .302. Computed values of alpha for the three subscales were: technical professional,  $\underline{r}_e = .637$ ; interpersonal,  $\underline{r}_e = .825$ ; and interpersonal trusting,  $\underline{r}_e = .819$ . The first category was the least reliable. The normal range of values for Cronbach's alpha is 0.0 to +1.00. Correlation among the categories varied from  $\underline{r}_e = .598$  to  $\underline{r}_e = .806$ .

Hinshaw and Atwood (1982) further established reliabilities of each subscale using four estimates; coefficient alpha, inter-item, item-subscale and subscale-subscale. A coefficient alpha of  $\underline{r}_e = .70$  was established for the technical professional category while the educational category correlations were  $\underline{r}_e = .83$  to

$\underline{r}_e = .95$ . Similar patterns were established for the interpersonal trusting category. Most of the estimates met the criteria for internal consistency. The total instrument correlation was  $\underline{r}_e = .55$  to  $\underline{r}_e = .70$  for 7 of the correlations and  $\underline{r}_e = .70$  for the other 14.

Validity. Content validity was established through the method of item selection and revision. Several items for the scale were selected from patient comments of their likes and dislikes of nursing environments. Risser (1975) applied Reekies' taxonomy (cited in Risser, 1975) to categorize statements and enhance the degree of content validity. Construct validity was not established but Risser predicted that positive skewing of scores obtained on other satisfaction studies would provide evidence of construct validity.

Hinshaw and Atwood (1982) established construct validity using three techniques. These techniques included convergent and discriminant strategy, discriminance and predictive modeling. Analysis of convergent and discriminant techniques demonstrated  $\underline{r}_e = .80$  to  $\underline{r}_e = .90$  correlations in relationship to other constructs which were from  $\underline{r}_e = .06$  to  $\underline{r}_e = .63$ . Validity estimates of discriminance were

strong for two of the subscales but weak for the other subscale. Moderate construct validity was established using the predictive modeling technique.

Interpretation. Agreement or disagreement with the statements is measured on a 5-point Likert-type scale with categories of strongly agree, agree, neutral, disagree, and strongly disagree. A strongly agree answer receives one point while a strongly disagree response receives five points; the other scores vary between one and five. For the positive statements, weights were assigned the alternative responses from one (strongly agree) to five (strong disagree). Weights were reversed for the negative items. Participants who received a low score were considered to be satisfied with their care, whereas a high score indicated the participants were dissatisfied with their care. For the purposes of this study, the point value was reversed so that the strongly agree category received the highest value while the strongly disagree category received the lowest value. The negative and positive items were treated in the same manner as Risser (1975). High scores indicated that the patients were satisfied with their care, whereas low scores were indicative of low satisfaction.



### Data Collection

Collection of data began after approval by Texas Woman's University and the study agency. The Hogan Empathy Scale as a pretest and posttest, Demographic Data Sheet, and a description of the study were issued to each nurse participant by the investigator or assistants at preliminary meetings in hospital classrooms. The nurses were allotted 30 minutes to complete the questionnaire although generally 15 minutes or less were required.

The Hogan Empathy Scale, the Demographic Data Sheet, and instructions were placed in a packet and the packet was administered as a pretest to the control group and experimental group of nurses twice on each shift over a period of one week. One month following the completion of the 3-week empathy classes by the experimental group, both groups were retested using the items in the packet as the posttest. The posttesting took one week for completion in order to allow for sessions to be held twice on each of the three shifts. All instructions were repeated prior to posttesting.

The investigator and two assistants administered the Risser Patient Satisfaction Scale to the control and experimental groups of patients concurrently during the week of testing of the nurses. All testing of patients

was done at the bedside. Patients who were able or desired to write, completed the scale themselves while others were read the questions by the investigator or assistant.

Data collection followed the ethical human rights guidelines as aforementioned. Six months prior to gathering data for the principal study, a pilot study was conducted in the same agency using two medical-surgical units.

#### Pilot Study

Two medical-surgical units were selected from the 14 inpatient units which excluded psychiatry, pediatrics and intensive care units. Randomization was not used based on convenience for the investigator. Once the sample was chosen, a coin was flipped to decide which group of nurses would receive the experimental treatment. All registered professional and vocational nurses who agreed to participate were included in the study. There were six nurses in the experimental group and 12 in the control. The nurses in the experimental group attended the 7-hour empathy training, however both groups received the Hogan (1975) Empathy Scale as pretest and posttest. Posttests

were administered to the same nurses in each group one week after classes were completed.

The patients in the experimental and control groups were administered the Risser (1975) Patient Satisfaction Scale as pretest and posttest concurrently with the nurse subjects. For posttesting the patient population for both groups was different; patients were discharged from the hospital during the 5-week interval before the posttest. For pretesting there were 17 patients in the control group and 10 patients in the experimental group. There were 10 patients in the experimental group and 21 in the control group for the posttesting.

The findings for the pilot study were analyzed according to the hypotheses of the study. Each hypothesis, including the rationale for refining or retaining the methodology, techniques and instruments, is discussed. The hypotheses were:

H<sub>1</sub>: Empathy levels of medical-surgical nurses who receive empathy training classes will increase after the classes.

This hypothesis was tested by comparison of the pretest and posttest scores of the nurses in the experimental group. An analysis of variance with repeated measures was used to measure the difference in scores but

because of the small sample size of the experimental group, the data could not be analyzed. An analysis of variance was retained for the principal study because the sample size was larger and the test is the most powerful analysis technique.

H<sub>2</sub>: Empathy levels of medical-surgical nurses who receive no formal empathy classes will be lower than those medical-surgical nurses who receive formalized classes.

An analysis of variance with repeated measures was used to analyze the difference in empathy scores between the experimental and the control nurse groups. Difference in the scores between the pretest and posttest was not significant at  $p < .05$ . This test was retained because, with the larger sample, the data could be analyzed using this powerful statistical technique.

H<sub>3</sub>: The level of patient satisfaction will be higher on the unit staffed by medical-surgical nurses who have had empathy training classes than on units where medical-surgical nurses did not have empathy training classes.

Patient satisfaction with nursing care scores were analyzed using an analysis of variance with repeated measures. Findings indicated there was no significant difference in the scores at  $p < .05$ .

H<sub>4</sub>: Patient satisfaction will increase on the medical-surgical unit staffed by nurses who have participated in empathy training classes. An analysis of variance was used to compare pretest and posttest scores of patients in the experimental group. The results indicated that there was a significant difference between the pretest and posttest scores. The posttest scores were significant at  $p < .05$ .

The findings from the pilot study demonstrated that both tools were feasible for data collection in both groups. Other findings indicated the need for larger samples. After the pilot study another hypothesis was added to the major study for investigation.

#### Treatment of Data

All data were organized, categorized and prepared for computerized statistical analysis. Descriptive statistics were used to summarize the characteristics of the data both by group and total sample so that interpretation and conclusion could be drawn (Fox, 1976). Inferential statistics were applied to the data to make inferences about the patient and nurse populations (Polit & Hungler, 1978).

Empathy scores, age and years of practice of the nurse subjects were described by use of the means and standard deviations. Additional measures of central tendency included the mode and percentage to represent educational level and ethnic group. The Pearson product-moment correlation coefficient was used to analyze the relationship between empathy scores and age, empathy scores and length of practice. Ethnic background and educational level were analyzed in relationship to empathy scores using the Kruskal-Wallis test.

Patient satisfaction with nursing care scores both by group and the total sample were described using the means, standard deviation and range. All descriptive data were summarized using graphs and charts.

The hypotheses were tested using an analysis of variance. Kirk (1982) defined this statistic as a parametric test of significance of differences between means. This procedure was used for analysis of the empathy scores and for the patient satisfaction with nursing care scores.

### Summary

In this chapter the procedures for collecting, summarizing and analyzing the data for this experimental study were delineated. For the collection of data, the

Hogan Empathy Scale was used for the nurse population and the Risser Patient Satisfaction Scale for the patients. The study was conducted in a large county hospital using two medical-surgical inpatient units. The purpose of the study was to provide more information on empathy and its relationship to nurse-client relationships and patients' satisfaction with their care.

## CHAPTER 4

### ANALYSIS OF DATA

This experimental study was conducted to investigate the effectiveness of empathy training in increasing the empathic level of nurses and influencing patient satisfaction with nursing care. The nurses' empathic level was measured by using Hogan's (1975) Empathy Scale and the level of patient satisfaction with nursing care was measured by using Risser's (1975) Patient Satisfaction Scale. In this chapter the analyses of data obtained from patients and nurses are presented.

The data obtained from nurses are summarized and described using descriptive statistics. First, the combined sample is discussed then the experimental and control groups are described. The second section includes a description of the patient sample. The scores for patient satisfaction with nursing care are discussed according to the entire sample and according to each separate group. Finally, the inferential data analysis are presented.



### Description of Sample

The sample of nurses consisted of an experimental group designated A and a control group B. Group A received the empathy training while group B received no training. The 50 registered professional and licensed vocational nurses who comprised both samples received the Hogan Scale as both pretest and posttests. Nurse assistants employed on the units were not included in the study.

### Combined Nurse Sample

A summary of the attribute variables of age, length of practice, ethnicity and educational level is presented to describe the total sample of 50 nurses (Table 1). Age varied from 24 to 65 years with a mean of 37.75 years and a standard deviation of 9.5. Of the 50 nurses responding, 8 did not report age. The mean length of time in nursing practice was 12.38 years and varied from 2 to 33 years. Within the sample--27 (54%) nurses were Caucasian and Black Americans; 20 (40%) were Filipino and Indian Asians; and 3 (6%) were Black Africans. Level of education varied as follows: 17 (34%) were licensed vocational nurses; 12 (24%) had diplomas; 7 (14%) were associate degree graduates and 14 (28%) had earned bachelor's degrees.

Table 1

Frequency Distribution and Percentages of  
Age, Length of Practice, Ethnic Group  
and Educational Level by Group

Variables	Experimental Group		Control Group		Total Number	
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
<u>Age (Years)</u>						
24-31	7	16.8	5	12.0	12	28.8
32-39	11	26.0	8	19.0	19	45.0
40-47	1	2.4	5	12.0	6	14.4
48-55	0	0.0	1	2.2	1	2.2
56-65	2	4.8	2	4.8	4	9.6
No Response	<u>3</u>	<u>0.0</u>	<u>5</u>	<u>0.0</u>	<u>8</u>	<u>0.0</u>
Total	24	50.0	26	50.0	50	100.0
<u>Length of Practice (Years)</u>						
2-6	9	18.0	7	14.0	16	32.0
7-11	5	10.0	3	6.0	8	16.0
12-16	5	10.0	5	10.0	10	20.0
17-24	3	6.0	8	16.0	11	22.0
25-33	<u>2</u>	<u>4.0</u>	<u>3</u>	<u>6.0</u>	<u>5</u>	<u>10.0</u>
Total	24	48.0	26	52.0	50	100.0
<u>Ethnic Group</u>						
Black Africans	1	2.0	2	4.0	3	6.0
Caucasian Americans	2	4.0	1	2.0	3	6.0
Black Americans	13	26.0	11	22.0	24	48.0
Filipino Asians	4	8.0	1	2.0	5	10.0
Indian Asians	<u>4</u>	<u>8.0</u>	<u>11</u>	<u>22.0</u>	<u>15</u>	<u>30.0</u>
Total	24	48.0	26	52.0	50	100.0

Table 1 (Continued)

Variables	Experimental Group		Control Group		Total Number	
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
<u>Educational Level</u>						
Licensed Vocational Certificate	9	18.0	8	16.0	17	34.0
Diploma in Nursing	2	4.0	10	20.0	12	24.0
Associate Degree	5	10.0	2	4.0	7	14.0
Bachelor of Science	<u>8</u>	<u>16.0</u>	<u>6</u>	<u>12.0</u>	<u>14</u>	<u>28.0</u>
Total	24	48.0	26	52.0	50	100.0

Scores on the Hogan Empathy Scale for the total 50 subjects are delineated into pretest and posttest scores and they are described according to lowest and highest scores and by ranges as established by Forsyth (1979).

Combined Nurse Sample  
Pretest Empathy Scores

The ranges were: 0 to 13, low range; 14 to 26, medium range; and 27 to 39, high range. Pretest scores are described in Figure 1. These scores varied from 14 to 26 points. The mean pretest score was 19.06 and the standard deviation was 2.58. According to these established ranges, all 50 (100%) pretest scores were in the medium range as shown in Table 2.

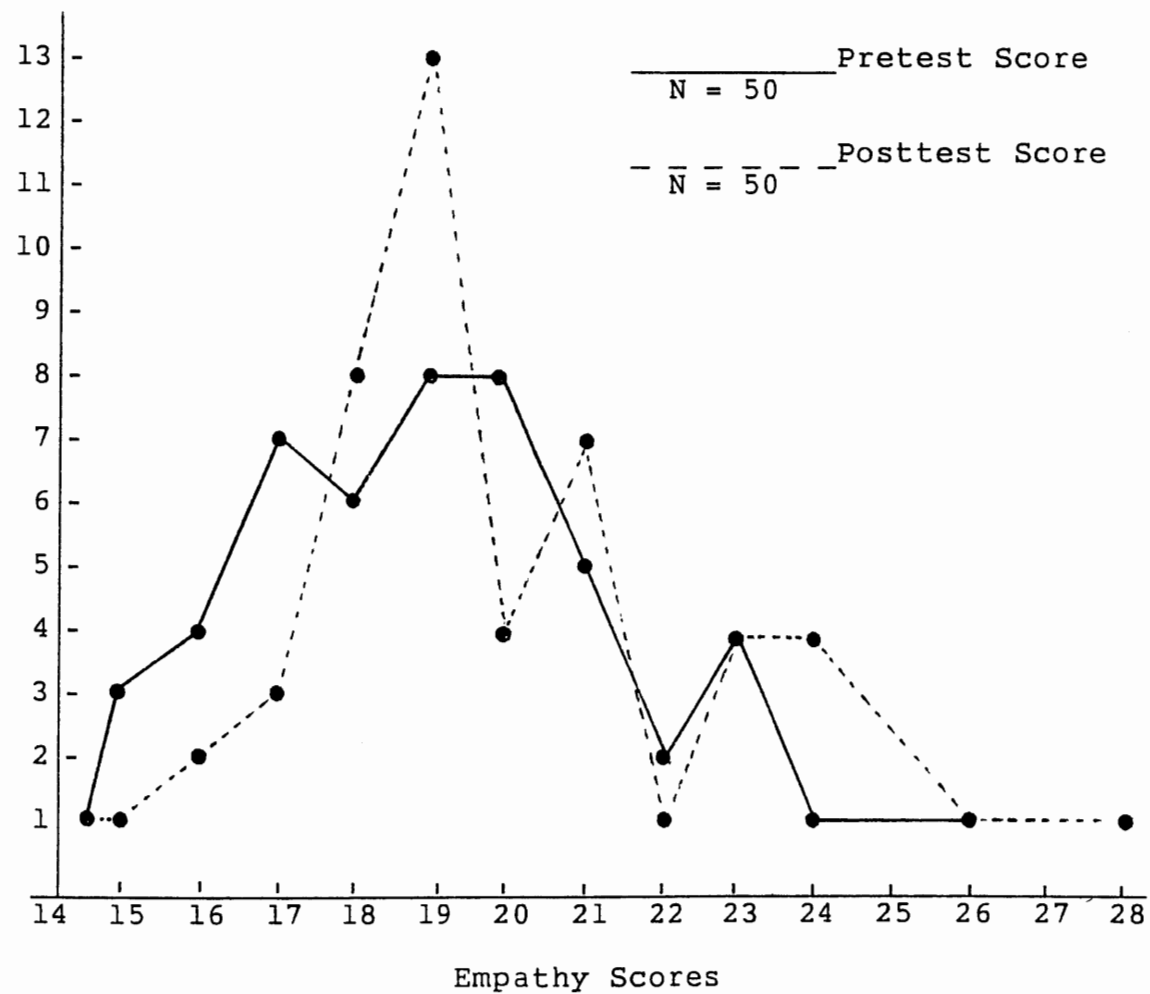


Figure 1. Pretest and Posttest Empathy Scores of the Combined Samples of Experimental and Control Nurse Groups

Mean Pretest Scores - 19.06  
Standard Deviation - 2.58

Mean Posttest Scores - 19.88  
Standard Deviation - 2.76

Table 2  
Combined Sample of Pretest and Posttest  
Hogan Empathy Scale Scores  
According to Ranges<sup>a</sup>

Time	Low 0-13		Middle 14-26		High 27-39		Total	
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
Pretest	0	0	50	100.0	0	0.0	50	100.0
Posttest	0	0	49	98.0	1	2.0	50	100.0

<sup>a</sup>Ranges are adapted from Forsyth's (1979) study.

#### Combined Nurse Sample Posttest Empathy Scores

Posttest empathy scores are illustrated in Figure 1. These scores fell between 14 and 28. The mean posttest score was 19.88 and the standard deviation was 2.76. According to established ranges, 49 (98%) of the posttest scores fell in the medium range while 1 (2%) score was in the high range (see Table 2).

#### Experimental Nurse Group

Further descriptions of nurse participants were derived from the classification of subjects into experimental and control groups. The experimental group consisted of a total of 28 nurses who were employed on the general medical unit; however, only 24 (86%) nurses

participated in the study. Of the remaining 4 (14%) nurses, two were on vacation and the other two nurses did not complete the classes. The mean age of the 24 subjects was 36.23 years with a standard deviation of 8.5 years. Ten (20%) of the 24 nurses had practiced nursing more than 12 years. Nurses in group A described their ethnicity as: American--Caucasians 2 (4%) and Blacks 13 (26%); Asian--Filipinos 4 (8%) and Indians 4 (8%); and African--Blacks 1 (2%). The educational levels of the subjects in group A were 9 (18%) licensed vocational nurses 2 (4%) diploma graduates; 5 (10%) associate degree graduates; and 8 (16%) bachelor degree graduates (see Table 1).

#### Experimental Nurse Group Pretest Empathy Scores

For this experimental nurse group, the mean pretest score on the Hogan Empathy Scale was 18.41 and the standard deviation was 2.30 as shown in Table 3. All 24 (100%) of the pretest empathy scores were classified in the medium range. These scores are illustrated in Table 4.

#### Experimental Nurse Group Posttest Empathy Scores

The posttest mean empathy score of the experimental group was 20.37 and the standard deviation was 2.66. Twenty-three (96%) of the 24 posttest empathy scores were

Table 3  
Hogan Empathy Scale Mean Pretest  
and Posttest Scores  
by Group

Group	Mean	Pretest Standard Deviation	Mean	Posttest Standard Deviation
Experimental	18.41	2.30	20.37	2.66
Control	19.65	2.72	19.42	2.83

Table 4  
Pretest and Posttest Hogan Empathy Scale  
Scores According to Ranges<sup>a</sup>  
by Experimental Group

Time	Low 0-13 <u>n</u> %		Middle 14-26 <u>n</u> %		High 27-39 <u>n</u> %		Total <u>n</u> %	
Pretest	0	0	24	100.0	0	0.0	24	100.0
Posttest	<u>0</u>	<u>0</u>	<u>23</u>	<u>96.0</u>	<u>1</u>	<u>4.0</u>	<u>24</u>	<u>100.0</u>
Total	0	0	47	196.0	1	4.0	48	200.0

<sup>a</sup>Ranges are adapted from Forsyth's (1979) study.

in the medium range and 1 (4%) was in the high range.

Scores according to these ranges are also illustrated in Table 4.

### Control Nurse Group

A total of 32 nurses were employed on the surgical nursing unit control group; however, only 26 (81%) participated in the study. Three (9.5%) nurses were on vacation and the other 3 (9.5%) did not complete post-testing. The mean age of the 26 subjects was 39.23 years with a standard deviation of 10.34 years. Of the 26 nurses, 16 (32%) had practiced nursing 12 or more years. Subjects described their ethnicity as: American--Caucasians 1 (2%) and Blacks 11 (22%); Asian--Filipinos 1 (2%) and Indians 11 (22%); African--Blacks 2 (4%). The level of education included 8 nurses (16%) with vocational preparation, 10 (20%) with diplomas, 2 (4%) with associate degrees and 6 (12%) with bachelor of science degrees (see Table 1).

### Control Nurse Group Pretest Empathy Scores

The mean pretest Hogan Empathy Scale score for the nurse control group was 19.65 with a standard deviation of 2.72 (see Table 3). Scores for the control group also described according to established ranges are found in Table 5. All 26 (100%) pretest scores were classified in the medium range of 14 to 26.



Table 5  
Pretest and Posttest Hogan Empathy  
Scores According to Ranges<sup>a</sup>  
by Control Group

Time	Low 0-13		Middle 14-26		High 27-39		Total	
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
Pretest	0	0	26	100.0	0	0.0	24	100.0
Posttest	<u>0</u>	<u>0</u>	<u>26</u>	<u>100.0</u>	<u>0</u>	<u>0.0</u>	<u>26</u>	<u>100.0</u>
Total	0	0	52	100.0	0	0.0	52	200.0

<sup>a</sup>Ranges are adapted from Forsyth's (1979) study.

#### Control Nurse Group Posttest Empathy Scores

The mean posttest empathy scores for the control group was 19.42 and the standard deviation was 2.83 (see Table 3). According to ranges, all 26 (100%) posttest empathy scores were classified in the medium range of 14 to 26. The range of scores on the Hogan Scale for the nurse control group are also found in Table 5.

#### Combined Patient Sample

The sample was selected from the nursing units staffed by the nursing experimental and control groups. This sample of patients was then designated as the experimental and control groups according to the respective

units from which they were selected. English speaking patients who agreed to participate in the study were selected. The Risser Patient Satisfaction Scale was administered to both patient groups as a pretest and posttest. Patients who responded to the pretest differed from those completing the posttest because of a two month time interval between the administration of respective tests.

#### Combined Patient Sample Scores

To determine the patient's level of satisfaction with nursing care, scores on the Risser Scale were described according to arbitrary divisions of extremely low, low, moderate, high and extremely high satisfaction groupings. The highest obtainable score was 125 points and the lowest score was 25; therefore, the scores were grouped in increments of 20 points. Each division was labeled and given a point range as follows: extremely high satisfaction, 106 to 125; high satisfaction, 85 to 105; moderate satisfaction, 65 to 84; low satisfaction, 25 to 44. The total sample of 80 patients scored between 49 and 125 on the pretest. The mean pretest score was 91.11 with a standard deviation of 14.44. The total sample of 78 patients scored 57 to 119 on the posttest. The mean posttest score

was 90.52 with a standard deviation of 11.78. These scores according to the satisfaction categories of extremely low, low, moderate, high and extremely high satisfaction with nursing care are presented in Figure 2.

#### Experimental Patient Group

The experimental group of patients used for pretesting was comprised of 31 (62%) of the 50 patients in the unit. The remaining 19 (48%) patients did not complete the scale or did not volunteer to participate in the study.

#### Experimental Patient Group Scores

The mean pretest patient satisfaction with nursing care score was 91.61 with a standard deviation of 18.79 as illustrated in Table 6. Thirty-one (60%) of the 52 patients on the unit participated in the posttesting. Twenty-one (40%) patients declined to participate or did not complete the posttest. The mean posttest score was 96.87 and the standard deviation was 13.29 as shown in Table 7.

The experimental patient group's satisfaction with nursing care scores were also described according to the divisions of extremely low, low, moderate, high and extremely high groupings. None of the pretest scores fell

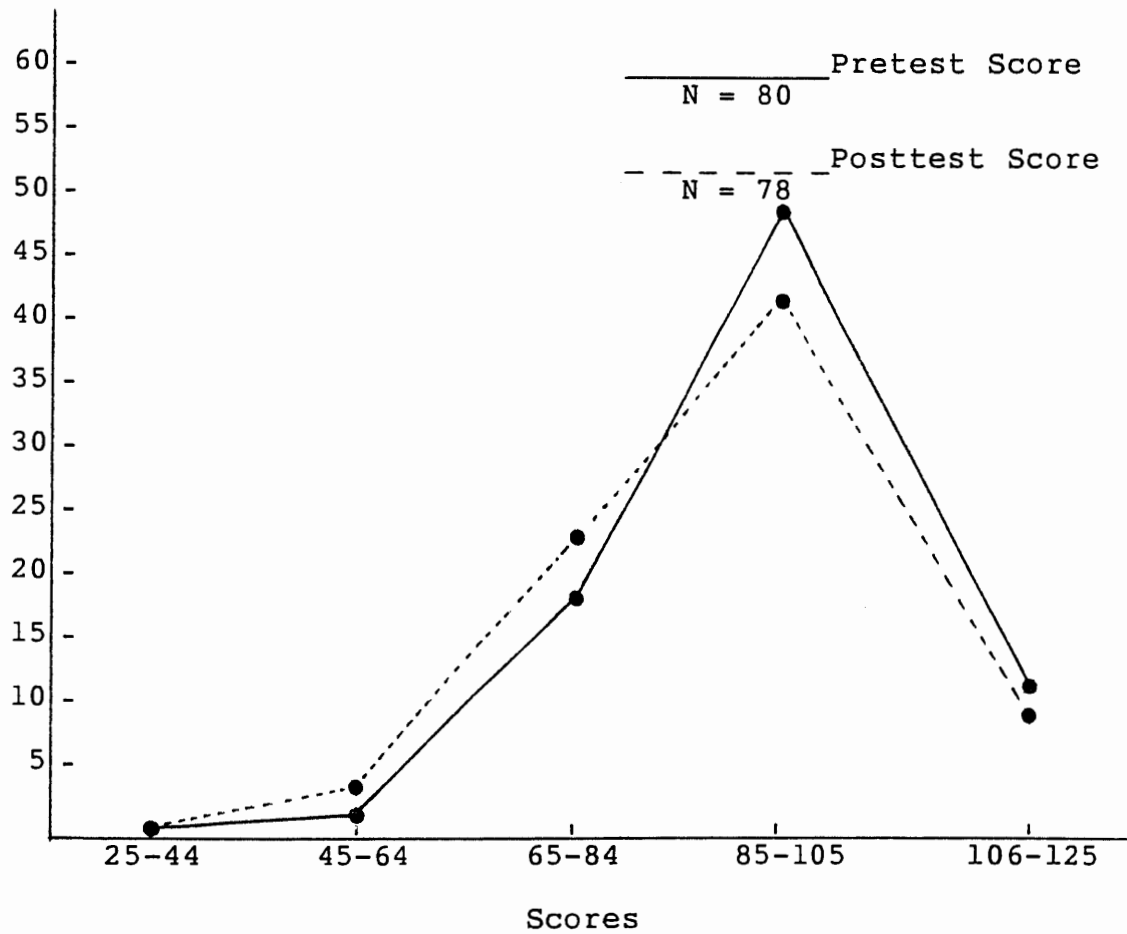


Figure 2. Pretest and Posttest Scores  
of the Total Patient  
Sample

Mean Pretest Scores - 91.11  
Standard Deviation - 14.44

Mean Posttest Scores - 90.52  
Standard Deviation - 11.78

Table 6  
Risser Patient Satisfaction With  
Nursing Care Pretest Scores  
for Experimental and  
Control Groups

Score Ranges	Experimental N = 31		Control N = 49	
	<u>n</u>	%	<u>n</u>	%
Extremely Low 25-44	0	0.0	0	0.0
Low 45-64	1	3.0	0	0.0
Moderate 65-84	9	29.0	9	18.0
High 85-105	13	42.0	37	76.0
Extremely High 106-125	<u>8</u>	<u>26.0</u>	<u>3</u>	<u>6.0</u>
Total	31	100.0	49	100.0
Mean	91.61		90.61	
Standard Deviation	18.79		10.04	

in the extremely low range. The other pretest scores were the following: 1 (3%) in the low category of 45 to 64; 9 (29%) in the moderate category of 65 to 84; 13 (42%) in the high category of 85 to 105; 8 (26%) in the extremely high category of 106 to 125 (see Table 6). Posttest

Table 7  
Risser Patient Satisfaction With  
Nursing Care Posttest Scores  
for Experimental and  
Control Groups

Score Ranges	Experimental N = 31		Control N = 47	
	<u>n</u>	%	<u>n</u>	%
Extremely Low 25-44	0	0.0	0	0.0
Low 45-64	2	7.0	1	2.0
Moderate 65-84	3	10.0	21	45.0
High 85-105	18	58.0	24	51.0
Extremely High 106-125	<u>8</u>	<u>25.0</u>	<u>1</u>	<u>2.0</u>
Total	31	100.0	47	100.0
Mean	96.87		84.14	
Standard Deviation	13.29		10.23	

satisfaction with nursing care scores for the experimental group were described as follows: none (0%) in the extremely low division; 2 (7%) in the low division, 3 (10%) in the moderate division; 18 (58%) in the high

division; and 8 (25%) in the extremely high division (see Table 7).

#### Control Patient Group

The control group of patients used for pretesting was comprised of 49 (82%) of the 60 patients on the unit. Of the 11 (18%) who did not participate, 8 did not speak English and the other 3 patients did not volunteer to participate in the pretesting.

#### Control Patient Group Scores

The mean pretest patient satisfaction with nursing care score was 90.61 and the standard deviation was 10.04 (Table 6). For posttesting, 47 (90%) of the 52 patients in the unit agreed to participate. The other 5 (10%) declined to participate, or they did not complete the posttest. The mean posttest satisfaction with nursing care score was 84.14 with a standard deviation of 10.23 (see Table 7).

Further description of the scores of the control group of patients was categorized according to the division of satisfaction with nursing care. Pretest scores were described as follows: None were in the extremely low category of 25 to 44 or the low category of 45 to 64; 9

(18%) fell in the moderate category of 65 to 84; 37 (76%) were in high category of 85 to 105; 3 (6%) were in the extremely high category of 106 to 125 (Table 6). Posttest satisfaction with nursing care scores were as follows: no scores in the extremely low division, 1 (2%) in the low division; 21 (45%) in the moderate division; 24 (51%) in the high division; 1 (2%) in the extremely high division (see Table 7).

Data for the nurse and patient samples have been described and summarized according to descriptive statistics, first for combined samples and then for each separate group. The data from nurses were described according to the variables of age, length of practice, ethnicity, and educational level. The next section of this chapter will include the findings of the study.

### Findings

This study was conducted to investigate if empathy training improved the empathic level of nurses and to determine whether patients who received nursing care from empathy trained nurses expressed higher levels of satisfaction with nursing care. The relationship between the demographic variables of age, length of practice, ethnicity, and level of education was compared with



empathy using correlation procedures. The hypotheses were tested using the analysis of variance with repeated measures.

Two tests of correlation were used to examine the relationship between posttest empathy scores and the extraneous variables. A Pearson product-moment correlation coefficient was used to determine the relationship between age and length of practice and posttest empathy scores (Table 8). An inverse relationship was found between age and empathy scores. The younger nurses tended to have higher empathy scores. There was no significant relationship between length of practice and empathy posttest scores (Table 8).

Table 8  
Correlation Between Hogan Scale  
Empathy Scores of Total Sample  
With the Variables Age and  
Length of Practice

Variables	Posttest Scores	<u>P</u>
Age	-0.3796	.007*
Length of Practice	0.1715	.117

\*p≤.01.

A Kruskal-Wallis one-way analysis of variance was used to examine the difference between empathy scores of nurses grouped according to educational level of nurses. The educational variable was categorized into four levels. These levels included vocational, diploma, associate degree, and bachelor's degree nurses. The Kruskal-Wallis converted Chi-Square score value,  $X^2 = 2.31$  ( $p > .509$ ) indicated there was not a significant difference in empathy scores of nurses grouped according to educational levels (Table 9).

Table 9  
Hogan Scale Posttest Mean Ranks  
According to Level of  
Education

Educational Level	Cases	Mean Ranks	Chi Square
Licensed Vocational Certificate	17	26.26	2.31
Diploma	12	21.00	
Associate Degree	7	23.71	
Bachelor of Science Degree	<u>14</u>	29.30	
Total Cases	50		

A Kruskal-Wallis one-way analysis of variance was also applied to empathy posttest scores and levels of ethnicity. Ethnicity of the nurses was categorized into

three groups and included Caucasian and Black Americans, Filipino and Indian Asians, and Black Africans. The interpretation of the Kruskal-Wallis converted Chi-Square value of  $X^2 = .987$  ( $p > .610$ ) indicated that there was no significant difference between posttest empathy scores of nurses grouped according to ethnicity (Table 10).

Table 10  
Hogan Scale Posttest Mean Ranks  
According to Ethnicity

Ethnic Group	Cases	Posttest Mean Rank	Chi Square
Americans	27	22.98	.987
Asians	20	27.28	
Africans	<u>3</u>	26.33	
Total Cases	50		

Further analysis of data is explained according to hypotheses. The five hypotheses were related to the effects of empathy training on nurses empathic level and the effect of empathy trained nurses on patient satisfaction with nursing care. Each hypothesis is discussed separately.

Hypothesis One:

H<sub>1</sub>: Empathy levels of medical-surgical nurses who receive empathy training will increase after the empathy training classes.

There was a significant change in empathy scores of the experimental nurse group from pretest to posttest. The mean pretest score was 18.41 as compared to the mean posttest score of 20.37. The analysis of variance indicated that a significant interaction had occurred as evidenced by an F value of 6.65 ( $p < .01$ ) (Table 11). The mean empathy scores were graphed to determine if an increase in the mean score occurred from pretest to posttest. There was a change in the mean score from pretest to posttest. A graphic representation of the mean empathy scores is found in Figure 3. To interpret the interaction, an analysis of covariance (ANCOVA) was computed on the scores to account for the affects of the pretest empathy scores on the posttest empathy scores. The results of ANCOVA indicated that the experimental nurse group experienced an increase in empathy levels (Table 12). This hypothesis was accepted.

Table 11  
Analysis of Variance Summary Table  
of Empathy Scores for the  
Experimental and  
Control Groups

Source of Variance	SS	DF	MS	F	<u>P</u>
Pretest					
Mean	37836.35	1	37836.35	3983.63	.00
Between Group	0.50	1	0.50	0.05	.81
Error	455.90	48	9.50		
Posttest					
Within Group	18.62	1	18.62	4.14	.04*
Interaction	29.90	1	29.90	6.65	.01*
Error	215.78	48	4.49		

\*p<.05

Table 12  
Analysis of Covariance Summary Table  
of Empathy Scores

Source	SS	DF	MS	F	<u>P</u>
Experimental					
Group	24.19	1	24.185	3.58	.064
1st Covariance	46.84	1	46.811	6.94	.011*
Error	317.13	47	6.747		

\*p<.05

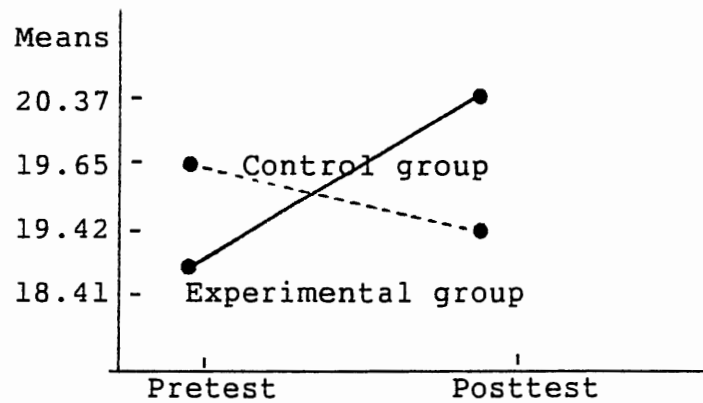


Figure 3. Mean Pretest and Posttest Empathy Scores of the Experimental and Control Group of Nurses

Hypothesis Two:

H<sub>2</sub>: Empathy levels of medical-surgical nurses who did not have empathy training classes will not increase from pretest to posttest.

The mean pretest empathy score for the nurse control group was 19.65 whereas the mean posttest empathy score was 19.42. Significant interaction was revealed by the analysis of variance as evidenced by an F value of 6.65 ( $p < .01$ ) (Table 11). The mean empathy pretest and posttest scores were graphed to demonstrate the relationship of the change in scores from pretesting to posttesting. Results indicated that the mean posttest score decreased as compared to the mean pretest score (see Figure 3). To determine the meaning of the interaction and change, an analysis of covariance was used to separate out the effects of the pretest empathy scores on the posttest empathy scores. Results indicated that the change was not significant in terms of an increase in empathy (Table 12). Based on the analysis of covariance the hypothesis was accepted.

Hypothesis Three:

H<sub>3</sub>: Empathy levels of medical-surgical nurses who receive no formal training will be lower than those medical-surgical nurses who receive formalized classes.

The analysis of variance was done to determine whether there were differences in posttest empathy scores of the experimental and control nurse groups. The results indicated there was a significant interaction within the two groups as indicated by an F value of 4.14 ( $p \leq .04$ ). There was a change in mean empathy scores from pretest to posttest by both groups as evidenced by an F value of 6.65 ( $p \leq .013$ ).

The mean pretest and posttest empathy scores of the groups of nurses were graphed to determine whether a change occurred after treatment. Mean pretest scores were the following: 18.41 for the experimental group and 19.65 for the control group. Mean posttest empathy score for the experimental group was 20.37 while mean posttest empathy score of the control group was 19.42. The mean scores of both groups were graphed and the results indicated that the means of each group of nurses were connected by nonparallel lines. According to Kirk (1982) this interaction was significant. The graphic representation of the mean scores is found in Figure 3. To interpret



the treatment affects on the posttest scores, an analysis of covariance was computed on the scores. The pretest scores were used as covariates. Results indicated that the experimental group's posttest empathy scores were significantly higher than the control group's (Table 12). This hypothesis was accepted.

Hypothesis Four:

H<sub>4</sub>: Patient satisfaction levels will be higher in the unit staffed by medical-surgical nurses who have had empathy training than in the unit where the medical-surgical nurses have not have empathy training classes.

The experimental patient group had a higher level of satisfaction with nursing care than the control patient group prior to the treatment effect. The mean satisfaction with nursing care pretest scores for both groups were: 91.61 with a standard deviation of 18.79 for the experimental group and 90.61 with a standard deviation of 10.04 for the control group. The mean posttest satisfaction with nursing care score for the experimental group was 96.87 and the standard deviation was 13.29. The mean posttest score of the control group was 84.14 and the standard deviation was 10.23. The analysis of variance demonstrated that the interaction between the pretest and

posttest of the groups was significant at  $p < .002$  (Table 13). By graphing (Figure 4) the mean pretest and posttest scores, a mean change was noted from pretesting to posttesting. The experimental patient group mean posttest score increased as compared to the control group's.

A test of simple-main effects was applied to the scores and the results indicated that for A at  $b_2$ , the  $F = 781$  value (see Table 14) was statistically significant. The experimental patient group's level of satisfaction with nursing care increased when nurses had empathy training. Hypothesis<sub>4</sub> was accepted.

Table 13  
Analysis of Variance of Patient  
Satisfaction With Nursing  
Care Scores

Source	SS	DF	MS	F	<u>P</u>
Mean	1242428.10	1	1242428.10	7483.80	.000
Between					
group	1773.16	1	1773.16	10.68	.002*
Time	13.67	1	13.67	0.08	.774
Within					
group	1293.68	1	1293.68	7.79	.005*
Error	25566.42	154	166.01		

\* $p < .05$

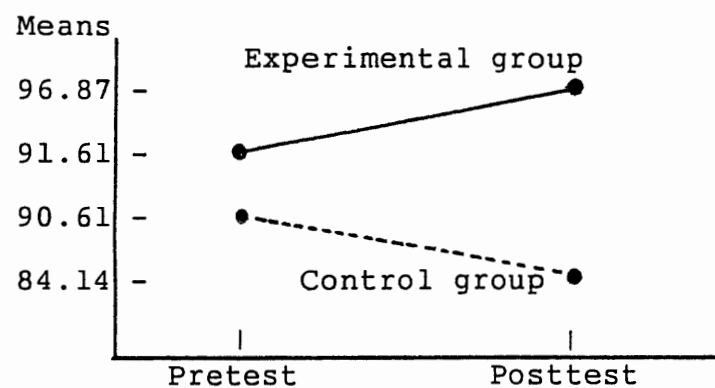


Figure 4. Mean Pretest and Posttest Patient Satisfaction With Nursing Care Scores of the Experimental and Control Patient Groups

Table 14  
Summary Table of Simple-Main Effects:  
Patient Satisfaction With  
Nursing Care Scores

Source	Sum of Squares	Degrees of Freedom	Mean Square	F Value
Sum Squares <sub>A</sub>	1773.16	1	1773.16	10.68
Sum Squares <sub>B</sub>	13.67	1	13.67	0.08
AB	1293.68	1	1293.68	7.79
A at b <sub>1</sub>	121,664.00	(p-1)1	121,664.00	732.00*
A at b <sub>2</sub>	129,694.00	(p-1)1	129,694.00	781.00*
B at a <sub>1</sub>	433.00	(q-1)1	433.00	2.00
B at a <sub>2</sub>	15,984.00	(q-1)1	15,984.00	96.00*

Hypothesis Five:

H<sub>5</sub>: Patient satisfaction with nursing care will increase on the medical-surgical unit staffed by nurses who have participated in empathy training.

There was a significant interaction after the treatment factor was implemented as indicated by  $p < .005$ . The graphic illustration of mean patient satisfaction with nursing care scores from pretesting to posttesting indicated that the experimental group's mean posttest score increased from 91.61 to 96.87 (see Figure 4). The test of simple-main effects demonstrated that B at a<sub>1</sub> had an  $F = 2.00$  which indicated that the mean change in scores from pretesting to posttesting was not significant

for the experimental group. Therefore, the experimental group did not express a higher level of satisfaction with nursing care after empathy training. Hypothesis, was not accepted.

Other findings included a significant interaction, A at  $b_1$ , where  $F = 732.00$ . This  $F$  value is found in Table 14. Patients on the experimental unit had a higher initial mean patient satisfaction with nursing care score than did patients on the control unit.

#### Summary of Findings

In this chapter, results of descriptive and inferential statistics have been reported for the data of nurses and patients. Descriptive statistics demonstrated that the 50 nurses had a medium level of empathy according to the ranges described by Forsyth (1979). Overall mean gains in empathic level were made by the experimental group. The 24 nurses in the experimental group had a mean pretest empathy score of 18.41 and a mean posttest empathy score of 20.37 as compared to the mean score of the 26 nurses in the control group. The mean pretest empathy score of the control group was 19.65 whereas the mean posttest empathy score was 19.42.

Other descriptors of the total sample of nurses indicated that the mean age was 37.73 years and the mean length of practice was 12.38 years. By ethnicity, the total sample was comprised of the following: Americans--Blacks (48%) and Caucasians (6%); Asians--Filipinos (10%) and Indians (30%); African--Blacks (6%). Educational levels of the groups were described as 34% licensed vocational and 66% registered professional nurses.

There were 158 patients who participated in the pre-testing and posttesting to determine their satisfaction with nursing care. The 31 patients in the experimental group had a mean pretest score of 91.61 with a standard deviation of 18.79. The mean posttest score of the 31 patients in the experimental group was 96.87 with a standard deviation of 13.29. The 49 patients in the control group during pretesting had a mean score of 90.61 with a standard deviation of 10.04. For posttesting, the 47 patients in the control group had a mean score of 84.14 with a standard deviation of 10.23. Descriptively, the patients were generally satisfied with their nursing care; however, the experimental group's mean score increased after the nurses attended empathy training classes.

Correlation procedures indicated that there was no significant relationship between empathy scores and the

demographic variables of length of practice, ethnicity, or educational level. There was a significant relationship between empathy and age. The younger the nurse the more empathic the nurse.

Statistical analyses of the three hypotheses related to empathy training and empathic level resulted in statistical acceptance of each hypothesis. As predicted in hypothesis<sub>1</sub>, nurses in the experimental group experienced an increase in empathic level after empathy training. The prediction of hypothesis<sub>2</sub> that empathy levels of nurses in the control group who did not receive any training would not vary from pretest to posttest was accepted because the control group of nurses actually decreased in empathic level between pretesting and posttesting. Hypothesis<sub>3</sub> was accepted because the scores of the experimental group of nurse were statistically higher after empathy training than the control group.

For the patient group, statistical analysis resulted in acceptance of hypothesis<sub>4</sub>. Patient satisfaction with nursing care was higher on the unit staffed by medical-surgical nurses who had empathy training as compared to the unit where the medical surgical nurses did not have empathy training classes. Hypothesis<sub>5</sub> was not

accepted. There was an increase in patient satisfaction with nursing care but the increase was not statistically significant.



## CHAPTER 5

### SUMMARY OF THE STUDY

The purpose of this study was to investigate the empathic level of nurses and to examine the influence of empathy trained nurses on patient satisfaction with nursing care. The final chapter begins with a discussion of the findings from previous chapters. Further discussion includes a summary and a discussion of findings, conclusions, and implications. Recommendations for further study are discussed.

Ashley's empathetic process model developed by this writer was the conceptual framework for the study. Two problems were formulated for the study:

1. Do nurses who receive empathy training classes demonstrate higher levels of empathy than nurses who do not receive empathy training classes?
2. Do patients who receive care by nurses who have had empathy training classes express higher levels of satisfaction with their care than patients who receive care from nurses who did not have empathy training classes?

As a result of these research problems, five hypotheses were formulated. The hypotheses were:

H<sub>1</sub>: Empathy levels of medical-surgical nurses who receive empathy training classes will increase after the empathy training session.

H<sub>2</sub>: Empathy levels of medical-surgical nurses who have not had empathy training classes will not increase from pretest to posttest.

H<sub>3</sub>: Empathy levels of medical-surgical nurses who receive no formal training classes will be lower than medical-surgical nurses who receive formalized training.

H<sub>4</sub>: Patient satisfaction levels will be higher on the unit staffed by medical-surgical nurses who have had empathy training classes than on the unit where the medical-surgical nurses did not have empathy training classes.

H<sub>5</sub>: Patient satisfaction with nursing care will increase on the medical-surgical unit staffed by nurses who have participated in empathy training classes.

Empathy was explored and extensively discussed as a concept, skill and technique in nursing and other helping professions. Positive and negative outcomes in nurse-patient relationships as related to nurse empathy level were presented from the overview of literature. Included in the discussion was an overview of empathy as related to patient satisfaction.

### Summary

The study followed the criteria for an experimental design, ethical consideration, protection of the subjects and agency approval. Data were collected by the investigator and two assistants. Three instruments, Hogan's (1975) Empathy Scale, Demographic Data Sheet and Risser's (1975) Patient Satisfaction Scale were used to collect data.

The Hogan Empathy Scale had established reliability and validity for measuring empathic level. The scale along with the Demographic Data sheet were used to collect data and demographic information from the population of nurses. Licensed vocational and registered professional nurses who comprised both experimental and control groups received the scale as a pretest and a posttest. The experimental group attended classes in empathy training.

Risser's Patient Satisfaction Scale had been studied and validated through previous research as a measure of patient satisfaction with nursing care. Patients in the experimental and control groups were administered the instrument as a pretest and a posttest. Prior to this study a pilot study was conducted. All data for the study were appropriately described and analyzed for the combined samples and for each group.

### Discussion of Findings

The study was focused on two dependent variables: empathy and patient satisfaction with nursing care. The independent variable, empathy training was administered to nurses in the experimental group. Findings of the study are discussed according to the demographic variables and empathy levels for the nurse group, the three hypotheses of the group of nurses and the two hypotheses for the groups of patients.

#### Demographic Variables and Empathy Level

The relationship between the demographic variable of age and posttest empathy scores was established through the use of the Pearson product moment correlation coefficient. The mean age of the total population was 37.73 years with a standard deviation of 9.5. There was a negative correlation between age and posttest empathy scores; younger nurses tended to have higher empathy scores. The age range of 24 to 39 was designated as the younger population. This finding is similar to Forsyth's (1979) report that nurses 30 to 39 years of age scored higher on the Hogan Empathy Scale than those nurses in the 50 to 59 years age range. Stetler (1977) found no significant relationship between age and empathic level of

nurses. Although contradictory findings between these studies exist, an explanation for the inverse relationship of age and high empathy scores may mean that empathic level cannot be judged by chronological age alone. Age encompasses factors such as emotional maturity and life experiences. Therefore, difficulty may arise when explaining empathy in relationship to chronological age without knowledge of these factors.

No significant difference was established between empathy and the number of years the nurse had been in practice. The mean length of practice was 12.38 years. This finding implied that the number of years in practice did not affect empathic level. This finding supported Sparling and Jones' (1977) report of no significant differences in nurse empathic level as related to years of practice. However, Forsyth (1979) found a difference; nurses who had practiced nursing less than two years obtained higher empathy scores on the Hogan Scale than those nurses who had practiced longer.

Similarly Layton (1979) compared senior and junior nursing students' empathic level after both groups received empathy training. She attributed the improvement in junior students' scores over the seniors' as being related to established habits of the seniors. Layton

found the seniors had developed their own skills for interviewing patients through practices and experiences that were more difficult to undo through training, whereas the juniors had not been practicing interviewing long enough to develop any set patterns. The majority of the nurses in this study had been in practice over 12 years and probably also established their own patterns of interacting with patients. An explanation for the non-significant difference between empathy and length of practice may be related to the fact that empathy level decreases over a period of time or empathic level becomes internalized and routine.

The investigation of the difference between ethnicity and empathy revealed no significant findings. The group of nurses in this study were represented by three ethnic groups: American--Blacks (48%) and Caucasians (6%); Asian--Filipinos (10%) and Indians (30%); and African--Blacks (6%). All groups have diverse cultural differences, but based on these findings, ethnicity is not an intervening variable in establishing empathic level. There were no available studies from the literature search in which researchers had investigated the relationship of empathy to ethnicity.

The variable of educational level has been explored by several authors (Forsyth, 1979; Sparling & Jones, 1977; Stetler, 1977). Differences in findings were reported. Stetler, and Sparling and Jones' findings were similar to the findings of this study, in that there was no significant relationship between nurse empathic level and educational levels. However, Forsyth (1979) found that the diploma educated head nurses had lower empathy scores than the baccalaureate degree nurses.

#### Hypothesis Testing of Empathy Scores

Three hypotheses were tested to determine the relationship between empathy training and empathic level. The first hypothesis was related to whether empathy level of nurses who received empathy training increased after the empathy sessions. Results indicated that the empathy scores increased significantly in the experimental group of nurses. The empathy classes were adapted and modified from Kalisch's (1971) training program in which empathy training classes resulted in improved empathy scores of the experimental group of student nurses which was significantly higher than the empathy scores of the control groups. Students in Kalisch's control group received lecture and discussion on human behavior, whereas the

control group of nurses in this study received no training. Initially, the mean pretest empathy score of the control group in the present study was higher than the experimental group. However after empathy training the experimental group's mean posttest score increased, whereas the control nurse group's mean posttest decreased. Empathy training resulted in an increase in nurse empathy scores.

High scores on the Hogan Scale, according to Hogan (1969) are indicative of a socially acute person who is sensitive to interpersonal behavior. Low scores imply that the person is cold, hostile and insensitive to the feelings of others. Since both groups of nurses in this study were functioning with at least a medium level of empathy, they most closely relate to Hogan's description of the socially acute person who is sensitive to interpersonal behaviors.

Hypothesis two stated that empathy level of the control nurse group would not increase from pretest to posttest. Since the empathy scores decreased from pretest to posttest the implications are that without empathy training, empathy level may decrease. Investigators have not addressed why empathy scores decrease when empathy classes are not offered, however an explanation for this decrease may be attributed to the natural phenomenon of



regression towards the mean. According to Roscoe (1975), in order to predict scores on a variable from knowledge of scores on another variable, a previous study of a group of subjects on the variable must exist. Therefore since investigators (Kalisch, 1971; Kunst-Wilson, et al., 1981; Layton, 1979) have found that empathy training increases empathy level, an assumption can be made that empathy scores regress toward the mean when no empathy training is offered. Another explanation for the decrease may be related to sampling error or to the short time period between testings.

The third hypothesis was used to test whether empathy level of medical-surgical nurses who receive no formal training classes would be lower than medical-surgical nurses who received formalized classes. The hypothesis was accepted based on statistical analysis. The results supported consistent findings (Carkhuff, 1969a; Kalisch, 1971) that empathy training does increase empathy levels. The prediction was that the empathy classes would increase the experimental nurse group's level of empathy. This assumption was based on Roger's (1951) premise that empathy could be taught. The method of teaching empathy for this experimental group of nurses improved their empathy scores, but according to the score ranges adopted

from Forsyth's (1979) study, only one nurse scored in the high range after empathy training. This is important because according to Carkhuff, (1969a) and Rogers (1951) the therapist must function at a high level of empathy in order to affect therapeutic outcomes. Overall, nurses empathic level did not reach the high level. A possible reason may be that the method of training was not suitable for this sample of nurses.

Hypothesis Testing of  
Patient Satisfaction  
With Nursing Care Scores

Hypothesis four was accepted because there was an increase in patient satisfaction level on the unit where nurses received empathy training. The training intervention may have had some affect upon nurses' empathic level which may in turn have enhanced patients' satisfaction with nursing care.

Due to a lack of significant difference between mean pretest and posttest patient satisfaction with nursing care scores of the experimental group, hypothesis five was not accepted. An interpretation of this finding may be that because the posttest sample of patients was different from the pretest sample, patients could not serve as their own control group. Another plausible reason is that these

patients by chance may have felt disgruntled in direct relationship to the supply and demand of nurses who provided nursing care. This study was conducted in a county hospital where minimal staffing patterns are sometimes not available. According to Ware's (1977) taxonomy of patient satisfaction, availability of doctors and nurses is a criterion for patient satisfaction with their care. One other possible reason for the nonsignificant relationship between posttest scores of the experimental and control groups may be related to the nurse assistants who worked on each unit but were not included in the study. Therefore the nurse assistants may not have demonstrated empathy toward the patients and as a result may have affected the patient's level of satisfaction with nursing care.

#### Conclusions and Implications

Based on the findings of this study several conclusions are made. Nurses in this county hospital were functioning at a moderate empathic level according to the score ranges used in this study. Layton (1979) and LaMonica (1979) emphasized the need for high empathic levels in nurse-patient interactions to produce therapeutic outcomes. Nurses in this population need more

empathic training in order to increase empathic levels and to combat the decrease in empathic levels experienced by the control group when no empathy training was offered. Empathy training should be a part of the nurse's continuing education in order to maintain high empathic levels. Another implication is based on the results that the level of patient satisfaction with nursing care expressed by the experimental patient group was not significantly different from the control group. Satisfaction with nursing care may have been influenced by the use of nurse assistants as care givers. They interact with patients frequently and sometimes on a more consistent basis than the nurses. A potential of the assistants being classified as a nurse by the patient existed. However, since there was not a statistical relationship between educational level and empathic level, nurse assistants may be educated in empathy techniques. Patient satisfaction scores may increase when all care givers are included in empathy training.

Because neither nurse empathic level or patient satisfaction level was at a high level, consideration should be given to the exploration of the effects of intervening variables on these two dependent variables. Nurses on all three shifts were included in this study.

Therefore, shift worked should be explored as a variable since on some shifts nurses interact more frequently with patients, thus affecting patient expression of satisfaction with nursing care. An investigation of the affect of this variable on empathy may add to existing knowledge. Other variables that may have some influence on patient satisfaction may be the patient's diagnosis, age, sex, or ethnicity. None of these variables were investigated in this study; however if explored, they may help explain patient satisfaction with nursing care.

In a further attempt to assure high empathic functioning, empathy trainers should be statistically documented as having the ability to impart empathic behaviors. The empathy trainers in this study were not tested for empathic level; they were assumed to be highly empathic because of past teaching experiences in counseling and clinical practice in psychotherapy.

Another implication may be inferred from the method of teaching empathy. Empathy training in this study was limited to one method of teaching for the experimental group. Because of the group's medium level of empathy scores, there may be a need to determine if another approach to teaching would have a greater affect on nurse empathic level.

### Recommendations for Further Study

Further research on empathic level of nurses and the affect of empathic interactions on patient satisfaction with nursing care may be derived from this study. To further enhance the body of nursing knowledge, the recommendations evolved from this research are suggested.

1. This study should be replicated using the same design.
2. Measurement of the instructors' empathy level should be done using a reliable and valid test to assure high empathic functioning since nurse empathic scores were not in the high range.
3. Two different modes of teaching wherein both groups of nurses are exposed to a treatment factor should be included in the study to determine which mode of treatment is more effective in increasing empathic level.
4. A follow-up posttest should be administered to the nurse groups to determine if empathic level is stable over a period of time.
5. Nurse assistants should be included in empathy training since they provide continuous services to patients.

6. The demographic variable, shift worked, should be included in the study to determine its affect on empathic level.

7. A replication of this study should be done in a long-term care facility where the patient population would be the same for pretesting and posttesting of patient satisfaction with nursing care.

8. A follow-up posttest should be implemented to determine if patient satisfaction with nursing care received is stable over a period of time when the nurses have received empathy training.

9. Demographic variables of age, sex, ethnicity and diagnosis should be included in the collection of patient data to study patient satisfaction.

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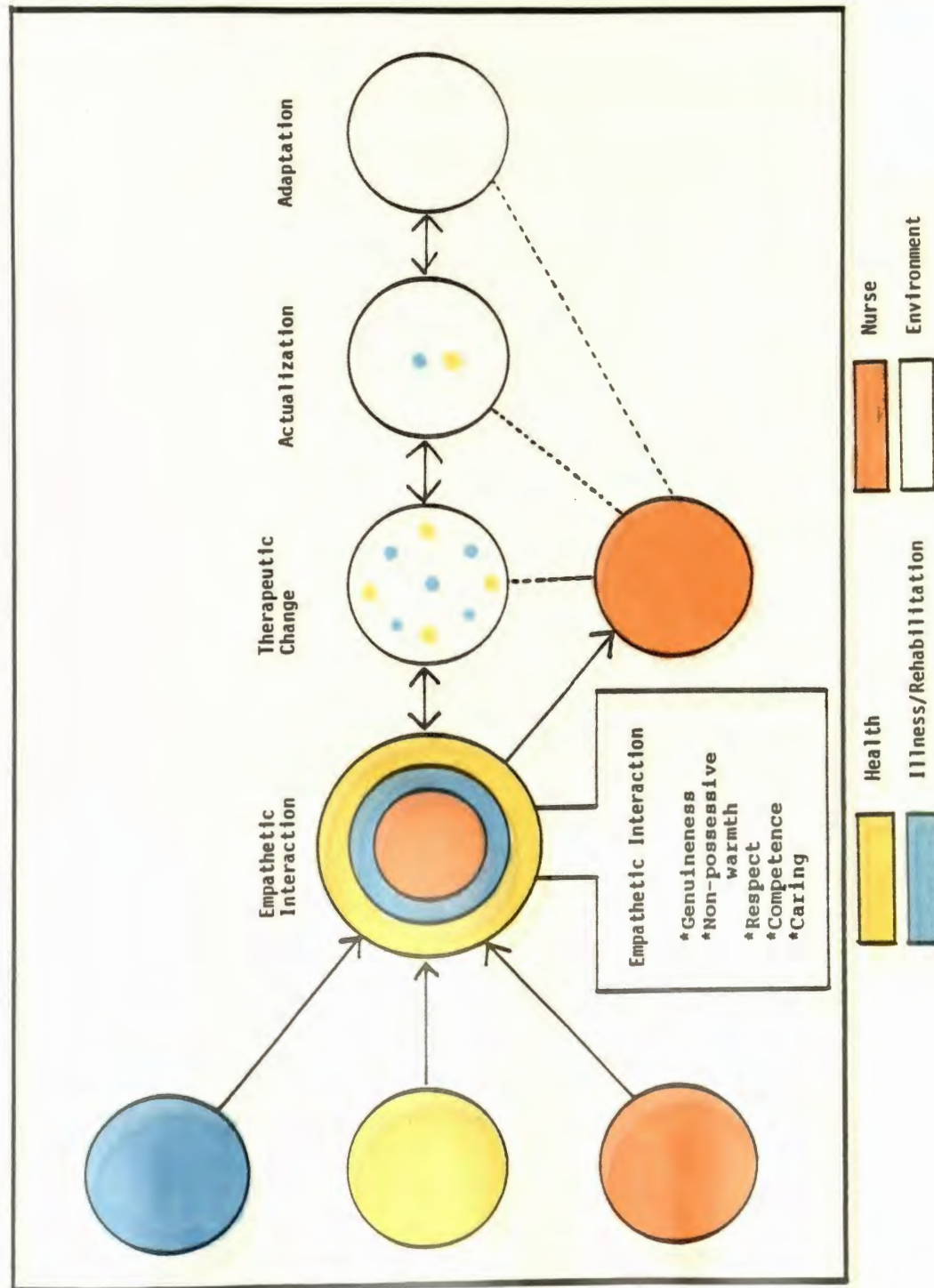
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APPENDIX A  
EMPATHETIC PROCESS MODEL

ASHLEY'S EMPATHETIC PROCESS MODEL



APPENDIX B  
HUMAN SUBJECTS REVIEW COMMITTEE



Texas Woman's University

1130 M.D. Anderson Blvd., Houston, Texas 77030 (713) 792-7945

COLLEGE OF NURSING  
HOUSTON CAMPUS

### PROSPECTUS FOR DISSERTATION

This prospectus proposed by Mary Holt Ashley  
and entitled "Relationship of Empathy Training on Empathic Level  
of Nurses and Patient Satisfaction with Nursing  
Care"

Has been read and approved by the members of (XXX/her) Research  
Committee.

This research is (check one):

  X   Is exempt from Human Subjects Review Committee review because  
patients and nurses only received a survey questionnaire.

       Requires Human Subjects Review Committee review because

Research Committee:

Chairperson, Carolyn M. Adema

David Goodale

Gregory A. Richardson

Donna D. Smith

Lorraine Wolf

Dallas Campus        Denton Campus        Houston Campus   X

APPENDIX C  
AGENCY APPROVAL



TEXAS WOMAN'S UNIVERSITY  
COLLEGE OF NURSING  
DENTON, TEXAS 76204

DALLAS CENTER  
1810 INWOOD ROAD  
DALLAS, TEXAS 75235

HOUSTON CENTER  
1130 M. D. ANDERSON BLVD.  
HOUSTON, TEXAS 77030

AGENCY PERMISSION FOR CONDUCTING STUDY\*

THE Ben Taub General Hospital

GRANTS TO Mary Holt Ashley, R.N., M.S.

a student enrolled in a program of nursing leading to a Doctoral Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem:

1. Do nurses who receive empathy training classes demonstrate higher levels of empathy than nurses who do not receive empathy training classes?
2. Do patients who receive care by nurses who have had empathy training classes express higher levels of satisfaction with their care than patients who receive care from nurses who have not had empathy training classes?

The conditions mutually agreed upon are as follows:

1. The agency (may) (may not) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may) (may not) be identified in the final report.
3. The agency (wants) (does not want) a conference with the student when the report is completed.
4. The agency is (willing) (unwilling) to allow the completed report to be circulated through interlibrary loan.
5. Other \_\_\_\_\_

Date: \_\_\_\_\_

Mary Holt Ashley R.N.  
Signature of Student

[Signature]  
Signature of Agency Personnel

[Signature]  
Signature of Faculty Advisor

\* Fill out and sign three copies to be distributed as follows: Original-Student;  
First copy - agency; Second copy - TWU College of Nursing.

APPENDIX D

LETTERS OF APPROVAL FOR USE  
OF HOGAN EMPATHY SCALE

CONSULTING PSYCHOLOGISTS PRESS, INC.  
577 COLLEGE AVENUE  
PALO ALTO, CALIFORNIA 94306

Ms. Mary Holt-Ashley, R.N.  
10906 Whitethorn  
Houston, TX.

In response to your request of September 26, 1984 permission is hereby granted you to reproduce 7 copies of the items from the CPI that are are on Hogans Empathy Scale. These are for your use in dissertation research.

subject to the following restrictions:

(a) Any material used must contain the following credit lines:

"Reproduced by special permission of the Publisher, Consulting Psychologists Press, Inc., Palo Alto, CA 94306,

from The California Psychological Inventory  
(publication)

by Harrison G. Gough, PhD. Copyright 1957  
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(b) None of the materials may be sold or used for purposes other than those mentioned above.

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(d) Payment of a reproduction fee of \_\_\_\_\_

FEE WAIVED

Please remit without further notice and mail to my attention.

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CONSULTING PSYCHOLOGISTS PRESS, INC.

By Peggy Ferris  
Permissions Editor

Date 10/8/84

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SANTA BARBARA • SANTA CRUZ

INSTITUTE OF PERSONALITY ASSESSMENT  
AND RESEARCH3657 TOLMAN HALL  
BERKELEY, CALIFORNIA 94720

January 22, 1985

Dear Ms. Holt Ashley, RN

Please forgive the long delay in replying to your letter of December 3, 1985. I was in London from early December until just a week ago. Then, because our spring term did not start until today, I did not come in to the Institute until just now. Your letter was among the urgent documents I found.

You may certainly have permission to use the 8 items from this Institute's testing files, in your work with Dr. Hogan's scale. You did not mention the items from the CPI (of which I am the author), also included in the Em scale. You may have my permission to use these items as well.

I am enclosing a sheet we prepared to help clarify items and scoring of Em for persons who write to IPAR about it.

Good luck on your doctoral study.

Sincerely,

A handwritten signature in black ink, appearing to read "Harrison Gough".

Harrison G. Gough, Ph.D.  
Professor of Psychology

APPENDIX E  
HOGAN EMPATHY SCALE

Dear Participant:

Mary Holt Ashley, a doctoral student in the nursing program at Texas Woman's University, is conducting a research study to determine nurses empathic level. Your participation will provide valuable data towards understanding empathy. The first questionnaire will be completed today and the second will be completed at a later time. Each questionnaire takes 10 minutes to complete. The decision to participate or not participate will not affect your employment status.

Completion of this questionnaire constitutes informed consent to participate in the study.

Thank you for your participation

## Demographic Data Sheet

This information is necessary for collecting data for this study. The information will be statistically analyzed. No names will be used in reporting the results; therefore, do not write your name on this sheet nor on the Hogan Empathy Scale.

Check or Fill-in Only One Answer

1. Area of practice
  - A. \_\_\_\_\_medicine
  - B. \_\_\_\_\_surgical
2. Length of practice as a nurse  
\_\_\_\_\_years
3. Age  
\_\_\_\_\_years
4. Educational preparation
  - A. \_\_\_\_\_Licensed in Vocational Nursing
  - B. \_\_\_\_\_Diploma in Nursing
  - C. \_\_\_\_\_Associate Degree in Nursing
  - D. \_\_\_\_\_Bachelor of Science or Arts in Another Field
  - E. \_\_\_\_\_Bachelor of Science in Nursing
  - F. \_\_\_\_\_Master of Science or Arts in Another Field

G. \_\_\_\_\_Master of Science in Nursing

5. Ethnic Group

American

A. \_\_\_\_\_Black

B. \_\_\_\_\_Caucasian

C. \_\_\_\_\_Hispanic

D. \_\_\_\_\_Indian

Asian

E. \_\_\_\_\_Chinese

F. \_\_\_\_\_Filipino

G. \_\_\_\_\_Indian

H. \_\_\_\_\_Vietnamese

African

I. \_\_\_\_\_Egyptian

J. \_\_\_\_\_Nigerian

K. \_\_\_\_\_Other



## HOGAN EMPATHY SCALE

Part 1

		<u>Circle One Answer</u>	
		True	False
1.	A person needs to "show off" a little now and then.	T	F
2.	I usually take an active part in the entertainment at parties.	T	F
3.	I like to have a place for everything and everything in its place.	T	F
4.	I feel sure that there is only one true religion.	T	F
5.	I am afraid of deep water.	T	F
6.	I have at one time or another tried my hand at writing poetry.	T	F
7.	I prefer a shower to a bathtub.	T	F
8.	It bothers me when something unexpected interrupts my daily routine.	T	F
9.	It is hard for me to just sit still and relax.	T	F
10.	I always try to consider the other fellow's feelings before I do something.	T	F
11.	I don't like to work on a problem unless there is the possibility of coming out with a clear-cut and unambiguous answer.	T	F
12.	I can remember "playing sick" to get out of something.	T	F

- |     |                                                                                        |   |   |
|-----|----------------------------------------------------------------------------------------|---|---|
| 13. | I like to keep people guessing what I'm going to do next.                              | T | F |
| 14. | Before I do something I try to consider how my friends will react to it.               | T | F |
| 15. | I like to talk before groups of people.                                                | T | F |
| 16. | My parents were very strict and stern with me.                                         | T | F |
| 17. | Sometimes I rather enjoy going against the rules and doing things I'm not supposed to. | T | F |
| 18. | I think I would like to belong to a singing club.                                      | T | F |
| 19. | I usually don't like to talk much unless I am with people I know very well.            | T | F |
| 20. | I think I am usually a leader in my group.                                             | T | F |
| 21. | I must admit I often try to get my own way regardless of what others may want.         | T | F |
| 22. | I liked "Alice in Wonderland" by Lewis Carroll.                                        | T | F |
| 23. | I don't really care whether people like me or dislike me.                              | T | F |
| 24. | Clever, sarcastic people make me feel very uncomfortable.                              | T | F |
| 25. | I have a natural talent for influencing people.                                        | T | F |
| 26. | The trouble with many people is that they don't take things seriously enough.          | T | F |

- |     |                                                                                    |   |   |
|-----|------------------------------------------------------------------------------------|---|---|
| 27. | Only a fool would try to change our American way of life.                          | T | F |
| 28. | Most of the arguments or quarrels I get into are over matters of principle.        | T | F |
| 29. | I would like the job of a foreign correspondent for a newspaper.                   | T | F |
| 30. | People today have forgotten how to feel properly ashamed of themselves.            | T | F |
| 31. | When a man is with a woman he is usually thinking about things related to her sex. | T | F |

## Part 2

Circle One Answer

- |     |                                                                                                      | True | False |
|-----|------------------------------------------------------------------------------------------------------|------|-------|
| 32. | I frequently undertake more than I can accomplish.                                                   | T    | F     |
| 33. | I enjoy the company of strong-willed people.                                                         | T    | F     |
| 34. | Disobedience to the government is never justified.                                                   | T    | F     |
| 35. | I have a pretty clear idea of what I would try to impart to my students if I were a teacher.         | T    | F     |
| 36. | I am usually rather short-tempered with people who come around and bother me with foolish questions. | T    | F     |
| 37. | It is the duty of a citizen to support his country, right or wrong.                                  | T    | F     |
| 38. | I have seen some things so sad that I almost felt like crying.                                       | T    | F     |

39. As a rule I have little difficulty  
in "putting myself into other  
people's shoes."

T

F

APPENDIX F  
SCORING OF THE HOGAN EMPATHY SCALE

Scoring of the Hogan Scale for Empathy<sup>1</sup>

There are 64 items in the complete scale. Thirty-nine of these items are found in the California Psychological Inventory, published by the Consulting Psychologists Press, 577 College Avenue, Palo Alto, California 94306, and 17 are found in the Minnesota Multiphasic Personality Inventory, published by the National Computer Systems. The remaining 8 items come from an unpublished testing form developed by the Institute of Personality Assessment and Research, University of California, Berkeley, California, 94720.

A. Scoring of 39 items in the CPI.

1. 4(T)	11. 91(F)	21. 186(F)	31. 287(T)
2. 8(T)	12. 97(T)	22. 191(T)	32. 359(T)
3. 17(T)	13. 98(F)	23. 194(F)	33. 361(F)
4. 25(F)	14. 100(T)	24. 198(T)	34. 363(F)
5. 52(T)	15. 122(T)	25. 239(T)	35. 364(F)
6. 67(F)	16. 127(T)	26. 242(T)	36. 403(T)
7. 79(F)	17. 130(T)	27. 247(F)	37. 421(F)
8. 81(F)	18. 143(T)	28. 255(F)	38. 442(F)
9. 84(T)	19. 161(F)	29. 271(F)	39. 463(F)
10. 86(T)	20. 173(F)	30. 275(T)	

B. Scoring of 17 items in the MMPI.

1. 26(F)	6. 231(T)	11. 399(T)	16. 468(F) <sup>2</sup>
2. 73(F)	7. 327(F)	12. 404(F)	17. 478(F)
3. 79(F)	8. 336(F)	13. 407(T)	
4. 100(T)	9. 355(T)	14. 410(T)	
5. 170(F)	10. 372(T)	15. 417(F)	

C. Scoring 8 items from IPAR testing devices.<sup>3</sup>

1. I frequently undertake more than I can accomplish. (T)
2. I enjoy the company of strong-willed people. (T)
3. Disobedience to the government is never justified. (F)
4. It is the duty of a citizen to support his country, right or wrong. (F)
5. I have seen some things so sad that I almost felt like crying. (T)
6. I have a pretty clear idea of what I would try to impart to my students if I were a teacher. (T)
7. As a rule I have little difficulty in "putting myself into other people's shoes." (T)
8. I am usually rather short-tempered with people who come around and bother me with foolish questions. (F)

- 
1. See Robert Hogan, "Development of an Empathy Scale," in Journal of Consulting and Clinical Psychology, 1969, 33, 307-316.
  2. This item is incorrectly listed in the Hogan article as 463.
  3. Items reproduced by permission of Harrison G. Gough, Ph.D., Director, Institute of Personality Assessment and Research, 3657 Tolman Hall, Berkeley, California, 94720.

APPENDIX G  
EMPATHY TRAINING CLASSES

## EMPATHY TRAINING CLASSES

## Class I: 2-Hour Class

## Class Outline

- A. Introduction
- B. Presentation of objectives
- C. Characteristics for establishing an empathic relationship using the client-centered approach
- D. Definition of the nursing process from an empathic helper
- E. Identification of three dimensions of the helping relationship as it relates to meeting the patient needs
- F. Explanation of the components of empathy
- G. Demonstration of an empathic helping process

## Class II: 3-Hour Class

- A. Introduction
- B. Presentation of objectives
- C. Steps of an empathic relationship
- D. Maintaining an empathic relationship



1. Attending skills
  - a. positioning
  - b. eye contact
  - c. observing
  - d. listening
2. Questioning skills
  - a. open ended statements
  - b. close ended statements
3. Responding skills
  - a. effective responses
  - b. non-effective responses
- E. Practicing skills for establishing an empathic relationship
- F. Role play of an encounter with a patient
  - a. Pairing off of participants
  - b. Written responses from participants
  - c. Feedback by instructors

Class III: 2-Hour Class

- A. Introduction
- B. Presentation of objectives
- C. Discussion of role playing exercise

- D. Discussion of feelings and problems and reactions to role playing
- E. Reading of situations requiring empathic responses
  - a. Feedback from participants
  - b. Feedback by instructors

APPENDIX H

LETTER OF APPROVAL FOR USE OF RISSE  
PATIENT SATISFACTION SCALE



December 20, 1984

Mary Holt-Ashley, RN, MS  
10906 Whitehorn  
Houston, Texas 77016

Dear Ms. Holt-Ashley:

Thank you for your letter of December 3, 1984.

You have permission to use the Risser instrument/scale in your research.

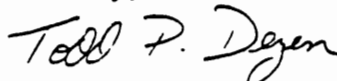
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Should you plan to publish or microfilm your research in the future, please inform us so formal permission applications can be filed.

We appreciate your interest and cooperation.

Sincerely,



Todd P. Dezen  
Permissions Coordinator

/tpd

APPENDIX I  
RISSEK PATIENT SATISFACTION SCALE

Dear Participant:

Mary Holt Ashley, a doctoral student at Texas Woman's University, is conducting a research study to determine patients' satisfaction with their care. Your participation will provide valuable information necessary for enhancing patient satisfaction. Decision to participate or not participate will not affect your care or stay in the hospital.

Completion of this questionnaire constitutes informed consent to participate in the study.

Thank you for your participation

# RISSER PATIENT SATISFACTION SCALE

Circle the number under the word which comes closest to your own opinion. PLEASE BE SURE TO MARK EVERY STATEMENT.

	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>NEUTRAL</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
1 The nurse is skillful in assisting the doctor with procedures.	5	4	3	2	1
2 The nurse is understanding in listening to a patient's problems.	5	4	3	2	1
3 The nurse really knows what she is talking about.	5	4	3	2	1
4 The nurse explains things in simple language.	5	4	3	2	1
5 It is always easy to understand what the nurse is talking about.	5	4	3	2	1
6 The nurse should be more attentive than she is.	5	4	3	2	1
7 The nurse is just not patient enough.	5	4	3	2	1
8 The nurse is not precise in doing her work.	5	4	3	2	1

	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>NEUTRAL</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
9 When I need to talk to someone, I can go to the nurse with my problems.	5	4	3	2	1
10 The nurse is too busy at the desk to spend time talking with me.	5	4	3	2	1
11 The nurse makes it a point to show me how to carry out the doctor's orders.	5	4	3	2	1
12 The nurse is too slow to do things for me.	5	4	3	2	1
13 The nurse is pleasant to be around.	5	4	3	2	1
14 The nurse is often too disorganized to appear calm.	5	4	3	2	1
15 Too often the nurse thinks you can't understand the medical explanation of your illness, so she just doesn't bother to explain.	5	4	3	2	1



	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>NEUTRAL</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
16 The nurse always gives complete enough explanations of why tests are ordered.	5	4	3	2	1
17 I'm tired of the nurse talking down to me.	5	4	3	2	1
18 The nurse is a person who can understand how I feel.	5	4	3	2	1
19 The nurse gives good advice over the phone.	5	4	3	2	1
20 The nurse should be more friendly than she is.	5	4	3	2	1
21 I wish the nurse would tell me about the results of my tests more than she does.	5	4	3	2	1
22 The nurse asks a lot of questions, but once she finds the answers, she doesn't seem to do anything.	5	4	3	2	1
23 The nurse gives directions at just the right speed.	5	4	3	2	1
24 A person feels free to ask the nurse questions.	5	4	3	2	1

	<u>STRONGLY AGREE</u>	<u>AGREE</u>	<u>NEUTRAL</u>	<u>DISAGREE</u>	<u>STRONGLY DISAGREE</u>
25 Just talking to the nurse makes me feel better.	5	4	3	2	1