This is to certify that the

thesis entitled

ATTITUDES TOWARD THERAPEUTIC TOUCH:
A PILOT STUDY OF WOMEN WITH BREAST CANCER

presented by

JULIE GWEN THOMAS-BECKETT

has been accepted towards fulfillment
of the requirements for

~~Masters~~ degree in ~~Nursing~~

Major professor

Date May 13, 1991

ATTITUDES TOWARD THERAPEUTIC TOUCH: A PILOT STUDY OF WOMEN WITH BREAST CANCER

By

JULIE GWEN THOMAS-BECKETT

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF SCIENCE IN NURSING

COLLEGE OF NURSING

1991

ABSTRACT

ATTITUDES TOWARD THERAPEUTIC TOUCH:
A PILOT STUDY OF WOMEN WITH BREAST CANCER

By

Julie Gwen Thomas-Beckett

Therapeutic Touch is a holistic nursing intervention used to assist the client in achieving balance in their energy field, therefore maximizing their own recuperative powers. The purpose of this study was to describe the attitudes of women with breast cancer toward a written description of Therapeutic Touch. Since no instrument existed in the literature, a thirty item Likert scale was developed and administered in conjunction with three open-ended questions. Preliminary psychometric analyses revealed that the scale was unidimensional and had an acceptable level of internal consistency (alpha=0.98). Subjects who had heard of Therapeutic Touch before expressed more positive attitudes toward the intervention. Analyses of the open-ended questions revealed an active interest in Therapeutic Touch and an openness to options, with 39% of the sample reporting a willingness to receive the intervention. Implications for research and nursing practice are presented.

To my husband Rocky,
whose presence in my life
has brought me challenge, growth,
and a heart full of love.

ACKNOWLEDGEMENTS

This research would not have been completed without the valuable assistance of many people. I am especially grateful to Clare Collins, R.N., Ph.D for her expertise in the research process and serving as chairperson of this thesis committee. I would also like to thank the committee members, Rachel Schiffman R.N., Ph.D, Brigid Warren, R.N., M.S.N, and Gwen Wyatt R.N., Ph.D for their guidance and support. The assistance of Manfred Stommel in the statistical analysis and interpretation of the data is also greatly appreciated.

I would also like to express my deeply felt gratitude to my family and friends, whose love and support provided a sturdy base upon which I could grow. A warm and special thanks goes to my best friend and husband, Rocky, for his constant encouragement and belief in me. To all those I call my family; Delano, Joanne, Jim, Tim, Theresa, Marie, Mike, Bobbie Jo, Ray, and LaRay, thank you for your pride and trust. And to my friends, thank you for allowing me time. We have much to celebrate in this life, and I am grateful to all these special people.

Table of Contents

	Page
LIST OF FIGURE	viii
LIST OF TABLES	ix
LIST OF APPENDICES	x
CHAPTER I The Problem	
Introduction of the Study	1
Purpose and Research Question	5
Overview	6
CHAPTER II The Conceptual Framework	
Overview	8
Conceptual Definition of Attitude	8
Conceptual Definition of Therapeutic Touch	11
Conceptual Definition of Breast Cancer	14
Overview of Martha Rogers' Theory of Nursing	16
Proposed Model for the Study	19
Assumptions of the Study	21
Summary	22
CHAPTER III Review of Literature	
Overview	24
Attitudes Toward Touch and Therapeutic Touch	24
Attitudes Toward Health Behaviors	27
Empirical Studies of Therapeutic Touch	29
Analysis of Therapeutic Touch Literature	31
Summary	33
CHAPTER IV Methodology and Procedures	
Overview	34
Study Design	34
Methods	36
Population, Subjects, and Sampling Technique	36
Operational Definition of Attitudes Toward Therapeutic Touch	37
The Instrument	38
Scoring of Likert Scale Items	41
Content Validity and Pilot Testing	41
Data Collection Procedures	43
Protection of Human Subjects	45
Analysis of Reliability of ATTT	48
Analysis of Data	50

Page

Assumptions of the Study..... 51
Limitations of the Study..... 52
Summary..... 53

CHAPTER V Results of the Study
Overview..... 54
Description of the Sample..... 54
Age of Subjects..... 55
Years Since Diagnosis with Breast Cancer..... 55
Treatment for Breast Cancer..... 56
Stage of Breast Cancer..... 58
Prior Knowledge and Experience with Therapeutic Touch..... 59
Participants Attitudes Toward Therapeutic Touch..... 60
Quantitative Analysis..... 60
Comparison of Groups..... 62
Qualitative Analysis..... 63
Affective Themes..... 64
Cognitive Themes..... 65
Behavioral Themes..... 67
Final Analysis of Quantitative and Qualitative Data... 69
Summary..... 71

CHAPTER VI Summary and Implications
Overview..... 72
Summary of the Study..... 72
Interpretation of Study Findings..... 76
Reliability..... 77
Validity..... 77
Critique of Study Results..... 79
Implications for Nursing Practice..... 80
Implications for Future Research..... 82
Contributions of the Study..... 87
Summary..... 88

REFERENCE LIST..... 89

LIST OF FIGURE

Figure		Page
1	The relationship of the Unitary Human Being and the Environment; the woman with breast cancer and her attitude toward the health care intervention of Therapeutic Touch.....	23

LIST OF TABLES

Table		Page
1	Reliability Analysis of Subscales on Final ATTT Items	49
2	Correlation Matrix of Subscales	49
3	Frequency and Percentage of Age of Subjects	55
4	Frequency and Percentage of Numbers of Years Since Diagnosis with Breast Cancer	56
5	Summary of Treatments for Breast Cancer	58
6	Frequency and Percentage of Stage of Breast Cancer at Diagnosis	59
7	Summary of Statistics on Final Items in ATTT	61
8	One-Way Analysis of Variance for Scale, and Past Experience with Therapeutic Touch	63
9	Inter-Item Correlation Matrix of Affective Items	103
10	Inter-Item Correlation Matrix of Cognitive Items	104
11	Inter-Item Correlation Matrix of Behavioral Items	105

LIST OF APPENDICES

Appendix		Page
A	The Instrument: Attitudes Toward Therapeutic Touch Questionnaire.....	93
B	List of Likert Scale Items and Number of Responses.....	102
C	Statistics for Subscales.....	103
D	Responses to Open-Ended Questions.....	106
E	Letters of Agreement for Data Collection.....	111
F	Human Subjects Approval.....	114

CHAPTER I

The Problem

Introduction of the Study

There are many ways of communicating thoughts, feelings, and emotions. Some forms of communication and interaction are verbal, many are non-verbal. The act of touch for all cultures in varying degrees, is a way of communicating caring, presence, helping, and emotion. The customs and beliefs in a culture influence how touch is given and how it is interpreted. Krieger believes (1979-b, p.297), "our culture still suffers from the rigid social perspectives of the Victorian era, so that, in spite of the social revolution of the 1960's, we are still largely a no-touch culture." Despite some of the constraints placed on touching in this American society, there is still the desire and yearning for touch. This desire is illustrated by the infant who ceases crying once held by its parent, or the new graduate who embraces her parents as she holds her diploma, or the elderly man who reaches out a shaking hand for some warmth. "The need to help wells up from the same psychodynamic depths from which arose the stimuli that guided early man not merely to mate, but to form the nuclear family in which the attributes of love and caring and protection from harm were nurtured. This need to help is probably the most humane of human characteristics" (Krieger, 1976, p.572).

The nurse in advanced practice and especially in primary

care, is faced daily with people's need to touch and be touched. An area of great concern for today's nurses and health professionals is "how to manifest an attitude of care and concern and deliver quality health care while working actively with patients over long periods of time, often under high stress conditions" (Heidt, 1981, p.37). Somehow conventional medicine and health care has squeezed out the caring, touching elements of health care delivery, as machines and technology become primary interventions. However, the tide seems to be turning toward the basic element of touch as the client in primary care becomes more involved in her/his care and demands a holistic approach. The Clinical Nurse Specialist (CNS) is in a critical position, one in which the holistic needs of the client are addressed in an advanced practice role. "A new message is coming forth...which states that we can help each other, we can help ourselves. A new age of understanding is dawning that has the philosophy of holism as its content, an age in which human beings can intelligently cooperate with nature and with each other" (Krieger, 1981, p.137).

A specific area in which clients are cooperatively working with health care providers is nursing care of clients with breast cancer. Because of the increased participation of the client, the plans of care must be holistic in nature in order to meet the needs of the client physically, socially, psychologically, and spiritually. Caring for clients with breast cancer in particular, is an arena in which research is

needed about traditional and non-traditional interventions used for cancer and the treatment side effects. Women with breast cancer are a growing population since breast cancer is the most common malignancy among women (Rich, Greig, & Greene, 1987). The American Cancer Society reports that in the United States, breast cancer accounts for 28% of all newly diagnosed cancers in women and 18% of female cancer deaths (ACS, 1989). Because breast cancer is so prevalent and its treatment so complex, interventions to decrease anxiety, nausea, and pain must be thoroughly researched.

A number of studies have been done focusing on the emotional response of women with breast cancer. Women with breast cancer have significantly higher levels of anxiety (Bloom, 1987), particularly if they have undergone mastectomy (Fallowfield, Baum, & Maguire, 1986; Gottschalk & Hoigaard-Martin, 1986). Researchers studying cancer treatment conclude that women consider adjuvant chemotherapy the most unpleasant aspect of treatment. Emotions such as anxiety add to the severity, intensity, and frequency of post-chemotherapy nausea (Jacobsen, Andrykowski, Redd, Die-Trill, Hakes, Kaufman, Currie, & Holland 1988).

Studies done on interventions that are non-traditional, that is not associated with the medical model of treatment, provide support for non-traditional breast cancer intervention options. Borysenko (1982) concluded that behavioral interventions based on elicitation of the relaxation response provide a means of influencing affective and psychological

states which may have an impact or response to cancer treatment. Bridge, Benson, Pietroni, and Priest (1988) concluded that women with breast cancer benefit from relaxation training as evidenced by lower mood disturbance scores as compared with women not practicing relaxation techniques. There is currently no published literature on the effects of Therapeutic Touch as an intervention for pain, nausea, or anxiety reduction in women with breast cancer. Therapeutic Touch is not an established intervention and is therefore not part of the medical model of treatment. Because of this, Therapeutic Touch is not familiar to clients as a possible health care intervention. There is a great need for research on Therapeutic Touch as a nursing intervention; how it works, its effects on anxiety, pain, nausea, relaxation, and other specific disease processes. Only with rigorous research will Therapeutic Touch be utilized by health care providers, known by consumers, and understood by scientists. Perhaps, with appropriate and abundant research on the intervention of Therapeutic Touch, it will become a more established treatment, not only for women with breast cancer, but for all clients who respond to holistic care.

Purpose and Research Question

Before conducting an experimental design testing the effects of Therapeutic Touch as a nursing intervention, it is important to first conduct a pilot study to determine the feasibility of such a design (Polit & Hungler, 1987). "Pilot work can be thought of as work a) designed to answer a methodological question(s) and b) conducted prior to or as a part of the development of a research plan" (Prescott & Soeken, 1989, p.60). Very few of the studies done with Therapeutic Touch mention the utilization of pilot studies. If no ground work has been done prior to the study, then problems may be encountered with the population definition (too broad or too narrow), with the tool selected (not valid, not understood by the subjects, not effective in measuring variability), with the setting (equipment availability, staff, resources), or with subjects (number qualified to participate, willingness to participate, time needed). This study is a pilot study focusing on subject's willingness to participate in a Therapeutic Touch treatment and their attitudes toward Therapeutic Touch.

Therefore, the purpose of this thesis is to conduct a pilot study to assess the feasibility of intervening with Therapeutic Touch by studying potential subjects. The variable of attitudes toward Therapeutic Touch may effect people's willingness to participate in an intervention as well as the outcome of the intervention. Therefore the main goal of the study is to assess subject's attitudes toward

Therapeutic Touch. The research question to be answered is as follows:

> What are the attitudes of women with breast cancer toward a written description of Therapeutic Touch?

Overview

This thesis is a pilot study, to obtain data on the attitudes of women with breast cancer toward Therapeutic Touch. Data will be gathered on the attitudes of the subjects in order to best determine the feasibility of obtaining subjects for participation in the research of Therapeutic Touch as an intervention. There are six chapters in this thesis, with Chapter I including the introduction, background of the problem, purpose statement, and research question.

Chapter II contains a definition the concepts within the study question, and the relationships among these conceptual variables. There is a discussion of the nursing theory of Unitary Human Beings, as developed by Martha Rogers. Rogers' theory is applied to the concepts in the problem statement, and a model for the study is illustrated. Chapter III then contains a review of the literature, as well as a critique and analysis of the literature.

Chapter IV contains the methodology for this thesis study. Operational definitions of the concepts are given, as well as the sampling method, instrumentation, scoring, and data analysis procedures. Chapter V consists of the data analysis and findings. A description of the results are

given.

Chapter VI includes the discussion of data results, interpretations, summaries, and conclusions. Based on the data collected, the discussion focuses on implications for advanced nursing practice and primary care, as well as areas for further study. In conclusion, the research problem and purpose is tied to the conceptual framework and previous research. It is hoped that this thesis provides direction for future research on the relationship of attitudes to the outcomes of Therapeutic Touch.

CHAPTER II

The Conceptual Framework

Overview

The following chapter consists of a discussion of Rogers' Theory of Unitary Human Beings. The relationship of the concepts in the problem statement to the nursing theory is defined and a model for the study is presented.

Conceptual Definition of Attitude

All of life is affected by attitudes. "Attitudes constitute an immensely important component in the human psyche. They strongly influence all of our decisions; the friends we pick, the jobs we take, the movies we see, the foods we eat, the spouses we marry, the clothes we buy, the houses we live in" (Mueller, 1986, p.7). Attitudes reflect the culture and the time in which one lives. Choices involving health care and treatment alternatives are also affected by attitudes. The Clinical Nurse Specialist in primary care must provide holistic plans of care but in order for these plans to be effective, the attitudes, values, and beliefs must be understood. Only with an understanding of the client's attitudes will the interventions be most effective and acceptable to the client.

There are many definitions of attitudes, but the social psychologist Louis Thurstone, is credited with first formalizing and popularizing an attitude-measurement

methodology (Mueller, 1986). Thurstone defined attitude as the sum total of man's inclinations and feelings, prejudice and bias, preconceived notions, ideas, fears, threats, and convictions about any specified topic (Thurstone, cited in Mueller, 1986). Mueller (1986, p.1) points out that "when asked about their 'attitude', people respond with opinions, beliefs, feelings, prescriptions (behavioral preferences or behavioral intentions), statements of fact, and statements about their own behavior. They make highly cognitive responses, and they make highly affective responses." In order to understand a client's attitudes, a thorough assessment must be made, with listening and observing being key actions.

For purposes of this paper, the definition of the concept of attitude is based on the work of Rosenberg and Hovland (1960). According to Rosenberg and Hovland (1960, p.15), attitudes usually feature "consistency between the feelings, beliefs, and overt actions elicited by their objects." Typically, attitudes are defined as predispositions to respond in a particular way toward a specified class of objects. Being predispositions they are not directly observable or measured. They must then be inferred from the way one reacts to particular stimuli (Rosenberg & Hovland, 1960). If attitudes are predispositions to respond to a class of stimuli with certain classes of responses, Rosenberg and Hovland (1960, p.3) "designate the three major types of response as cognitive, affective, and behavioral." The 'affect' component

is concerned with feelings, evaluations, and emotions. Its measurable dependent variable would be sympathetic nervous responses, or verbal statements of affect. The 'cognition' component is concerned with beliefs about whether something is true or false. Its measurable variables are perceptual responses, or verbal statements of belief. The 'behavior' component is concerned with intentions and decisions to act. The measurable variables are overt actions, or verbal statement concerning behavior (Rosenberg & Hovland, 1960, p.3). By measuring the affective, cognitive, and behavioral components, the attitude of the individual is assessed.

Rosenberg and Hovland (1960, p.17-18) state, "when a person has a relatively stable tendency to respond to a given object with either positive or negative affect, such a tendency is accompanied by a cognitive structure made up of beliefs about the potentialities of that object for attaining or blocking the realization of valued states." If the end result is the attainment of something valued, then actions will be taken to reach it. Action or the intent to act reflects an attitude. The CNS in primary care must assess a persons affective, cognitive, and behavioral statements in order to best understand a client's attitudes toward health care interventions, and their willingness to participate in any specific intervention.

Conceptual Definition of Therapeutic Touch

Therapeutic Touch is derived from the traditional practice of laying-on of hands. Krieger introduced Therapeutic Touch into nursing in the 1970's after studying Western and Eastern religions in order to explain the phenomena she observed with Oskar Estebany and Dora Kunz in experiments of healing illness in people (Krieger, 1979-a). According to Eastern religions, "the interaction between healer and subject is thought to occur by a state of matter referred to as 'prana'. The nearest translation...would be 'vitality' or 'vigor', or that which lies behind the animation we recognize as the life process...the healthy person has an overabundance of prana, and the ill person has a deficit; indeed, the deficit is the illness. This prana can be activated by will and can be transferred to another person if one has the intent to do so" (Krieger, 1979-b, p.300). The healer, therefore, must have a strong commitment which gives a sense of control over the projection of vital energy for the well-being of another (Krieger, 1979-b). The act of healing is seen as the "channeling of this energy flow by the healer for the supplementation of that of the ill individual. The resonance would act in the service of the ill person to reestablish the vitality of the flow in this open system, to restore unimpeded communication with the environment- for given this- the patient really heals himself" (Krieger, 1979-b, p.301).

Krieger states many assumptions regarding the practice of

Therapeutic Touch. "Human beings are open systems, and appear to be a nexus of all fields of which life partakes" (Krieger, 1981, p.143). Therapeutic Touch is not a miracle, and it is not a simple act. Rather, it is complex, requiring that the healer intervene from a knowledgeable base, and do so in a conscious manner (Krieger, 1979-a, 1979-b). One need not be gifted in the powers of healing, but rather the ability to do Therapeutic Touch is latent in all people, as "the universality of its use among people of diverse cultures throughout the world seems to indicate its key position as a clue to natural laws that underlie the manner in which man may act therapeutically and humanely to man" (Krieger, 1979-b, p.303).

Although the actual intervention of Therapeutic Touch will not be done in this study, it is important to describe what it is and how it is done, especially because it is a non-traditional intervention. In The Therapeutic Touch: How to Use Your Hand to Help or to Heal, Krieger (1979-a, p.35-36) identifies the phases of Therapeutic Touch, which are as follows;

1. centering oneself physically and psychologically, finding within oneself an inner reference of stability,
2. exercising the natural sensitivity of the hand to access the energy field of the healee for cues to differences in the quality of energy flow,
3. mobilizing areas in the healee's energy field that the healer may perceive as being non-flowing, sluggish, congested, or static,
4. the conscious direction by the healer of his or her excess body energies to assist the healee to repattern his or her own energies.

Given these phases, there are distinct steps in the practice of Therapeutic Touch (Krieger, 1979-a, p.69);

1. centering oneself
2. making an assessment of the healee
3. 'unruffling' the field
4. the direction and modulation of energy
5. recognizing when it is time to stop. One stops when there are no longer any cues, that is, relative to the body's symmetry there is now no perceivable differences bilaterally.

For the purposes of this study, Therapeutic Touch is described by the author as follows;

Therapeutic Touch is a treatment used by some nurses. It is based on the belief that human beings do not stop at the skin, rather, we release and are surrounded by an energy field. Imagine sitting close to someone. You can feel the warmth of their body even though you are not physically touching them. You are interacting with their energy field, which cannot be seen, but it can be felt and described.

If you were to receive Therapeutic Touch, you would be placed in a quiet room, sitting in a comfortable chair with comfortable clothing. Your feet are on the ground and your arms are at your sides. You could close your eyes, and allow your body to relax. The nurse would then move her hands over your body, leaving her hands about three to five inches away from your skin. She is massaging the field of energy that surrounds you and is a part of you. Moving from your head to your toes in a gentle sweeping motion, the nurse is massaging you without having to physically touch you. You may experience a sensation of warmth or tingling on your skin, and an overall feeling of relaxation.

The Therapeutic Touch treatment usually lasts about fifteen minutes. After the treatment is over, you may sit in the chair, relaxed and quiet. The goal of the Therapeutic Touch treatment has been to create balance in your energy field, in order to allow your own healing energies to work.

Conceptual Definition of Breast Cancer

According to Pittman and Sorenson (1980, p.1809), "for both men and women the breasts are body areas highly invested with emotional feelings. Breast size is commonly viewed in terms of masculinity, femininity, and attractiveness. Breasts are erogenous zones (responsive to sexual stimuli) and, as such, are usually considered to be private body parts." The woman who is diagnosed as having breast cancer faces not only the physical threat of the cancer, but also the emotional and personal threat of her view of self. This multi-faceted impact of the diagnosis of breast cancer must be attended to by the nurse in an advanced practice role. The necessity of holistic care is vital.

Breast cancer is typically indicated by "a nontender, firm or hard lump with poorly delimited margins (caused by local infiltration). Slight skin or nipple retractions is an important finding. Minimal breast asymmetry may be present" (Pittman & Sorenson, 1980, p.1813). There may be dimpling or puckering of the skin, changes in color over the lesion, or serous or bloody discharge from the nipple (Molbo & Sun, 1987). The diagnosis of breast lesions which could be benign or malignant, involves physical assessment, self-examination as well as clinical evaluation; use of radiographic techniques such as mammography; laboratory studies; and biopsy, including needle or open (Pittman & Sorenson, 1980; Molbo & Sun, 1987). Once diagnosed, breast cancer is then identified or staged

based on a) the size of the primary lesion; b) the extent of spread to regional lymph nodes, and c) the presence or absence of metastasis (Pittman & Sorenson, 1980, p.1820).

Treatment of breast malignancies depends on the factors known about the tumor. Treatment consists of four major methods; including surgery, radiotherapy, endocrine manipulation, and chemoimmunotherapy with cytotoxic agents (Pittman & Sorenson, 1980, p.1821-1823; Molbo & Sun, 1987, p.1863-1864).

Surgical treatment options for breast cancer consist of lumpectomy, partial mastectomy, subcutaneous mastectomy, simple mastectomy, modified radical mastectomy, and radical mastectomy (Molbo & Sun, 1987). With breast cancer, the "emphasis is on treating women with breast malignancies as if they had metastatic disease" (Molbo & Sun, 1987, p.1864). Therefore, adjuvant chemotherapy is often used to supplement primary surgical or radiation treatment, and is usually administered on an outpatient basis (Molbo & Sun, 1987). The intravenous administration of cytotoxic agents may continue on a weekly-to-monthly basis for 6 to 12 months (Molbo & Sun, 1987, p.1873). Chemotherapy is often administered in a primary care setting, by a nurse who has the responsibility of planning and intervening for the health care of the woman.

Overview of Martha Rogers' Theory of Nursing

The conceptual framework for this study utilizes the Theory of Unitary Human Beings developed by Martha E. Rogers. Rogers, with a background in public health nursing, became Head of the Division of Nursing in 1954 at New York University (Hektor, 1989). Capitalizing on her knowledge gained from reading and studying anthropology, sociology, astronomy, religion, philosophy, history, and mythology, Martha Rogers developed and published her own conceptual framework for nursing in 1970 (Falco & Lobo, 1980). Her contribution to nursing provides a holistic, environmental, and creative view, focusing on the human being and the environment in continual interaction. Rogers sees nursing activity as "creative and imaginative, rooted in abstract knowledge, intellectual judgement, and compassion. She emphasizes the use of the nurse's own self with the safe utilization of the skills and technology of the time" (Quillin & Runk, 1989, p.286). The use of the self is key in intervening with the practice of Therapeutic Touch.

According to Rogers', human beings have the "capacity to knowingly rearrange their environment and to exercise choices in fulfilling their potentialities" (Rogers, 1970, p.65). Nursing must assist the client in identifying her/his environment and the attitudes and feelings about the choices available in their environment.

In primary care, the CNS works with clients and families providing continuous holistic care. Rogers' theory applies

well in the primary care setting, because human beings in her view are at the center of nursing's purpose. "This conceptual framework for nursing looks at the total individual. Nursing, then, is a humanistic and a humanitarian science directed toward describing and explaining the human being in synergistic wholeness. The science of nursing is a science of humanity - the study of the nature and direction of human development" (Falco & Lobo, 1980, p.166). The person or client of nursing is therefore defined as a Unitary Human Being, "an irreducible, multi-dimensional energy field identified by pattern and manifesting characteristics that are different from those of the parts and cannot be predicted from knowledge of the parts (Rogers, 1986, p.5). In this study, the Unitary Human Being is the woman with breast cancer seeking health care from the CNS in the primary care environment. The environment is defined as "an irreducible, multi-dimensional energy field identified by pattern and manifesting characteristics different from those of the parts. Each environmental field is specific to its given human field. Both fields change continuously, mutually, and creatively. The human and environmental fields are infinite and integral with one another" (Rogers, 1986, p.5). In Rogers' view, "the irreducible nature of individuals as energy fields, different from the sum of their parts and integral with their respective environmental fields, differentiates nursing from other sciences and identifies nursing's focus" (Rogers, 1986, p.3).

The definition of nursing or focus of nursing, is to

"promote symphonic interaction between man(woman) and environment, to strengthen the coherence and integrity of the human field, and to direct and redirect patterning of the human and environmental fields for realization of maximum health potentials (Rogers, 1970, p.122). In her theory, Rogers uses the word health frequently, but declines to give a specific definition. In her view, health and illness are value words broadly defined by each culture and expressing the interaction between human and environmental fields (Meleis, 1985; Quillin & Runk, 1989). "Health and illness are not dichotomous but continuous, are part of the same continuum, and are an expression of the life process; they are socially defined" (Meleis, 1985, p.221). Nursing can intervene in this life process, from birth to death. This study specifically focuses on the intervention of nursing in the life process of the woman with breast cancer.

There are five main assumptions of Martha Rogers' theory of Unitary Human Beings upon which nursing science builds. The five assumptions are as follows (Rogers, 1970, p.47-73):

1. Man is a unified whole possessing his own integrity and manifesting characteristics that are more than and different from the sum of his parts.
2. Man and environment are continuously exchanging matter and energy with one another.
3. The life process evolves irreversibly and unidirectionally along the space-time continuum.
4. Pattern and organization identify man and reflect innovative wholeness.
5. Man is characterized by the capacity for abstraction and imagery, language and though, sensation and emotion.

These assumptions provide the base upon which the elements of Rogers' theory rest.

Proposed Model for the Study

One of the five assumptions of the Unitary Human Being and therefore the woman with breast cancer, is the capacity for abstraction and imagery, language and thought, sensation and emotion (Rogers, 1970). The author of this study identifies a parallel between this assumption and the components of attitude. For example, language and thought is a cognitive response, sensation and emotion is an affective response. With the capability to imagine and process abstraction, the woman with breast cancer responds behaviorally to the environment by making choices. If the stimuli in the health care environment is the choice for participation in a Therapeutic Touch intervention, it impacts on the woman with breast cancer who is capable of abstraction, imagery, language and though, sensation and emotion. Given the option of Therapeutic Touch, the woman with breast cancer reacts with affective, cognitive and behavioral responses. The assessment of these three components of attitude is the focus of the study. The affective component response (sympathetic nervous system responses; verbal statements of affect) may produce feelings of relaxation, nervousness, excitement, hesitancy, or expectancy. The cognitive component response (perceptual responses; verbal statements of belief) may produce statements of belief, disbelief, or uncertainty of

belief in regards to Therapeutic Touch. The behavioral component response (overt action, verbal statements concerning behavior) could yield statements of willingness or unwillingness to participate, or uncertainty of willingness to participate in an intervention.

Elemental in Rogers' theory is the interrelationship of the Unitary Human Being and the environment as depicted in Figure 1. The Unitary Human Being and environment are irreducible wholes, manifesting characteristics that are different from those of their parts. In other words, one must look at the whole in order to fully understand the Unitary Human Being or the environment, instead of looking at each part separately. It is however, important to know the parts that make up the whole. For instance, the client seen in primary care must be treated as a whole person, but this can only be done by understanding the physical, social, psychological and spiritual components of the whole. This assessment can include the attitudes, beliefs, and cultural values of the client.

Openness and pattern are building blocks for the Unitary Human Being and the environment, demonstrating the ongoing interaction between them. For this reason, the circles in the model are made of broken lines, to depict the interaction and interrelationship of the variables. The health care environment effects the woman with breast cancer and her attitudes just as the woman with breast cancer effects the environment. As Rogers states, "the human and environmental

fields are infinite and integral with one another" (Rogers, 1986, p.5). Attitudes effect the stimuli just as the stimuli effect the attitude. And so it is that attitudes must be assessed in order to understand the feasibility of conducting an experiment intervening with the stimulus of Therapeutic Touch. Information from this study could provide the groundwork necessary for future experimental research; of the effects of Therapeutic Touch, and the influence of people's attitudes on the outcomes of a Therapeutic Touch intervention.

Assumptions of the Study

1. The woman with breast cancer is a Unitary Human Being, an irreducible, multi-dimensional energy field identified by pattern and manifesting characteristics that are different from those of the parts and cannot be predicted from knowledge of the parts.
2. The health care environment and its interventions are an irreducible multi-dimensional energy field identified by pattern and manifesting characteristics different from those of the parts.
3. The interaction between the woman with breast cancer and the health care environment is continuous, integral, and infinite, characterized by pattern, openness, and multi-dimensionality.
4. The woman with breast is characterized by the capacity for abstraction and imagery, language and thought, sensation and emotion.

5. Attitude as a construct is composed of three components; affective, cognitive, and behavioral, which can be measured by responses to statements of affect, belief, and behavior.
6. The fifth assumption of the Unitary Human Being implies the presence of attitudes, as the components of the assumption are reflected in the components of attitude, such as sensation and emotion as an affective response, language and thought as a cognitive response.
7. With the capacity to imagine and process abstraction, the woman with breast cancer responds behaviorally to the health care environment and its choices for treatment such as Therapeutic Touch.

Summary

This chapter contains a discussion of Martha Rogers' nursing theory of Unitary Human Beings. Her theory is extended to include the concept of attitudes as relating to her assumption that man is capable of abstraction and imagery, language and thought, and sensation and emotion. A model for the study is illustrated and defined, focusing on the interaction of the Unitary Human Being and the environment in assessing the affective, cognitive, and behavioral components of breast cancer patients' attitudes toward Therapeutic Touch. Assumptions of the conceptual framework are listed. The purpose of this framework is to provide a strong base upon which to work in describing attitudes toward Therapeutic Touch as a nursing intervention.

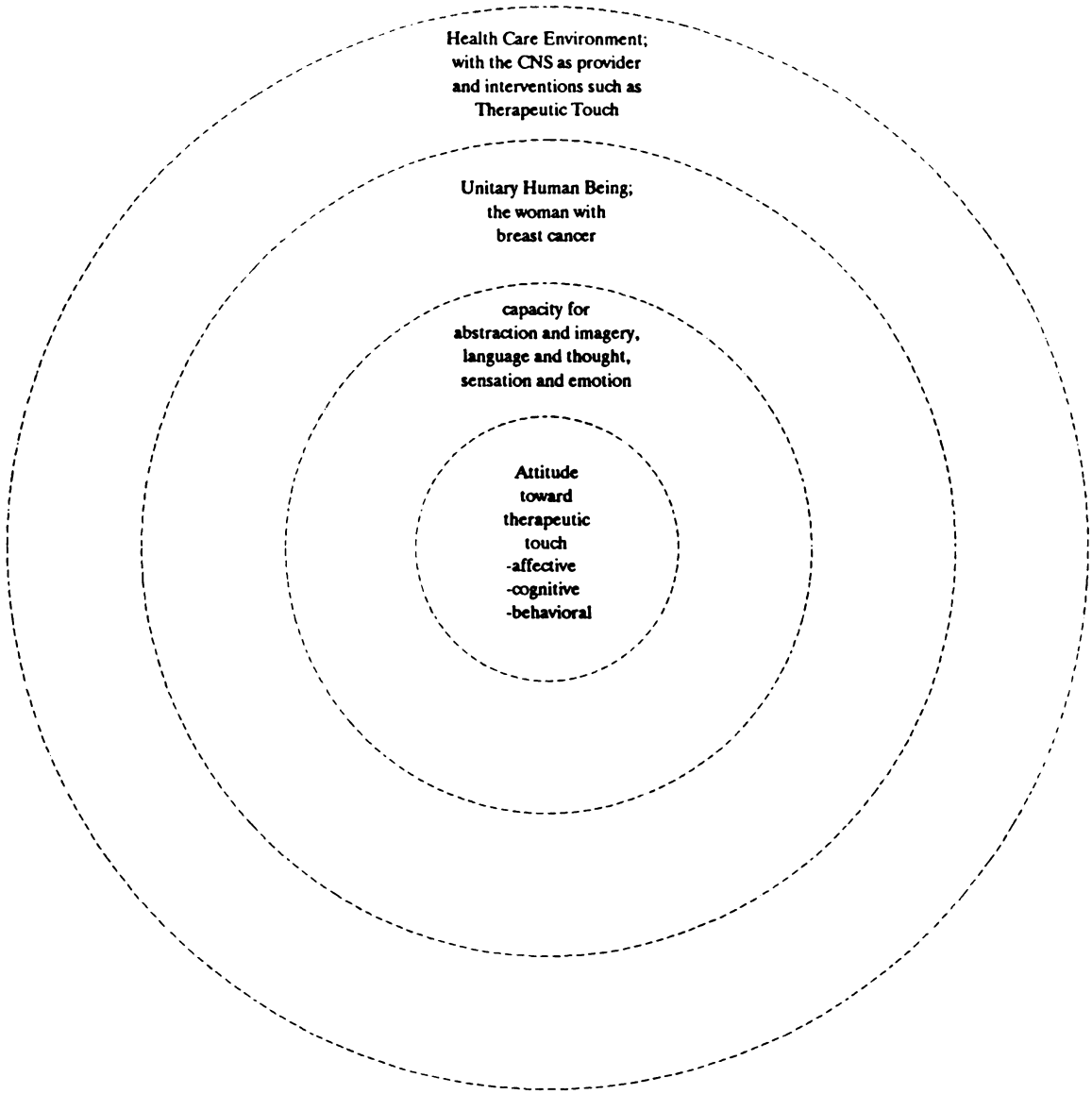

Figure 1: A model for the study - The relationship of the Unitary Human Being and the Environment; the woman with breast cancer and her attitudes toward the health care intervention of Therapeutic Touch.

CHAPTER III

Review of Literature

Overview

The purpose of this literature review is to provide an understanding of the research previously done in the area of attitudes toward touch therapy, attitudes toward health behaviors, and empirical studies of Therapeutic Touch. Concepts reviewed are attitudes and Therapeutic Touch. Included in each section is a critique of the research. An analysis of the literature is given which provides purpose and direction for the present study.

Attitudes Toward Touch and Therapeutic Touch

There is a growing body of research on Therapeutic Touch, however, there is no known published research about people's attitudes and feelings about this nursing intervention. Although many studies have been done on how physical touch effects the human being, only a few nursing studies have focused on what people feel or believe about touch. Included in this literature review is a sample of the nursing literature on touch. However, this literature reflects people's attitudes toward physical touch, and not Therapeutic Touch as theoretically defined in this thesis. Therefore, due to lack of information about attitudes toward Therapeutic Touch and how these attitudes may effect the outcome of Therapeutic Touch, the data from this thesis may provide new

ground and a different perspective for Therapeutic Touch research.

Whitcher and Fisher (1979) focused on the reaction of hospitalized patients to touch. Forty-eight individuals who entered the hospital for elective surgery participated in the study. The experimental manipulation took place shortly after admission, with the nurse introducing herself and teaching the patient about his or her surgery. After the teaching session, the nurse put one hand on the patient's arm and maintained this touch for approximately one minute while she and the patient examined the booklet detailing the procedure for surgery. Patients in the control group experienced the same interaction but without physical contact. Dependent measures used to assess the effects of touch were a set of affective (patients feelings concerning hospitalization and surgery via questionnaire), evaluative (satisfaction with preoperative instruction via questionnaire), behavioral (how much of teaching booklet read via Likert scale), and physiological indexes (pulse, blood pressure, temperature). These indexes were expected to discriminate between patients who reacted favorably and those who reacted unfavorably to the hospital experience (Whitcher & Fisher, 1979). The affective, evaluative, and behavioral indexes as described in the Whitcher and Fisher study are similar to the affective, cognitive, and behavioral components of attitude as proposed in this thesis. Therefore, the researchers may be measuring the effect of touch on subjects attitudes by measuring their

affective, evaluative, and behavioral responses.

Whitcher and Fisher (1979) concluded that female subjects in the touch condition experienced more favorable affective, behavioral, and physiological reactions than a no-touch control group. Males in the touch condition, however, reacted more negatively than control subjects on the affective, behavioral and physiological indexes. Although these results are interesting, there is a high probability of the existence of confounding variables, for which there seems to be no control designated. For instance, the affective, evaluative and behavioral indexes could be affected by the reading level of the subject, making completion of a questionnaire and Likert scale difficult. Reading level also affects whether or not the teaching booklet was read and comprehension obtained. There is no mention of assessment or control for reading level of subjects. The physiological index measurements was based on the assumption of the presence of anxiety and the influence of anxiety on vital signs. Evidence of anxiety in physiological indexes could be influenced by a number of variables such as type of surgery, previous experience, medications, prognosis, social and family support, and expectations. There was no measure of these possible variables, and no control in the study. Therefore, due to the number of confounding variables, these results are not generalizable to the broader population.

Whitcher and Fisher (1979) studied how physical touch affects the attitudes of the subjects, whereas this thesis

study focuses on how attitudes effect the intervention of touch. Also, Therapeutic Touch does not require physical touch, while Whitcher and Fisher focused on physical touch. Therefore, although Whitcher and Fisher shed light on some of the differences in reactions to physical touch, the results cannot be generalized to the intervention of Therapeutic Touch which involves elements of non-physical touch.

Attitudes Toward Health Behaviors

Pender and Pender (1986) studied the relationship of attitudes and intention to engage in health behaviors. A 75-item questionnaire was distributed randomly in Northern Illinois, to 377 predominantly white households with 40% males and 60% females between ages 18 and 66 responding. Data were collected on subjects attitudes, subjective norms (perceived social pressure), and intention to engage in the health behaviors of exercise, weight control, and stress reduction. Attitudes explained intentions to engage in all three health behaviors studied. Although the researchers concluded that attitudes significantly affected intent for health behavior, the correlation coefficients were relatively low ($r=.177$ for exercise, $r=.127$ for diet, and $r=.271$ for stress reduction). Despite the low correlations, all were significant to at least the .01 level. The role of attitude may significantly effect the participation in health behaviors, therefore, it is an important area of study as attitudes may effect patients participation in a Therapeutic Touch treatment.

Pender and Pender (1986) provide valuable data, but most importantly they provide implications for the future research of attitude components and subjective norms as they effect the actions of individuals. Other health behaviors such as participation in the intervention of Therapeutic Touch could be studied as it is affected by attitudes and subjective norms. This thesis study of women with breast cancer and their attitudes toward Therapeutic Touch is a step toward this goal.

However, there is one main difference between the Pender and Pender (1986) study and this thesis. The Pender and Pender (1986) study focused on behaviors clients usually do on their own without intervention from a health care provider, such as exercise, diet, and stress reduction. Therapeutic Touch on the other hand, is an interaction between the client and the nurse, therefore participation in this health care intervention is different than those studied in the Pender and Pender (1986) research. Implications for future study however, include the effect of attitudes and subjective norms on the participation in Therapeutic Touch intervention.

Empirical Studies of Therapeutic Touch

Since its introduction to nursing in the 1970's by the Delores Krieger R.N., there have been a small number of empirical studies testing the effects of Therapeutic Touch on a variety of human conditions. Heidt (1981) and Quinn (1984, 1989-a) have studied the effects of Therapeutic Touch on decreasing anxiety in hospitalized cardiovascular patients. Keller and Bzdek (1986) studied tension headache pain reduction due to the intervention of Therapeutic Touch. Heery (1989) measured the effects of Therapeutic Touch on chemotherapy-induced emesis.

Despite, and possibly due to limitations in all of the above studies, all researchers except for Heery (1989) have yielded significant results in the effect of Therapeutic Touch. The intervention of Therapeutic Touch has significantly reduced anxiety scores in hospitalized cardiovascular patients (Heidt 1981; Quinn 1984), and relieved tension headache pain immediately and for four hours after intervention (Keller & Bzdek, 1986). Common methodological limitations include the following; 1) small sample size which decreases the generalizability of the data (Heidt, 1981; Quinn, 1984; Keller & Bzdek, 1986), 2) problems with control group definition (Keller & Bzdek, 1986; Heidt, 1981), 3) lack of a no-treatment control group (Keller & Bzdek, 1986), 4) time limitation on intervention which may decrease the possible effects of Therapeutic Touch (Quinn, 1984, 1989-a; Heidt, 1981; Keller & Bzdek 1986; Meehan 1990), 5) use of

medications possibly masking dependent variable effect such as pulse and blood pressure (Quinn, 1989-a), and 6) use of experienced Therapeutic Touch practitioner providing Mock Therapeutic Touch treatment (Quinn, 1989; Quinn, 1989-a).

The Meehan, et al. study has made a concerted effort to control for methodological limitations found in previous studies. Meehan is the first Therapeutic Touch researcher to receive funding from the National Center for Nursing Research to assess the effects of Therapeutic Touch in reduction of perioperative stressors (Meehan, 1990; Meehan, Mersmann, Wiseman, Wolff & Malgady, 1990). These researchers found that subjects who received Therapeutic Touch in conjunction with a narcotic waited a significantly longer time before requesting further narcotic medication.

There is a need for further empirical as well as qualitative research on Therapeutic Touch to provide future direction and definition to the practitioners and recipients of Therapeutic Touch (Heidt, 1990; Quinn, 1989). This thesis study explores an area possibly related to the effects of Therapeutic Touch by assessing women with breast cancer and their attitudes toward Therapeutic Touch. Because no study in the past has developed a design to measure the effect of attitude on the Therapeutic Touch outcome, this study assessing attitudes toward Therapeutic Touch is a necessary endeavor. Information and methodology from this study may provide direction for the study of the much aliened placebo effect in Therapeutic Touch, and hopefully lead to scientific

merit in an intervention which was once standard; the laying on of hands.

Analysis of Therapeutic Touch Literature

The literature on Therapeutic Touch is exciting and encouraging as it provides a whole new realm in which to work with and for the client. In order to best give direction to nurses in advanced practice who are researching Therapeutic Touch, the research strengths, limitations, and gaps must be identified. The most important strength of Therapeutic Touch is that it incorporates what nursing is all about; human caring, touch, and interaction. Therapeutic Touch is a nursing intervention, in which the nurse collaborates with the patient for their care. However, "what we do not know and to which question we must apply further efforts in nursing research is how Therapeutic Touch works, and, most importantly, why it works" (Krieger, 1976, p.574). It is often proposed (Clark & Clark, 1985; Krieger, Peper, & Ancoli, 1979-c) that the placebo effect is the cause of positive results and not the Therapeutic Touch treatment. Therefore, it is critical that the powerful placebo effect be controlled in future studies, using double-blind experimental and control groups (Keller & Bdzek, 1986; Clark & Clark, 1985). According to Krieger et al., "even if Therapeutic Touch is just 'placebo', placebo has been noted to help in over thirty percent of illnesses. Learning to systematically maximize this process through a healing meditation would, in itself, be

a significant contribution to nursing...Therapeutic Touch goes beyond placebo and involves an undefined but learnable method of human energy balancing" (1979-c, p.662).

The author of this thesis believes that attitudes toward health care interventions play a large role in the effect of a treatment. Attitudes may also play a role in the effects of Therapeutic Touch. If the subject feels positive about Therapeutic Touch, perhaps the treatment may be more effective than if the subject feels negative about Therapeutic Touch. To date, there has been no scientific inquiry into this relationship. Even if the effects of Therapeutic Touch are due to a placebo effect, the results from placebo effects are real and cannot be discarded as ineffective. However, the scientific community needs to understand more about Therapeutic Touch and how and why it works. Therefore, as a start, this thesis will gather data on the attitudes of subjects toward Therapeutic Touch. The data from this study can and should be used for future focus group questions, research questions, and experimental designs to test the relationship of attitudes toward Therapeutic Touch to the outcome of Therapeutic Touch. Qualitative and quantitative research is needed to provide the vital groundwork for rigorous research which defines and gives direction for nursing.

Summary

This chapter provides a literature review of studies focusing on attitudes toward physical touch, attitudes toward health behaviors, and the efficacy of Therapeutic Touch as a nursing intervention. Attitudes toward Therapeutic Touch have not been defined by the literature, as there is currently no scientific research studying the relationship of attitudes and Therapeutic Touch. Due to the lack of information regarding attitudes toward Therapeutic Touch, and the effect attitude may have on the outcome of Therapeutic Touch, the data from this thesis is needed. The literature review has provided a base for this thesis and evidence this study is needed.

CHAPTER IV

Methodology and Procedures

Overview

The purpose of this chapter is to present the methods and procedures used in this thesis to collect data on the attitudes of women with breast cancer toward a description of the nursing intervention of Therapeutic Touch. Content in this chapter consists of 1) the study design; including a description of the population, subjects, and sampling techniques, and operational definition of concepts; 2) the instrument; 3) data collection procedures; 4) protection of human subjects; 5) reliability of ATTT, 6) analysis of data and 7) summary.

Study Design

The design which was utilized in this study was an exploratory research design. The term exploratory is used because there is little information known about the attitudes of people toward Therapeutic Touch as a nursing intervention, and the data collected could shed light on the subject for use in future studies. Therefore, it was a descriptive study designed to describe the attitudes of women with breast cancer toward Therapeutic Touch. "The concept of attitude, like many abstract concepts, is a creation -a construct. As such, it is a tool that serves the human need to see order and consistency in what people say, think and do, so that given certain

behaviors, predictions can be made about future behaviors" (Henerson, Morris, & Fitz-Gibbon, 1987, p.11).

A combination of closed and open-ended questions were used in an instrument designed specifically for this study to measure attitudes of women toward a description of Therapeutic Touch as an intervention for health care, specifically, for breast cancer. According to Henerson et al., (1987, p.11-12) "we can only infer that a person has attitudes by her words and actions". Therefore, by assessing women's responses to the empirical indicators of affective, cognitive, and behavioral statements, it is hypothesized that attitudes would be inferred.

The development of the instrument for this study was, by no means, meant to develop a tool for the measurement of attitudes toward health care interventions. The study questionnaire titled "Attitudes Toward Therapeutic Touch (ATTT)" was developed for descriptive purposes for this study only. It was hoped that data collected from this study would yield information that may will be useful in the future development of a tool for defining attitudes, as well as providing information for research on the effect of attitude on the outcome of Therapeutic Touch.

Methods

The discussion of methods for this study will include the following; 1) population, subjects, and sampling technique, and 2) operational definition of attitudes toward Therapeutic Touch.

Population, Subjects, and Sampling Technique

The target population for this study was women with breast cancer. The sample for this study was 31 women from two clinics associated with a major university in a large midwestern city. The clinics provided for the holistic treatment of cancer patients, addressing the needs of cancer patients and their families. Each subject met the following criteria:

1. female with breast cancer,
2. able to read and write in English.

There were no limits placed on age, stage of cancer, prior treatment for breast cancer, or prior knowledge and experience with Therapeutic Touch. Because this was a pilot study, one of the purposes of the study was to gather data on the women with breast cancer for subject definition in future studies with Therapeutic Touch and breast cancer.

Subjects enrolled into the study according to their availability and willingness to participate. Women who attended the clinic for treatment of breast cancer were asked to participate in the study, therefore, it was a sample of convenience. According to Polit and Hungler (1987),

convenience is similar to the accidental sample, and "the problem with accidental sampling is that available subjects might be atypical of the population with regard to the critical variables being measured" (p.209-210). Therefore, this sampling method was a nonprobability approach to selecting a sample, and does not yield a representative sample.

Operational Definition of Attitudes Toward Therapeutic Touch

Attitude was theoretically defined as the predisposition to respond to some class of stimuli with certain classes of responses, such as affective responses, cognitive responses, and behavioral responses (Rosenberg & Hovland, 1960). Operationally, attitudes were measured by subject response to the affective, cognitive, and behavioral items on the study questionnaire. The study questionnaire included statements on the three components of attitude; affective, cognitive, and behavioral. It was hypothesized that the affective component would be assessed by answers to questions addressing subjects feelings toward Therapeutic Touch. Examples of affective items are 'I am glad there are health care treatments such as Therapeutic Touch', 'I feel reassured when I read about Therapeutic Touch', 'I am afraid to receive Therapeutic Touch', and 'I feel nervous about Therapeutic Touch'. It was hypothesized that the cognitive component would be assessed by responses to statements addressing what subjects believe or think about Therapeutic Touch. Examples of cognitive items

are 'I believe human energy fields exist', 'I believe Therapeutic Touch can reduce unpleasant symptoms', 'I do not believe Therapeutic Touch can have beneficial effects', and 'I do not think Therapeutic Touch can help me'. It was hypothesized that the behavioral component would be assessed by responses to statements assessing subjects intent or willingness regarding Therapeutic Touch. Examples of behavioral items are 'I intend to seek further information about Therapeutic Touch', 'I intend to tell family and/or friends about Therapeutic Touch', 'I would not be willing to receive Therapeutic Touch along with my prescribed cancer treatment', and 'I do not plan to read anything more about Therapeutic Touch'. The entire study instrument is contained in Appendix A. The goal was to yield adequate data on the affective, cognitive, and behavioral aspects of the subjects, therefore defining their attitude toward a description of Therapeutic Touch as an intervention for women with breast cancer.

The Instrument

The instrument utilized in this study was specifically designed for this thesis for the purpose of obtaining descriptive data on women's attitudes toward a description of Therapeutic Touch. Therefore, there were no previous validity or reliability estimates. However, the use of questionnaires has often been seen as one effective tool in gathering exploratory data, especially in an area which little data has

been documented (Polit & Hungler, 1987). In light of the literature review for this thesis, there was no documentation of people's attitudes toward Therapeutic Touch. "Self-report procedures represent the most direct type of attitude assessment and should probably be employed unless you have reason to believe that the people whose attitudes you are investigating are unable or unwilling to provide the necessary information" (Henerson, et al. 1987, p.20). There was no reason to believe that women with breast cancer would be unable or unwilling to answer the questionnaire. "Self-report measures such as questionnaire, interviews, surveys, polls, journals, diaries, and logs should be used when the people whose attitudes are being investigated are; able to understand the questions asked of them, have sufficient self-awareness to provide the necessary information, are likely to answer honestly and not deliberately falsify their responses" (Henerson et al., 1987, p.22). Therefore, the tool for this study was considered a self-report measure to provide data on women's attitude toward a description of Therapeutic Touch.

The instrument titled "Attitudes Toward Therapeutic Touch" (ATTT) was a three-part questionnaire designed to collect data on women with breast cancer. The first part was designed to collect demographic data, such as age, year of diagnosis, stage of breast cancer, and types of treatment received for breast cancer. Subjects were also asked if they had ever heard of or received Therapeutic Touch prior to the day of testing, in order to gain an understanding of subjects

previous experience with Therapeutic Touch. Prior knowledge or experience was thought to be a variable which might effect subjects' attitude toward Therapeutic Touch.

The second and main part of the ATTT consisted of a description of Therapeutic Touch and the 30 items hypothesized to obtain data on the affective, cognitive, and behavioral components of attitude as operationally defined in the previous section. Prior to answering the questionnaire, the subjects were instructed to read the short paragraph describing Therapeutic Touch. This description was considered part of the tool, as answers to the questionnaire depended on subjects reading of the paragraph.

After reading the description of Therapeutic Touch, subjects responded to statements in items 12-41 by circling the response which best reflected their reaction to the statement. A Likert scale was used, scoring strongly disagree as "1", somewhat disagree as "2", somewhat agree as "3", and strongly agree as "4". The neutral choice was purposefully omittd, to force a choice on the part of the subjects.

The last section of the questionnaire consisted of three open-ended questions which continued to focus on the affective, cognitive, and behavioral aspects of their attitudes toward the description of Therapeutic Touch. One question asked for further feelings and reactions toward Therapeutic Touch. The second question asked the subject to write what information they would like to know about Therapeutic Touch while the third question asked if subjects

would be willing to participate in a Therapeutic Touch intervention. These open-ended questions were designed to provide an avenue for subjects to offer information they were unable to provide or clarify by answering the specific questions of the questionnaire. Given the fact there was no 'neutral' or 'do not know' option in the Likert scale items, it was hoped that open-ended questions would provide an opportunity for subjects to convey their attitude more fully and accurately. See Appendix A for the entire instrument.

Scoring of the Likert Scale Items

Each item on the likert scale which measured the affective, cognitive, and behavioral aspects of attitude was given a score. Questions which reflected a 'positive' attitude toward Therapeutic Touch were rated from "1" for strongly disagree to "4" for strongly agree. Questions which reflected a 'negative' attitude had scoring weights reversed. Questions 14, 17, 18, 19, 23, 24, 27, 28, 30, 31, 32, 35, 37, 38, and 40 had scoring weights reversed.

Content Validity and Pilot Testing

In order to develop the tool used in this thesis, a number of content validity measures were taken. Content validity was focused on the items from part two of the questionnaire hypothesized to measure the three components of attitudes. Scale items were given to three masters prepared nurses with experience in the research process. This panel of

experts were given a definition of each subscale or component of attitude as theoretically defined in this thesis. Next, the experts were asked to place items into the three subscale categories; affective statements, cognitive statements, and behavioral statements. Once categorized, subscale items were separated into positive/affirmative statement groups, or negative statement groups, achieving an overall of six categories. Upon review of Likert scale items, one expert placed each item into the categories as hypothesized. The second expert labeled all behavioral statements as cognitive, and all cognitive statements as behavioral. When questioned by the investigator, she reported reversing them accidentally. The third expert labeled the item 'I feel nervous' as a behavioral statement instead of affective, and 'I do not think Therapeutic Touch could help me' as a behavioral statement rather than cognitive. The overall opinion of the experts supported the placement of the items in the three categories of affective, cognitive, and behavioral.

In order to pilot test the tool, there was an assessment of level of reading comprehension required to read the questionnaire. The Flesch-Kincaid readability statistic, a computerized program that reviews the grammatical composition of the material and calculates the readability level, was applied to the tool. A reading level statistic of 54 reflecting a grade 6-10 reading level was calculated using this method.

Once the readability level was known, the second step in

pilot testing was the administration of the tool to three women in the community who did not have breast cancer. They were asked to read the description of Therapeutic Touch and complete the questionnaire to assess ease of administration, and length of time required for completion. The women were timed while completing the questionnaire to assess length of time necessary to complete the tool. Time noted for completion was 12 minutes, 13 minutes, and 18 minutes with a mean of 14 minutes. After completing the tool, women were asked to rate the questionnaire on ease of administration, using an arbitrary scale with "1" meaning very easy to complete and "5" meaning very difficult to complete. All reported the questionnaire as being very easy to complete. All questions were answered as directed.

Data Collection Procedures

The methods and procedures of the study were reviewed by the primary investigator with the Clinical Nurse Specialist responsible for data collection in each clinic. Data collection procedures were reviewed with the staff nurses who were instructed to distribute the questionnaires, collect the packets, and field questions regarding the completion of the tool. Staff nurses were instructed not to answer questions regarding Therapeutic Touch and how it works, but to reassure the subjects that it was the subject's reaction to the description of Therapeutic Touch that was sought. The principal investigator was present during the first day of

data collection at each site to ensure a smooth process.

A manilla envelope containing the study questionnaire was distributed to each woman with breast cancer seen in the study setting. Subjects were identified through the tumor registry at the clinical settings, and approached by the staff nurse responsible for their care. The Clinical Nurse Specialist (CNS) who was the manager of nursing care in the clinic was the contact person working for the principal investigator and overseer of the staff nurses who distributed the questionnaires. Each client with breast cancer was considered a potential subject and was screened by the staff nurse for ability to read and write English. The staff nurse gave the study packet to each woman with breast cancer able to read and write English for completion while in the waiting room or treatment room, depending on if the woman was receiving a chemotherapy treatment. The goal was to allow women to complete the questionnaire while they were normally at the clinic, to avoid asking subjects to stay later than planned to complete the questionnaire. It was assumed that less participation would be noted if women were asked to stay later than planned to complete a research questionnaire.

Once the subject was given the questionnaire, the staff nurse provided initial directions by instructing subjects to read the explanatory letter and consent information attached to the outside of the envelop. Subjects could then follow the instructions in the explanatory letter. Subjects were also be informed to direct questions regarding the completion of the

questionnaire to the staff nurse.

All other instructions for the completion of the questionnaire were within the tool itself. Subjects were be instructed to read the explanation and consent sheet, then proceed by completing the questionnaire if they wished. Inside the envelope was the instrument, containing the description of Therapeutic Touch and the ATTT. Written explanation of instructions preceded each part of the tool. Subjects were allowed whatever time was necessary to complete the questionnaire, and were told approximately 15 minutes would be necessary. Upon completion of the questionnaire, subjects were instructed to replace the packet back into the envelope and voluntarily hand it to the nurse. Subjects were not forced to complete the questionnaire as it was assumed that their completion and return of the questionnaire was indicative of their voluntary agreement to participate in the study. Once each week, returned packets were collected by the principal investigator.

Protection of Human Subjects

In any study with human participation, it is important to receive the subject's permission for participation, and protect the subject from harm. This thesis study was a non-invasive, non-intervention study. A description of the study was distributed to each subject. Included in the description was a guarantee of anonymity which was assured by having all subjects return the packet in the envelope whether she

completed the questionnaire or not. No names were written anywhere on the questionnaire, and envelopes were opened only by the principal investigator after leaving the clinic. The principal investigator did not have direct contact with subjects at any time during the study. No clinic staff member including the CNS knew who participated by completing the questionnaire. Confidentiality was also guaranteed as no names or incriminating data were reported on an individual basis, rather, data was only presented in an aggregate format. Questionnaire answers were shared with the principal investigator and her thesis committee.

Although no names appeared on any of the data, some subjects did however, request to be informed of study results. Subjects were instructed to write their address only on the bottom of the study explanation sheet if they wished to receive study results. The explanation sheet remained on the outside of the envelope and was separated from the questionnaire at the time of submission to the staff nurse. Neither the CNS nor the staff nurses saw the questionnaire and therefore did not know who completed the questionnaire and were not capable of associating subjects with specific responses. The envelopes were collected by the principal investigator and assigned a number, beginning with 01.

Through this process a guarantee of confidentiality was given. The principal investigator did not know who received or completed the questionnaire as she did not have direct contact at any time with the subjects. Report of research

findings did not associate subjects with specific responses or findings, rather, general statements regarding frequency of responses were made. The guarantee of confidentiality was addressed in the explanation of the study.

Also contained in the explanation of the study were statements regarding risks and benefits of participating in the study. Because it was a non-invasive, non-intervention study, there were no known potential risks or danger for harm either physically, psychologically, socially, or economically. Also, there was a guarantee that participation in the study would not impact or effect the subjects care received in the clinic. Benefits of subjects participation in the study was described as providing information for more rigorous research involving the intervention of Therapeutic Touch. These studies could lead to further research of a non-invasive intervention for anxiety and pain reduction, which could then be beneficial to the subjects themselves. Most of the benefits were considered those that may accrue to society in general as a result of this thesis study. Please see Appendix A for Explanation of the Study and Consent Form. The thesis proposal was approved by the Michigan State University Committee for Research Involving Human Subjects. See Appendix F for human subjects approval. See Appendix E for letters of approval for data collection from settings.

Analysis of Reliability of the ATTT Instrument

The initial reliability within subscales was assessed using Cronbach's alpha, which measured the consistency of items in each subscale. Cronbach's alpha for each subscale was as follows; 0.83 for the affective subscale (subject n=16), 0.92 for the cognitive subscale (subject n=20), and 0.86 for the behavioral subscale (subject n=20). See Appendix C for correlation tables.

In order to increase the internal consistency of the subscales, eight items found to have low inter-item correlations were deleted; two each from the affective and cognitive subscales and four from the behavioral subscale. Items deleted are highlighted in Appendix B.

The remaining 22 items were grouped according to subscales hypothesized as measuring affective, cognitive, and behavioral components of attitude. Reliability analyses were computed on remaining items within each subscale. Results of reliability analysis of subscales on the final ATTT items is listed in Table 1.

Table 1
Reliability Analysis of Subscales
on Final ATTT Items

AFFECTIVE: (8 items)	subscale mean= 2.85 mean inter-item correlation= .71 alpha= .9504 valid responses n=17
COGNITIVE: (8 items)	subscale mean= 2.93 mean inter-item correlation= .65 alpha= .9333 valid responses n=20
BEHAVIORAL: (6 items)	subscale mean= 2.83 mean inter-item correlation= .66 alpha= .9160 valid responses n=22

Each subscale was then correlated with the others. As illustrated in Table 2 the high correlations between the subscales does not support the maintenance of the subscales for analysis and throws doubt on the assumption that the subscales respresent empirically distinct dimensions of attitudes toward Therapeutic Touch as theoretically proposed.

Table 2
Correlation Matrix of Subscales

	Affective	Cognitive	Behavioral
Affective	1.00		
Cognitive	.91**	1.00	
Behavioral	.89**	.90**	1.00

p < .01, two-tailed.

Due to the high correlation among subscales, the ATTT was considered a unidimensional scale. The final instrument used for analysis of the research question was a 22 item attitude toward Therapeutic Touch scale with a Cronbach's alpha of 0.98, used in conjunction with 3 open-ended questions.

Analysis of Data

There were four areas of data analysis. The first area of data analysis was a summary of the descriptive demographic data. Data collected was age of subjects, year of diagnosis, stage of breast cancer, type of treatment received for breast cancer. Each type of treatment was listed separately and reported in the form of frequency and percentage. Questions regarding prior knowledge and experience with Therapeutic Touch were given percentages of 'yes' and 'no' answers. Descriptive data regarding type of information heard about Therapeutic Touch, when Therapeutic Touch was received, and how many times received was listed descriptively

The second area of data analysis was the review of the unidimensional scale mean score to determine subject's attitudes toward Therapeutic Touch. A third area of analysis was the comparison of those who had heard of Therapeutic Touch with those who had not, and those who had received Therapeutic Touch with those who had not. Subjects who had past experience with Therapeutic Touch were compared to subjects who have not using a one-way analysis of variance. This test was applied to determine if the two groups were different

based on their experience.

The fourth area of analysis was the report of qualitative data received from the three open-ended questions in the third part of the questionnaire. Number of subjects who respond to each question was assessed. The first open-ended question focused on the affective response of subjects, the second question focused on cognitive responses, and the last question focused on the behavioral aspect of subjects responses. Answers were reviewed for themes according to subscales. Specific quotes for each component of attitude and for each recurrent theme were listed in the analysis, but not to the extent that identification of a particular subject could be made. Results for the entire study were reported as aggregate rather than as individual.

Assumptions of the Study

1. Subjects were able to answer the questions asked of them, they had sufficient self-awareness to provide the necessary information, and were likely to answer honestly and not deliberately falsify their responses.
2. Women with breast cancer who sought care at the settings in this study had sufficient judgement ability to complete the questionnaire.
3. Attitudes could be measured by responses to affective, cognitive, and behavioral statements.

4. The study instrument was sensitive enough to measure subject attitudes by measuring feelings, thoughts, and intentions for behavior.

Limitations of the Study

1. The individuals who agree to complete the questionnaire did so on a voluntary basis and were considered a sample of convenience, therefore, the study results are not generalizable to all women with breast cancer.
2. The study subjects may not have understood the concept of Therapeutic Touch or holistic non-invasive interventions, despite the short written description of Therapeutic Touch given with the questionnaire.
3. The brief description of Therapeutic Touch may not have been detailed or strong enough to elicit a response on the questionnaire.
4. The use of an untested tool without previous reliability or validity estimates may yield data of questionable scientific usefulness.
5. The stress and anxiety associated with cancer and its treatments may limit the responses or participation of subjects.
6. The subjects' physical status may have affected their ability to answer the questionnaire, and caused lack of participation or rushed answers which may not truly reflect their attitudes.

7. The subjects physical status may have affected her willingness to participate in a Therapeutic Touch intervention as perceived by the subject, reflected in her response to the questionnaire. This may lead to answers refusing to participate in an intervention when in fact she would like to participate.

Summary

This chapter contains a description of the methodology used in this study. It was a design which utilized closed and open-ended questions designed to obtain data on women with breast cancer such as age, year of diagnosis, stage of cancer, types of cancer treatment received, and prior knowledge and experience with Therapeutic Touch. The attitudes of the subjects toward a description of Therapeutic Touch were assessed through focused questions using a Likert scale, and three open-ended question on the Attitudes Toward Therapeutic Touch study questionnaire. The following have been described and defined; design, population and subjects, sampling technique, operational definitions of concepts, the instrument, content validity, data collection procedures, method for protection of human subjects, analysis of reliability of ATTT, analysis of data, assumptions and limitations of the study. It is hoped that this methodology will be effective in obtaining the requested data.

CHAPTER V

Results of the Study

Overview

The purpose of this chapter is to present the study findings. The contents of the chapter include 1) description of the sample, 2) the study question answered through quantitative analysis of the unidimensional scale mean score, and qualitative analysis with extraction of themes from responses to open-ended questions, 3) final analysis of quantitative and qualitative data, and 4) summary.

Description of the Sample

The purpose of the study was to assess the attitudes of women with breast cancer toward a description of Therapeutic Touch. Study instruments were distributed to women with breast cancer receiving health care at two clinics in the Midwest area, both associated with the same major university. Thirty-five percent (n=11) of the completed questionnaires came from the first site, and 65% (n=20) came from the second site. Data collection occurred for two and one-half months; from December 20, 1990 to March 12, 1991, resulting in 31 returned questionnaires.

Age of Subjects

The questionnaire began with demographic information. Of the 31 who replied, the age range of subjects was 37-82 years with a sample mean of 56.7 (S.D.=12.7) years. This mean is somewhat deceptive given the wide variation of age. The majority of subjects were between ages 60-69 (32.2% of sample) and 40-49 (25.8% of sample). Distribution of subjects according to age is summarized in Table 3.

Table 3
Frequency and Percentage of Age of Subjects (n=31)

Age Range	Frequency	Percentage
<39	3	9.7
40-49	8	25.8
50-59	6	19.3
60-69	10	32.3
>70	3	9.7
missing	1	3.2
Total	31	100.0

Years Since Diagnosis with Breast Cancer

Among respondents, 80.7% were within 5 years of diagnosis with 10 subjects (32.3%) having been diagnosed with breast cancer in the last year (1990), and 6 subjects (19.4%) having been diagnosed two years prior in 1989. Only 6 subjects (19.3%) had been diagnosed more than 5 years ago, ranging from 1975 to 1984. Distribution of subjects according to years since diagnosis is summarized in Table 4.

Table 4
Frequency and Percentage of Number of Years Since Diagnosis with Breast Cancer (n=31)

Years	Frequency	Percentage
1 year or less	10	32.3
2 years	6	19.3
3-5 years	9	29.1
>5 years	6	19.3
Total	31	100.0

Treatment for Breast Cancer

Subjects were asked to report which types of treatments they had received for breast cancer by reporting yes, no, or do not know for the following; radical mastectomy, modified mastectomy, lumpectomy, radiation, and chemotherapy or other drugs. Regarding reports of types of treatment for breast cancer, 35.5% of subjects (n=11) had undergone a radical mastectomy, 48.4% (n=15) had undergone a modified mastectomy, 25.8% (n=8) had undergone a lumpectomy, 25.8% (n=8) had undergone radiation, and 83.9% (n=26) reported having had chemotherapy. Items were not mutually exclusive therefore, overlap between treatments may be present. For each intervention, from one to six subjects did not respond. Therefore, there was missing data for each intervention. When asked about any other treatment for breast cancer, 25.8% (n=8) reported receiving other treatments for breast cancer, and listed other treatments such as the drugs tamoxifen (n=4) and

Megace (n=1), psychotherapy (n=1), visual imagery classes (n=1), and faith in God (n=1).

Of the treatments for breast cancer available in the traditional health care system, the treatment most frequently received was chemotherapy. For each treatment listed, one to four subjects did not answer if they had or had not received the treatment. It was not known why the subjects left the question blank; however, it may be related to time since initial treatment, or lack of understanding the various types of treatment for breast cancer. Only one subject reported she did not know if she had received a lumpectomy, however, six subjects left this treatment question blank. It may be that subjects were unsure of the specifics of their treatment, especially surgical intervention. Table 5 presents a summary of treatments received by subjects for breast cancer.

Table 5
Summary of Treatments for Breast Cancer

Treatment	Frequency	Percentage
radical mastectomy		
yes=	11	35.5
no=	18	58.1
do not know=	0	0.0
missing=	2	6.5
total	31	100.0
modified radical mastectomy		
yes=	15	48.4
no=	13	41.9
do not know=	1	3.2
missing=	2	6.5
total	31	100.0
lumpectomy		
yes=	8	25.8
no=	16	51.6
do not know=	1	3.2
missing=	6	19.4
total	31	100.0
radiation		
yes=	8	25.8
no=	20	64.5
do not know=	0	0.0
missing=	3	9.7
total	31	100.0
chemotherapy		
yes=	26	83.9
no=	4	12.9
do not know=	0	0.0
missing=	1	3.2
total	31	100.0

Stage of Breast Cancer

Subjects were asked about the stage of cancer when diagnosis occurred, and 29 of the 31 subjects responded. Of those who were knowledgeable about their staging, the most frequently reported was Stage 2 with 11 subjects (35.5%) reporting diagnosis occurred at this stage. Stage 2 of breast

cancer is the presence of a breast tumor with evidence of malignancy in the axillary nodes (Molbo & Sun, 1987). More than one-third of the subjects did not know the stage of their disease when diagnosed. Distribution of subjects according to stage of breast cancer is summarized in Table 6.

Table 6
Frequency and Percentage of Stage of Breast Cancer at Diagnosis (n=31)

Stage	Frequency	Percentage
Stage 1	4	12.9
Stage 2	11	35.5
Stage 3	1	3.2
Stage 4	1	3.2
Do not know	12	38.7
(missing)	2	6.5
Total	31	100.0

Prior Knowledge and Experience with Therapeutic Touch

Subjects were asked if they had heard about or received Therapeutic Touch in the past. Most subjects (64.5%) had not heard of Therapeutic Touch. Eleven subjects (35.5%) reported having heard of Therapeutic Touch prior to the study, and eight of these eleven subjects provided written response regarding what they had heard. Subjects reported having heard the following; "pretty much what the description on the previous page described", "it's an energy field around your body", "not enough to understand it completely", "talked about it through visual imagery classes", "I've read about

Therapeutic Touch in nursing magazine some time ago" and "that it's good for your mind - I don't know about body."

Three (9.7%) of the thirty-one subjects who responded reported having received Therapeutic Touch in the past. One subject received Therapeutic Touch monthly one year prior for twelve months; one received Therapeutic Touch once fifteen months ago; and one subject received Therapeutic Touch once five years ago at a workshop. None were currently receiving the intervention. Since subjects were not asked, it is not known what response they had to Therapeutic Touch, or why they started and/or stopped treatment.

Participant Attitudes Toward Therapeutic Touch

The purpose of the study was to assess attitudes toward Therapeutic Touch utilizing the population of women with breast cancer. The study question was "What are the attitudes of women with breast cancer toward a description of Therapeutic Touch?" The study question is answered through analysis of mean scores of the ATTT inventory and the responses to the open-ended questions. Results of the quantitative and qualitative components are also compared and contrasted.

Quantitative Analysis

After reverse scoring, a mean scale score for the 22 item ATTT was computed. Valid cases for computation were considered to be any case with responses to at least 12 items

out of 22 items. Using a mean substitution procedure, there were 29 valid cases. As can be seen from Table 7, the mean score is 2.89, indicating a weakly positive attitude toward Therapeutic Touch as a general concept. The small standard deviation of 0.44 demonstrates a small variation in the responses. Given these statistics the study question is answered; the attitudes of women with breast cancer toward a description of Therapeutic Touch are slightly positive. Although subjects are mostly favorable toward Therapeutic Touch, it is not a clear and strong identification of positive attitudes toward Therapeutic Touch.

Table 7
Summary of Statistics
on Final Items in the ATTT

Mean scale score= 2.89
Standared deviation= 0.44
Variance= 0.19
Skewness= -0.82

Summary of item scores is noted in Appendix B. Most scores were either 'disagree' or 'agree', with fewer extreme scores of 'strongly disagree' or 'strongly agree' noted. Each item contained missing data, varying from 2 missing responses to 9 missing responses depending on the item. Most missing responses were noted on the positive affective items. As expected, the positive items had more 'agree' responses, and

the negative items had more 'disagree' responses. This pattern is most illustrated with the cognitive, behavioral, and negative affective items. The positive affective items however, have a relatively even distribution between 'agree' and 'disagree' illustrating that subjects had difficulty endorsing those items.

Comparison of Groups

Using a total scale score, a one-way analysis of variance was performed to determine the differences in group means between those subjects who reported having heard of Therapeutic Touch (n=11) with those who had not (n=18), and the difference between those who reported having received Therapeutic Touch (n=3) with those who had not (n=26). There were two missing cases. The purpose of this analysis was to determine if prior knowledge or experience with Therapeutic Touch effected subject's attitude toward Therapeutic Touch as more positive or more negative. The differences between groups are reported in Table 8. A significant difference between groups according to having heard of Therapeutic Touch is noted, but not according to having received Therapeutic Touch. Respondents who reported having heard about Therapeutic Touch (n=11) prior to the study reported significantly more positive attitudes toward Therapeutic Touch. Given the n=3 for those who had received Therapeutic Touch prior to the study, the standard error is large and may therefore effect the difference between groups. However, the

mean score of those who report having received Therapeutic Touch is higher than those who have not received the intervention.

Table 8
One Way Analysis of Variance for Scale, and Past Experience with Therapeutic Touch

Source of Variance	Mean	F-Ratio	F-Prob
Heard of TT	G1=heard of TT	G2=not heard of TT	
G1 (n=11)	3.13	6.7888	0.0147*
G2 (n=18)	2.73		
missing cases=2			
Received TT	G1=received TT	G2=not received TT	
G1 (n=3)	3.28	2.8788	0.1013
G2 (n=26)	2.84		
missing cases=2			

*p <.05.

Qualitative Analysis

Qualitative data were obtained from responses to three open-ended questions to further assess the affective, cognitive, and behavioral components of the subjects reaction to Therapeutic Touch. Of the thirty-one subjects, 21 subjects (67%) gave written responses for the question related to the affective component "What other feelings or reactions do you have about Therapeutic Touch?"; 15 (48%) gave written responses for the question related to the cognitive component "What further information would you like to know about

Therapeutic Touch?"; and 22 subjects (71%) gave written responses for the question related to the behavioral component "Would you be willing to receive Therapeutic Touch? Why or why not?".

In order to analyze the qualitative portion of the questionnaire, all responses to the open-ended questions were reviewed and themes within each component of attitude were extracted. Theme was defined as a molar unit of analysis which embodied an idea or an assertion about a topic (Polit & Hungler, 1987). Although each question was postulated to separately ask for and receive affective, cognitive, and behavioral responses, subject responses crossed over each area, ie. responses to the affective question received cognitive and behavioral comments. This result is congruent with the high correlation between subscales noted in the quantitative analysis. Analysis for extraction of themes was therefore done upon review of all responses and then categorized as affective, cognitive, and behavioral.

Affective Themes

The first open-ended question asked "What other feelings or reaction do you have about Therapeutic Touch?" The purpose of this question was to obtain further affective responses which may reflect subjects' attitudes toward Therapeutic Touch. Upon review of all responses, two affective themes emerged. One theme reflected a "positive reaction" to Therapeutic Touch, and the other theme reflected a doubting or

"skeptical reaction". Following are examples of the affective responses which reflect a "positive reaction" (subject n=5):

> "Having had a similar massage, I am glad it has come to the medical field."
> "I have had my energy field worked on and it is a wonderful experience, I would go through the process again."
> "I feel TT might be very relaxing, a time to be in touch with one's feelings."
> "Not so much excited as curious about TT."
> "I feel anything is possible and much healing comes from unseen sources. I believe in a power greater than what can be seen."

Following are examples of the second theme which emerged refecting the affective component of attitude, that being a "skeptical reaction" (subject n=3);

> "It is not authentic in my estimation. I question the source."
> "Unsure if it works or not."
> "Do not know enough about what has been accomplished by Therapeutic Touch."

Overall review of affective responses yields a mostly positive response to Therapeutic Touch, although a few skeptical responses were given. Other responses to the question designed to obtain affective statements consisted of cognitive and behavioral themes and are presented accordingly.

Cognitive Themes

The second question in the qualitative part of the questionnaire asked "what further information would you like to know about Therapeutic Touch?" The goal of this method was to obtain cognitive responses which may reflect subjects' attitudes toward Therapeutic Touch. The main cognitive theme which emerged from review of all responses pertains to details

of Therapeutic Touch such as benefits and how it works. This theme will be labeled "specifics of Therapeutic Touch". Following are examples of the theme which reflects "specifics of Therapeutic Touch" (subject n=10):

> "What has been the effect so far on those who have tried it?"
> "Will it be used as an adjunct or by itself?"
> "When and where it is done"
> "Where can I get more information?"
> "Where did it come from, what is its source?"
> "Benefits of it. Don't know enough about it or what has been proven."
> "Where available and if covered by insurance."
> "I am interested in its progress and availability."
> "I am not skeptical, just don't know enough."
> "I think it would be especially appropriate during chemo or radiation treatment during those months as close as possible to the actual treatment."

A second cognitive theme emerged from the responses and focuses on the importance of personal power and control for the patient. This theme will be labeled "power of self". Following are examples of the cognitive theme of "power of self" (subject n=4):

> "I also have read alot about how we can heal our own bodies with positive thinking."
> "It's important to me that I make decisions about my health and not leave it up to the doctors."
> "I want to be in control of my medical treatments."
> "I also feel your faith can heal as well as your mind."
> "If you tell yourself you're sick, you're going to make yourself sicker than you are. Your state of mind is 50% of your healing."
> "I believe in the power of all life seen and unseen."
> "I do believe that human beings do not stop at the skin too, but are made up of spirit, soul, and body."

Overall review of the cognitive responses yields a positive reaction to Therapeutic Touch, supported by the themes of valuing the power of the self, and requesting

specifics of Therapeutic Touch. Other responses to the question designed to obtain cognitive statements consisted of affective and behavioral themes and are presented as such.

Behavioral Themes

The third question in the qualitative part of the questionnaire asked "Would you be willing to receive Therapeutic Touch? Why or why not?". The purpose of this question was to obtain behavioral responses which may reflect their attitude toward Therapeutic Touch. Twenty-two subject responded, with twelve subjects (54.5%) stating yes, six subjects (27.2%) stating no, and four (18.1%) stating they were unsure of their willingness to receive a Therapeutic Touch treatment. Respondents who reported 'yes' did so with statements such as the following;

"I would try once."
"Yes, I would be willing to try TT."
"Yes because I feel it would be very beneficial."
"I would love to, to learn more about it, and experience it."
"Yes to see how I would feel."
"Yes to see what it is like."

Respondents who reported 'no' did so with statements such as the following;

"No, as I said, I question the source."
"At present I do not need further treatment."
"Basically my breast cancer is cured at this time - have no need for treatment."

Respondents who reported they were 'unsure' did so with statements such as the following;

"Possibly."
"Not sure at this point."
"Maybe after seeing statistics and depending on cost."

Upon review of all responses to the open-ended questions, two behavioral themes emerged. One theme focused on the openness of the subjects to new options and treatments, and will be labeled "open to options". Following are examples of the theme "open to options" (subject n=7):

"I'm usually willing to try anything new."
"I am most interested in any treatment that might help me and others."
"Until one tries a new treatment you aren't going to know if it works for you or not."
"If this would work, I would be willing to try anything."
"I would be glad to try anything that will help me to feel better and be better (anything reasonable)."
"It sould interesting and I would be willing to try it."
"Willing to try any type of treatment if not interfering with treatment already."

Another behavioral theme which emerged from written responses reflected an interest in Therapeutic Touch and will be labeled "active interest in Therapeutic Touch" (subject n=9). Following are examples of this theme;

"I would like to read all I could get."
"I'd like a list of names and phone numbers in case I want the info in the future."
"I wish I had easily available contact with those who practice it."
"All I can get."
"I would like to read about the therapy, it is new to me."
"I would be most interested in the results of the survey."
"I am sure this is an avenue we need to learn now to tune into."
"Just interest, to read further and explore subject."

Overall review of the behavioral responses yields a positive response to Therapeutic Touch, being mostly supported by the themes of openness to new options and an active

interest in Therapeutic Touch. Other responses to the question designed to obtain behavioral statements consisted of affective and cognitive themes are were presented as such.

Because subject affective, cognitive, and behavioral responses crossed over between the three open-ended questions, these questions did not strictly obtain affective, cognitive, and behavioral responses as postulated. As with the Likert scale items, only one factor is being measured due to the high correlation between questions. This factor is assumed to be the subjects general attitude toward Therapeutic Touch which is positive or negative; favorable or not favorable. Given the subjects responses to the qualitative questions, a mostly positive attitude toward Therapeutic Touch is reflected as evidenced by the interest in Therapeutic Touch and the willingness of subjects to participate in an intervention. However, not all subjects were favorable of Therapeutic Touch, and responded with a skeptical or doubting attitude toward the intervention. This was also reflected in subjects unwillingness or lack of certainty regarding participation in an intervention.

Final Analysis of Quantitative and Qualitative Data

Use of a combination of quantitative and qualitative methods within the instrument was beneficial in that their results supported each other. Quantitative analysis demonstrated a weak but mostly positive response to Therapeutic Touch through the mean scale score of 2.89. This

finding is better understood after review of the qualitative data. Through the qualitative analysis it is seen that a mostly favorable attitude was supported by curiousity and interest in the intervention as well as an openness to options and a belief in the power of the self. There was not a strong endorsement of Therapeutic Touch itself. However, curiousity and interest in Therapeutic Touch are identified by this author as positive attributes, which may lead eventually to a positive endorsement of Therapeutic Touch itself.

A negative attitude was noted by the responses of skepticism and doubt from subjects. There were however, more subjects with a written positive response toward Therapeutic Touch rather than negative, and the majority of subjects (54%) expressed willingness to receive Therapeutic Touch. The eagerness noted in subjects who expressed an active interest in learning more about Therapeutic Touch is also seen as a positive attribute. Therefore, given the combination of quantitative and qualitative results, the attitudes of women with breast cancer is mostly positive, based not on a complete endorsement of Therapeutic Touch itself, but rather on subjects expression of interest, curiousity, and willingness to participate in an intervention.

Summary

This chapter has reviewed the data from the study questionnaire which assessed the attitudes of 31 women with breast cancer toward a description of Therapeutic Touch. The following areas of data presentation and analysis were given; 1) description of the sample, 2) the study question answered through analysis of subscale means and analysis of unidimensionsal scale, 3) qualitative analysis and extraction of themes from responses to open-ended questions, and 4) final analysis of quantitative and qualitative data. A mostly positive attitude was obtained from subjects regarding their reaction to a description of Therapeutic Touch.

CHAPTER VI

Summary and Implications

Overview

In Chapter VI the study findings will be summarized and interpreted. The implications for future research and nursing practice will be discussed. The chapter includes 1) summary of findings, including the research question answered, 2) interpretation of study findings, including a discussion of reliability and validity measures, the relationship of findings to previous literature and the study model, and 3) implications for nursing practice and future research.

Summary of the Study

A descriptive study was designed to assess women with breast cancer and their attitudes toward Therapeutic Touch. Attitude was defined by Rosenberg and Hovland (1960) as having three components; affective, cognitive, and behavioral. The Unitary Human Being or the woman with breast cancer, was defined by nursing theorist Martha Rogers as an irreducible energy field in continual interaction with her environment and characterized by the capacity for abstraction and imagery, language and thought, sensation and emotion (Rogers, 1970). The conceptual framework for this study proposes that the components of attitude are similar to the characteristics of the Unitary Human Being in that the affective component reflects the capacity for sensation and emotion, and the

cognitive component reflects the capacity for language and thought. The behavioral component may be linked with the capacity to image, as imagery is often a precursor to action.

There is no known literature on attitudes toward Therapeutic Touch. The only research on attitudes toward touch dealt with physical touch. Critics of Therapeutic Touch (Clark & Clark, 1985) claim the placebo effect is responsible for the benefits of Therapeutic Touch. In the view of this author, research is needed to compare attitudes toward Therapeutic Touch with the outcome of the treatment. This study is considered a pilot study to provide initial data and methods for assessing attitudes toward Therapeutic Touch, using the population of women with breast cancer.

A three part questionnaire was developed for the purposes of this study, in order to assess women with breast cancer and their attitude toward a written description of Therapeutic Touch. Part I of the instrument obtained demographic data on subjects age, year of diagnosis, stage of cancer, treatments received, and previous experience with Therapeutic Touch. Part II consisted of thirty items using a four point Likert scale containing questions hypothesized to obtain affective, cognitive, and behavioral responses to the description of Therapeutic Touch. Part III contained three open-ended questions to obtain further affective, cognitive, and behavioral responses. Data analysis was performed using frequencies and percentages on demographic data, with reliability correlations and one-way anova analysis of Likert

scale items. Qualitative responses to the open-ended questions were reviewed and themes were extracted and defined.

A total of 31 subjects participated in the study over the two and one-half months of data collection at two cancer clinics in a large Midwest city. The range of age of subjects was 37 to 82 years. Thirty-two percent of subjects were diagnosed with breast cancer in the past year, and 35.5% reported Stage 2 of breast cancer at diagnosis. A striking 38.7% of subjects reported they did not know what their stage of breast cancer was upon diagnosis.

The most frequent treatment for breast cancer used by these subjects was chemotherapy (83.9%). When asked about their past experience with Therapeutic Touch, 35.5% of subjects had heard of Therapeutic Touch, and three subject (9.7%) had received Therapeutic Touch in the past.

Analysis of Likert scale items revealed high Cronbach's alpha correlation coefficients within each subscale, with higher alpha levels achieved upon the elimination of eight items with low inter-item correlational patterns. However, the affective, cognitive, and behavioral subscales were very highly correlated with each other (r=0.89 to 0.91). The ATTT was a unidimensional scale rather than a three-dimensional scale as theoretically proposed. When treated as a unidimensional scale, the Cronbach's alpha coefficient was .98. The scale mean score was 2.89, demonstrating a weak but mostly positive or agreeing attitude toward Therapeutic Touch.

A mostly positive response to the description of Therapeutic Touch was also noted in response to the qualitative open-ended questions. Once again however, a lack of firm dimensions was noted as subject affective responses were not limited to the affective question, cognitive responses to the cognitive question, and behavioral responses to the behavioral question. Upon review of all responses, themes were extracted and categorized according to the affective, cognitive, and behavioral definitions. A mostly positive response was noted, with subjects expressing their active interest in Therapeutic Touch and the specifics of how it works. Subjects expressed their openness to new options, and conveyed their belief in the power of the self. Of the 22 subjects who responded, 12 subjects (54.5%) stated they were willing to receive Therapeutic Touch.

There were statements from subjects which reflected a negative or skeptical response to the description of Therapeutic Touch. Subjects expressed their disbelief and doubt in the intervention. Some subject reported they did not need any further cancer treatment. Of the 22 subjects who responded, 6 subjects (27.2%) stated they were unwilling to receive Therapeutic Touch and 4 subjects (18.1%) were unsure.

Upon review of the study results, the research question is answered. The attitudes of women with breast cancer are mostly positive toward a description of Therapeutic Touch, although there is doubt among some subjects. The feasibility of intervening with Therapeutic Touch in an experimental

design was also assessed. Most subjects in this small sample were ages 60-69 with Stage 2 breast cancer, and had received chemotherapy. These data may assist in defining the population for future research. Twelve subjects out of 31 in the sample reported their willingness to receive Therapeutic Touch, therefore an experimental design with the intervention of Therapeutic Touch seems feasible.

Interpretation of Study Findings

The concept of attitude was defined as having three components; affective, cognitive, and behavioral. Given the high correlation among subscales, it is evident that the ATTT was a unidimensional scale. Therefore, although attitude was conceptually defined as having three components and was useful in the development of scale items, a global response to Therapeutic Touch was demonstrated. Based on the definition of attitude, this unidimensional response was not expected. This global response to the description of Therapeutic Touch may be postulated to be attitudes in general without the three conceptual components. Given the data, a mostly positive attitude was demonstrated by the sample. Despite the high reliability of the scale, the validity was not assessed. Therefore, there is no data on whether the scale is actually measuring what it proposed to measure.

Reliability

The ATTT was developed for the purposes of this study to assess the attitudes of women with breast cancer toward a description of Therapeutic Touch. Reliability measures included Cronbach's alpha which measured the internal consistency of items in the Likert scale. A second strategy for measuring reliability is testing for stability by focusing on the analysis of the same measure at multiple time points (Zeller and Carmines, 1980). The test-retest method was not employed in this study, therefore, the degree of stability of subject responses over time is not known.

The assessment of reliability focuses on the relationships among indicants of a single concept, whereas validity assesses the pattern of relationships between indicants making up different concepts (Zeller & Carmines, 1980). Therefore, reliability measures in this study would assess the relationship of items in the Likert scale using tests for stability and consistency.

Validity

Validity measures in this study would assess the relationship of the concepts of attitude, women with breast cancer, and Therapeutic Touch. Is the scale actually measuring the attitudes of women with breast cancer toward Therapeutic Touch? Validity assesses systematic error, which is uniform and constant and does not effect the repeatability or consistency of a measure (Zeller & Carmines, 1980).

According to Zeller and Carmines, "it is quite possible for a set of indicants to represent the 'wrong' concept but do so in a consistent and/or repeatable manner" (1980, p.78).

Therefore, in order to know if an instrument measures exactly what it is supposed to measure, validity measures must be taken. Content validity concerns "the extent to which a set of items taps the content of some domain of interest" (Zeller & Carmines, 1980, p.78). The domain of interest was specified as the three components of attitude based on a review of literature. Items for the ATTT were developed based on this conceptualization and then given to experts for review of consistency with the literature. The procedures used to derive the Likert scale items are evidence for the content validity of the instrument.

Two important areas for validity which were not assessed are criterion-related validity and construct validity. Criterion-related validity "concerns the correlation between a measure and some criterion variable of interest" (Zeller & Carmines, 1980, p.78). Construct validity "focuses on the assessment of whether a particular measure relates to other measures consistent with theoretically derived hypotheses concerning the concepts that are being measured. Construct validation ideally requires a pattern of consistent findings involving different researchers across a significant portion of time and with regard to a variety of diverse but theoretically relevant variables" (Zeller & Carmines, 1980, p.81-82). Because this tool has not been used before, there

has not been measures taken for instrument validation.

Critique of Study Results

Despite the lack of validity measures, the results of the study are worthwhile and must be seen for its theoretical and statistical merit. It is difficult to analyze the study findings in light of existing literature as there is currently no literature studying attitudes toward Therapeutic Touch. This study is the first known attempt at measuring a person's attitude toward Therapeutic Touch. The Pender and Pender study (1986) did however, find that attitudes played a significant role in the intention of individuals to engage in health behaviors such as exercise, diet, and stress reduction. The attitudes and subjective norms (perceived social pressure) of an individual may significantly effect intentions to engage in other health behaviors such as participation in a Therapeutic Touch intervention. Based on this study by Pender and Pender (1986), further study is needed to determine the relationship of attitude and subjective norm and the participation in a Therapeutic Touch treatment.

In terms of the study model, the interrelationships proposed were illustrated by those subjects who completed the questionnaire and by those who did not. The model proposed that the woman with breast cancer as the Unitary Human Being is interrelated and integral with her environment. Environment included the health care environment, interventions such as Therapeutic Touch, and the CNS. Given

her knowledge and experience with Therapeutic Touch as an intervention by a nurse in the health care environment, the woman with breast cancer responded to the ATTT reflecting her overall attitude toward Therapeutic Touch. According to the nurses in the clinics, many women who could have been subjects did not participate, citing they did not know anything about Therapeutic Touch and would therefore not be able to respond to the questionnaire. This also demonstrates the interrelationship of the Unitary Human Being (woman with breast cancer) to the environment (health care system with interventions such as Therapeutic Touch from a nurse). Those subjects who did not participate in the study did not have a relationship with the intervention of Therapeutic Touch. Those who did participate had some sort of relationship with Therapeutic Touch, which could have been past experience with the intervention, interest in the intervention, openness to new option, or a belief in the power of the self. Whatever their reason for participating in the study, subjects were integrally related with the health care environment; and the interventions and providers within it.

Implications for Nursing Practice

Nursing practice is characterized by its holistic approach to the client. Results from studies such as this must be reviewed and incorporated into practice. However, practice implications may be limited due to the small sample size and weakly positive endorsement of Therapeutic Touch.

Despite the number of women who did not participate in the study and the substantial amount of missing data, subjects had a slightly positive attitude toward Therapeutic Touch. A mostly favorable response was given in the Likert scale items, and supported by responses to the qualitative open-ended questions. Favorable responses were reflected in two main themes; a readiness to explore the option of Therapeutic Touch, and a willingness to receive Therapeutic Touch.

Subjects who participated expressed an active interest in Therapeutic Touch and asked questions about how it worked and when. Responses reflected an openness to options, and a belief in the power of the self. This finding implies that nurses in advanced practice must educate clients about Therapeutic Touch as an option for the holistic health care of the Unitary Human Being. Education is also needed for those who have already stated their willingness to receive Therapeutic Touch, so as to increase their knowledge of treatment effects and possible benefits. For those who are willing to receive Therapeutic Touch, the implication for the nurse in advanced practice is to learn more about Therapeutic Touch; who provides the intervention, and how to link the client with the provider. Therefore, the role of collaborator is also implied by this study.

Implications for nursing practice come not only from those who participated in the study, but also from those who did not. The main reason for not participating in the study was lack of knowledge about Therapeutic Touch. Even those who

did participate may have conveyed their lack of knowledge by the substantial amount of missing data noted for the Likert scale items. This once again calls upon the nurse in advanced practice to be an educator. The role of the assessor is also needed; to assess those who are willing to learn about options such as Therapeutic Touch. Dissemination of information is needed about Therapeutic Touch; how it works, how it could be useful, and where it is available.

Implications for Future Research

The main implications from this study exist in regards to research. A study does not end with its analysis, rather, it is part of an ongoing research process which defines and refines concepts and methods. The first implication for research is the further testing of the reliability and validity of the ATTT instrument. Further reliability measures would include tests for stability, such as test-retest methods over time. Further validity measures would include more stringent content validity measures, such as review of items by a number of experts, and further detailed review of literature of attitudes. Criterion-related validity measures would necessitate the defining of a criterion against which to measure the attitudes, such as a physical behavior (actually receiving Therapeutic Touch) rather than a stated behavior (stated willingness to receive Therapeutic Touch).

Construct validity measures would only be possible over time, with the replication and further testing of the

instrument by a number of different researchers. The following steps for construct validity must be taken; 1) theoretical relationship between the concepts themselves must be specified, 2) the empirical relationship between the measures of the concepts must be examined, and 3) the empirical evidence must be interpreted in terms of how it clarifies the construct validity of the particular measure (Zeller & Carmines, 1980, p.81). The theoretical relationship between attitudes and willingness to receive Therapeutic Touch (or even willingness to answer the questionnaire about TT) must be defined, then the empirical measurement of these concepts must be specified. Once these relationships are illustrated, the evidence must be interpreted for how attitudes effect the intervention, or how the intervention effects the attitude. Once again, is the illustration of how the Unitary Human Being effects the environment, and the environment effects the Unitary Human Being.

A second implication for research is the replication of the study utilizing a higher subject number in order to increase the heterogeneity of the sample and the generalizeability of the study results. This study sample was small (n=31), and there was a substantial amount of missing data. The amount of missing data may reflect the subjects lack of knowledge regarding Therapeutic Touch. This lack of knowledge was also noted in the number of potential subjects who did not participate because they 'did not know about Therapeutic Touch'. It is not known if more subjects who

already knew about Therapeutic Touch participated and therefore had a more positive attitude toward the intervention. The question regarding 'have you heard of Therapeutic Touch before today?' was an attempt at controlling this variable. However, nurses in the clinics reported there were many women with breast cancer who refused to participate in the study due to their lack of knowledge regarding the concept. Results may have been different had they participated. For the analysis, grouping for the one-way ANOVA could be altered to compare scores between three groups instead of two; with group 1 being those who have only heard of Therapeutic Touch, group 2 being those who have both heard of and received Therapeutic Touch, and group 3 being those who have neither heard of nor received Therapeutic Touch.

One of the purposes of this study was to determine the feasibility of intervening with Therapeutic Touch in an experimental study of women with breast cancer. Data from this study could be used to define the study population, and further assess attitudes toward Therapeutic Touch. With further reliability and validity testing, the ATTT could be refined and possibly used in a study comparing attitudes toward Therapeutic Touch and the outcome of the intervention, therefore listing the third implication for research. Further scale development measures would be necessary prior to this level of study.

A fourth implication for research is further tool refinement. The ATTT had 30 items using a four point Likert

scale. Future tool refinement could include a six point Likert scale, adding slightly disagree and slightly agree as response choices. Due to the unfamiliarity of Therapeutic Touch to many subjects and potential subjects, these added response choices may yield less missing data. Subjects may have left items blank being unable to fully disagree or fully agree with the statement. By giving subjects more choices a more accurate depiction of subjects' attitudes toward Therapeutic Touch may be assessed.

To further assess subjects overall reaction to Therapeutic Touch, a summary question could be placed after the specific Likert scale items. For example, subjects could be asked to place an X on a continuum line relecting "how favorable are you toward Therapeutic Touch"; from 'not at all favorable' to 'extremely favorable'. Measuring the placement of subjects' X on the line may be compared with Likert Scale responses and open-ended responses for a more accurate understanding of subjects' attitude toward Therapeutic Touch.

Other tool refinement could include revision of the stimuli, or the description of Therapeutic Touch. The stimuli could include photographs of the Therapeutic Touch process along with a description, a short video presentation of a Therapeutic Touch treatment, or the intervention itself. Subjects would then respond to this stimuli. Responses and subject participation might be very different given this type of stimuli.

The fifth implication for research involves the

investigation of other variables which may effect subjects' response to Therapeutic Touch. Based on the Pender and Pender study (1986), subjective norms (perceived social pressure) may have influenced subjects' participation in this study and could influence participation in a Therapeutic Touch intervention. Given the relationship of the subject and the nurse in the clinic, subjects may have felt obligated to participate in this study. Therefore, how does the nurse-patient relationship effect subjects' attitudes? How does the environment and the perceived social pressure within that environment effect attitudes?

Other variables which may effect attitudes are personality characteristics of the subject. For instance, what is the locus of control of subjects who are open to options such as Therapeutic Touch? Does the locus of control influence subjects' willingness to participate in an intervention? What influence does culture have on subject's attitudes? Can attitudes toward a new stimuli such as Therapeutic Touch be formed after reading a one page description? What else influences the formation of attitudes over time?

Although this study addressed and attempted to answer one question, it has raised numerous others. The nurse in advanced practice who is a leader and a role model for nursing must be involved in the challenge of research. This study has provided direction for future research on the variables which may effect the outcome of the intervention of Therapeutic

Touch.

A summary of the implications for research are as follows;

1) Further reliability and validity testing of the instrument,

2) Replication of the study with a larger sample,

3) Subject definition in other studies utilizing the population of women with breast cancer,

4) Further tool refinement, and

5) Investigation of other variables which may effect attitudes, and other variables which may effect the outcome of Therapeutic Touch.

Contributions of the Study

Because there is no known research on attitudes toward Therapeutic Touch, or on the effect of attitude on the outcome of Therapeutic Touch, this study has much to contribute. This study provides initial data on a small sample of women with breast cancer, and their reaction to a written description of Therapeutic Touch. Data suggests a slightly positive attitude toward Therapeutic Touch.

This study also contributes important initial work on the development of a tool to measure attitudes toward Therapeutic Touch. Although the three components of attitude were highly correlated, the end result of a positive or negative attitude toward Therapeutic Touch is a valuable result. This study provides ground upon which to build and refine a tool for attitude measurement.

Research in the area of Therapeutic Touch is just beginning to increase. Most studies have been intervention studies, assessing the effects of Therapeutic Touch on pain, anxiety, and nausea. There is currently no known research studying the effects of variables such as attitude on the outcome of the intervention. This study provides the initial information and methodology to begin the study of the effect of attitudes on the outcome of the Therapeutic Touch treatment. Hopefully this study will contribute the ideas and the impetus for future research for the continued and further use of Therapeutic Touch.

Summary

In Chapter VI a summary of the study and findings was presented, as well as interpretations of results. The study results were critiqued in light of the conceptual model of the study. Recommendations for nursing practice and future research were illustrated. Finally, contributions of the study were described. Although this study is completed, the potential for further research and tool development for the assessment of attitudes has just begun. Given the slightly favorable attitude of women with breast cancer toward a description of Therapeutic Touch, the nurse in advanced practice is called upon to educate those interested in the alternative healing intervention of Therapeutic Touch.

REFERENCE LIST

American Cancer Society (1989). Cancer strategies. Cancer, 39 3-20.

Bloom, J.R. (1987). Psychological response to mastectomy. Cancer, 59(1), 189-196.

Borysenko, J.K. (1982). Behavioral-physiological factors in the development and management of cancer. General Hospital Psychiatry 4(1), 69-74.

Bridge, L.R., Benson, P., Pietroni, P.C., & Priest, R.G. (1988). Relaxation and imagery in treatment of breast cancer. Bio-Medical Journal, 297(6657), 1169-1172.

Clark, P.E. & Clark, M.J. (1985). Therapeutic Touch: Is there a scientific basis for the practice? In D. Stalker and C. Glymour (Eds.), Examining holistic medicine (pp.287-296). Buffalo, NY: Prometheus Books.

Falco S.M. & Lobo, M.L. (1980). Martha E. Rogers. In J.B. George (chairperson, the Nursing Theories Conference Group), Nursing theories: The base for professional nursing practice (pp.164-183). Englewood Cliffs, NJ: Prentice-Hall, Inc.

Fallowfield, L.J., Baum, M., & Maguire, G.P. (1986). Effects of breast conservation on psychological morbidity associated with diagnosis and treatment of early breast cancer. Bio-Medical Journal 293(6558), 1331-1334.

Gottschalk, L.A., & Hoigaard-Martin, J. (1986). The emotional impact of mastectomy. Psychiatry Research 17(2), 153-167.

Heery, M.L. (1989). Effects of therapeutic touch on chemotherapy-induced emesis. Study presented at the Oncology Nursing Society.

Heidt, P. (1981). Effect of therapeutic touch on anxiety level of hospitalized patients. Nursing Research 30(1), 32-37.

Hektor, L.M. (1989). Martha E. Rogers: A life history. Nursing Science Quarterly, 2(2), 63-73.

Henerson, M.E., Morris, L.L., Fitz-Gibbon, C.T. (1987). How to measure attitudes. Newbury Park, CA: Sage Publications.

Jacobsen, P.B., Andrykowski, M.A., Redd, W.H., Die-Trill, M., Hakes, T.B., Kaufman, R.J., Currie, V.E., & Holland, J.C. (1988). Nonpharmocologic factors in the development of posttreatment nausea with adjuvant chemotherapy for breast cancer. Cancer, 61(2), 379-385.

Keller, E., & Bzdek, V.M. (1986). Effects of therapeutic touch on tension headache pain. Nursing Research, 35(2), 101-106.

Krieger, D. (1976). Alternative medicine: Therapeutic Touch. Nursing Times, 72(15), 572-574.

Krieger, D. (1979-a). The therapeutic touch: How to use your hands to help or to heal. NY: Prentice Hall Press.

Krieger, K. (1979-b). Therapeutic touch and contemporary applications. In H.A. Otto and J.W. Knight (Eds.), Dimensions in holistic healing: New frontiers in the treatment of the whole person (pp.297-305). Chicago, IL: Nelson-Hall.

Krieger, D. (1981). Ther creative nurse: A holistic perspective. In D. Krieger (Ed.), Foundations for holistic health nursing practices: The renaissance nurse (pp.137-148). Philadelphia: J.B. Lippincott Company.

Krieger, D., Peper, E., & Ancoli, S. (1979). Therapeutic Touch: Searching for evidence of physiological change. American Journal of Nursing, 79(4), 660-663.

Meehan, T.C. (1990). The science of unitary human beings and theory-based practice: Therapeutic touch. In E.A.M. Barrett (Ed.), Visions of Rogers' science-based nursing (pp.67-81). New York, NY: National League of Nursing.

Meehan, T.C., Mersmann, C.A., Wiseman, M.E., Wolff, B.B. & Malgady, R.G. (1990). The effect of Therapeutic Touch on postoperative pain. Pain, Supplement 5, p.s149.

Meleis, A.I. (1985). Theoretical nursing development and progress. (pp.219-229), Philadelphia: J.B. Lippincott.

Molbo, D.M., & Sun, C.Y. (1987). Interventions for persons with breast disorders. In W.J. Phipps, B.C. Long, and N.F. Woods (Eds.), Medical-surgical nursing: Concepts and clinical practice (pp.1855-1878). St. Louis: C.V. Mosby Company.

Mueller, D.J. (1986). Measuring social attitudes: A handbook for researchers and practitioners. New York: Teachers College Press.

Pender, N.J., & Pender, A.R. (1986). Attitudes, subjective norms, and intentions to engage in health behaviors. Nursing Research 35(1), 15-18.

Pittman, R., & Sorenson, K.C. (1980). Disorders of the breast. In J.Luchman and K.C. Sorenson (Eds.), Medical-surgical nursing:A psychophysiological approach (pp.1809-1836). Philadelphia: W.B. Saunders Company.

Polit, D.F., & Hungler, B. (1987). Nursing research: Principles and methods (3rd Ed.). New York, NY: J.B. Lippincott.

Prescott, P.A. & Soeken, K.L. (1989). The potential uses of pilot work. Nursing Research, 38(1), 60-62.

Quillin, S.I.M., & Runk, J.A. (1989). Martha Rogers' unitary person model. In J.J. Fitzpatrick and A.L. Whall (Eds.), Conceptual models of nursing: Analysis and application (2nd Ed.) (pp.285- 300). Norwalk, CT: Appleton & Lange.

Quinn, J.F. (1984). Therapeutic touch as energy exchange: Testing the theory. Advances in Nursing Science, 6(2), 42-49.

Quinn, J.F. (1988). Building a body of knowledge: Research on therapeutic touch 1974-1986. Journal of Holistic Nursing, 6(1), 37-45.

Quinn, J.F. (1989). Future directions for therapeutic touch research. Journal of Holistic Nursing, 7(1), 19-25.

Quinn, J.F. (1989-a). Therapeutic touch as energy exchange: Replication and extension. Nursing Science Quarterly, 2(2), 79-87.

Rich, E., Greig, A.E., & Greene, C. (1987). Reproductive tract. In C.S. Greene (Ed.), Handbook of adult primary care (pp.551-702). New York, NY: Wiley Medical Publication.

Rogers, M.E. (1970). An introduction to the theoretical base of nursing, Philadelphia: F.A. Davis.

Rogers, M.E. (1986). Science of unitary human beings. In V.M. Malinski (Ed.), Explorations on Martha Rogers' science of unitary human beings (pp.3-8). Norwalk CT: Appleton-Century-Crofts.

Rosenbery, M.J. & Hovland, C.I. (1960). Cognitive, affective, and behavioral components of attitudes. In M.J. Rosenberg, C.I. Hovland, W.J. McGuire, R.P.Abelson and J.W. Brehm (Eds.), Attitude organization and change: An analysis of consistency among attitude components (pp.1-14, 23-24). New Haven, CT: Yale University Press.

Whitcher, S.J., & Fisher, J.D. (1979). Multidimensional reaction to therapeutic touch in a hospital setting. Journal of Personal and Social Psychology 37(1), 87-96.

Zeller, R.A., & Carmines, E.G. (1980). Measurement in the social sciences; The link between theory and data. Cambridge: Cambridge University Press.

APPENDIX A
THE INSTRUMENT:
ATTITUDES TOWARD THERAPEUTIC TOUCH
QUESTIONNAIRE

Dear Potential Participant,

I am a graduate student in the College of Nursing at Michigan State University. My studies include the completion of my master's thesis, which is the study of women's attitudes toward Therapeutic Touch.

I have developed a questionnaire to assess attitudes toward Therapeutic Touch. Women who are attending this clinic for treatment of breast cancer will be asked to complete the written questionnaire.

Your help and assistance is appreciated. As a nurse, I am interested in providing quality care to people and the community. Research such as this will hopefully provide information for treatment options for all patients.

Once again, thank you for considering participation in this study.

Sincerely,

Julie Thomas-Beckett RN. BSN

Julie Thomas-Beckett R.N., B.S.N

Explanatory Letter and Consent Information

This study is a Michigan State University graduate student thesis. It is designed to obtain information about a particular nursing intervention; Therapeutic Touch. Information from this study may be used to develop research plans for further testing of Therapeutic Touch as a nursing intervention. Participation in the study requires the completion of a short questionnaire, while you are here in the clinic. The amount of time needed is about 15 minutes.

If you wish to participate, open the envelope and follow the directions for completing the questionnaire. Once completed, place the questionnaire in the envelope and give the envelope to the staff nurse. By completing and returning the questionnaire, you are voluntarily agreeing to participate in the study. Participation in the study consists only of completing the questionnaire. If you have any questions about how to complete the questionnaire, ask the staff nurse.

Your participation is voluntary; you may refuse to participate or stop your participation at any time without penalty. Your participation in this study will not change or effect your treatment in this clinic. There are no known risks of harm either physically, psychologically, socially, or economically for filling out the questionnaire. Benefits of your participation include providing information which would be used to further test the intervention of Therapeutic Touch.

Your response to the questionnaire will be held strictly confidential. Answers to the questionnaire will be shared with the principal investigator, Julie Thomas-Beckett R.N., and her thesis committee only for purposes of this study. No names will be used, and subjects will remain anonymous in all reports of the research findings.

If you do not wish to participate, replace the questionnaire in the envelope and give the envelope to the staff nurse. Because all questionnaires are returned in an envelope and no names appear anywhere on the questionnaire, you are guaranteed confidentiality.

If you have any questions or concerns about this study, please contact the principal investigator for assistance:

Julie Thomas-Beckett R.N. Phone:355-6523 8am to 5pm
A205 Life Sciences Building
Michigan State University
East Lansing, Michigan 48823

Thank you for your time and participation in this research project!

****

If you would like a report of the research findings, whether you complete the questionnaire or not, please write your address only at the bottom of this paper. Keep the top portion of this letter, but hand in this portion with your address. Results of the study will be addressed to "Potential Participant"

address_____state_____zipcode_____

INSTRUCTIONS: Please read the following description of Therapeutic Touch;

Since your diagnosis of breast cancer, you may have been introduced to many methods of medical treatment such as surgery, chemotherapy, or radiation. Some women take an active role in their health care by seeking medical, as well as non-medical treatments to improve their well-being. There are many non-medical treatments which can be used for achieving well-being, such as imagery, biofeedback, and relaxation techniques. Another example of a non-medical treatment is Therapeutic Touch.

Therapeutic Touch is a nursing intervention. It is based on the belief that human beings do not stop at the skin, rather, we release and are surrounded by an energy field. Imagine sitting close to someone. You can feel the warmth of their body even though you are not physically touching them. You are interacting with their energy field, which cannot be seen, but it can be felt and described.

If you were to receive Therapeutic Touch, you would be placed in a quiet room, sitting in a comfortable chair with comfortable clothing. Your feet are on the ground and your arms are at your sides. You could close your eyes, and allow your body to relax. The nurse would then move her hands over your body, leaving her hands about three to five inches away from your skin. She is massaging the field of energy that surrounds you and is a part of you. Moving from your head to your toes in a gentle sweeping motion, the nurse is massaging you without having to physically touch you. You may experience a sensation of warmth or tingling on your skin, and an overall feeling of relaxation.

The Therapeutic Touch treatment usually lasts about fifteen minutes. After the treatment is over, you may sit in the chair, relaxed and quiet. The goal of the Therapeutic Touch treatment has been to create balance in your energy field, in order to allow your own healing energies to work.

There are studies being done on the effects of Therapeutic Touch in order to understand how it can help people such as you. Some studies have found that Therapeutic Touch can reduce tension headache pain, relieve nausea, reduce anxiety, and increase hemoglobin levels, while other studies have found no results from Therapeutic Touch. More information is needed about Therapeutic Touch, so it can be used for the promotion of health and well-being of all patients who wish to participate in their care.

*****After reading the above description of Therapeutic Touch, please turn the page and answer the questions on the Study Questionnaire.**

Thank You.

ATTITUDES TOWARD THERAPEUTIC TOUCH
Questionnaire

For the following questions, please fill in the blank or place a checkmark by the answer which applies to you:

1. **What year were you diagnosed with breast cancer?_____, do not know_____.**

2. **Have you had a radical mastectomy for breast cancer treatment?**
   yes_____ no_____ do not know_____

3. **Have you had a modified mastectomy for breast cancer treatment?**
   yes_____ no_____ do not know_____

4. **Have you had a lumpectomy for breast cancer treatment?**
   yes_____ no_____ do not know_____

5. **Have you had radiation for breast cancer treatment?**
   yes_____ no_____ do not know_____

6. **Have you had chemotherapy or other drugs for breast cancer treatment?**
   yes_____ no_____ do not know_____

7. **Have you had any other treatment for breast cancer not listed?**
   yes_____. If yes, please list_____.
   no_____, do not know_____.

8. **What stage was the cancer in your breasts upon diagnosis?**
   Stage 0_____, Stage 1_____, Stage 2_____, Stage 3_____,
   Stage 4_____, do not know_____.

9. **What is your age? _____**

10. **Have you ever heard of Therapeutic Touch before today?**
    yes_____ no_____
    If yes, what have you heard?_____
    _____.

11. **Have you ever received Therapeutic Touch as described in the paragraph?**
    yes_____ no_____If no, then go to question #12.
    If yes, how many months ago?_____.
    If yes, how many times did you receive Therapeutic Touch?
    _____
    _____.

Go to the next page when completed with the above questions.

Attitude Inventory

For the following questions, read each item and circle the response which best describes your reaction to the statement:

* **strongly disagree**
* **disagree**
* **agree**
* **strongly agree**

12. I am glad there are health care interventions such as Therapeutic Touch.

STRONGLY DISAGREE **DISAGREE** **AGREE** **STRONGLY AGREE**

13. I believe human energy fields exist.

STRONGLY DISAGREE **DISAGREE** **AGREE** **STRONGLY AGREE**

14. I do not think Therapeutic Touch can have beneficial effects.

STRONGLY DISAGREE **DISAGREE** **AGREE** **STRONGLY AGREE**

15. I intend to seek further information about Therapeutic Touch.

STRONGLY DISAGREE **DISAGREE** **AGREE** **STRONGLY AGREE**

16. I believe Therapeutic Touch can reduce unpleasant symptoms.

STRONGLY DISAGREE **DISAGREE** **AGREE** **STRONGLY AGREE**

17. I feel nervous about Therapeutic Touch.

STRONGLY DISAGREE **DISAGREE** **AGREE** **STRONGLY AGREE**

Please continue on the next page.

18. I am not happy that there are health care interventions such as Therapeutic Touch.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

19. I will not seek further information about Therapeutic Touch.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

20. I intend to tell family and/or friends about Therapeutic Touch.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

21. I feel calm when I read about Therapeutic Touch.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

22. I believe human energy fields can be felt and massaged.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

23. I do not think Therapeutic Touch could help me.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

24. I will not tell anyone about what I've read about Therapeutic Touch.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

25. I think Therapeutic Touch could have beneficial effects.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

Please continue on the next page.

26. I would be willing to receive one brief Therapeutic Touch treatment.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

27. I feel anxious when I read about Therapeutic Touch.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

28. I do not believe Therapeutic Touch can reduce unpleasant symptoms.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

29. I am excited about Therapeutic Touch.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

30. I do not plan to read anything more about Therapeutic Touch.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

31. I would not be willing to receive one brief Therapeutic Touch treatment.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

32. I am afraid to receive Therapeutic Touch.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

33. I plan to read more about Therapeutic Touch.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

Please continue on the next page.

34. I think Therapeutic Touch could help me.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

35. I do not believe human energy fields can be felt and massaged.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

36. I would be willing to receive Therapeutic Touch treatments along with my prescribed cancer treatments.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

37. I do not believe human energy fields exist.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

38. I have unpleasant feelings when I read about Therapeutic Touch.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

39. I feel reassured when I read about Therapeutic Touch.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

40. I would not be willing to receive Therapeutic Touch treatments along with my prescribed cancer treatments.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

41. I have pleasant feelings when I read about Therapeutic Touch.

STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE

Please go on to the next page when you have completed the above questions.

For the following questions, please write any additional information you were unable to share in the previous questions. Please be specific.

42. What other feelings or reactions do you have about Therapeutic Touch?

43. What further information would you like to know about Therapeutic Touch?

44. Would you be willing to receive Therapeutic Touch? Why or why not?

Whether or not you completed the questionnaire, place it in the envelope and give it to staff nurse.
*****Thank you for your participation in this study*****

APPENDIX B
LIST OF LIKERT SCALE ITEMS AND NUMBER OF RESPONSES

List of Likert Scale Items and Number of Responses

	SD	D	A	SA	M
AFFECTIVE STATEMENTS; positive					
* I am excited about Therapeutic Touch.	1	11	11	2	6
* I am glad there are health care treatments such as Therapeutic Touch.	0	2	18	6	5
* I feel reassured when I read about TT.	1	9	9	3	9
* I have pleasant feelings when I read about TT.	1	9	13	1	7
* I feel calm whan I read about Therapeutic Touch.	1	5	17	1	7
AFFECTIVE STATEMENTS; negative (# = item deleted)					
* I am afraid to receive Therapeutic Touch.	2	24	1	1	3
* I am not happy that there are health care interventions such as Therapeutic Touch.	4	23	1	0	3
# I feel anxious when I read about TT.	1	17	5	2	6
* I have unpleasant feelings when I read about TT.	3	22	1	1	4
# I feel nervous about Therapeutic Touch.	3	16	9	0	3
COGNITIVE STATEMENTS; positive (# =item deleted)					
# I believe human energy fields exist.	0	3	20	4	4
* I believe Therapeutic Touch can reduce unpleasant symptoms.	0	4	19	2	6
* I believe human energy fields can be felt and massaged.	1	4	17	3	6
* I think Therapeutic Touch could help me.	0	6	15	2	8
* I think TT could have beneficial effects.	0	3	20	5	3
COGNITIVE STATEMENTS; negative (# =item deleted)					
* I do not believe human energy fields exist.	2	22	3	0	4
* I do not believe Therapeutic Touch can reduce unpleasant symptoms.	2	24	2	0	3
* I do not believe human energy fields can be felt and massaged.	2	18	5	1	5
* I do not think Therapeutic Touch could help me.	4	18	5	1	3
# I do not think TT can have beneficial effects.	2	18	7	1	3
BEHAVIORAL STATEMENTS; positive (# =item deleted)					
* I would be willing to receive TT treatments along with my prescribed cancer treatments.	1	6	15	4	5
* I intend to tell my family and/or friends about TT.	0	5	22	1	3
* I plan to read more about Therapeutic Touch.	1	4	21	1	4
# I intend to seek further information about TT.	1	8	15	0	7
# I would be willing to receive one brief Therapeutic Touch treatment.	3	4	18	3	3
BEHAVIORAL STATEMENTS; negative (# =item deleted)					
* I would not be willing to receive TT treatments along with my prescribed cancer treatments.	3	17	4	1	6
* I will not to tell anyone about what I've read on Therapeutic Touch.	2	22	5	0	2
# I do not plan to read anything more about TT.	1	19	4	1	6
* I will not seek further information about TT.	3	16	8	0	4
# I would not be willing to receive one brief Therapeutic Touch treatment.	3	18	3	3	4

SD=strongly disagree, D=disagree, A=agree, SA=strongly agree, M=missing

= items deleted from scale due to low item-total correlations.

APPENDIX C
STATISTICS FOR SUBSCALES

Statistics for Subscales

Table 9
Inter-Item Correlation Matrix of Affective Items (n=16)

	a1	a2	a3	a4	a5	Ra1	Ra2	Ra3	Ra4	Ra5
a1	1.0000									
a2	.53	1.0000								
a3	.89	.58	1.0000							
a4	.86	.43	.90	1.0000						
a5	.78	.40	.81	.91	1.0000					
Ra1	.28	.20	.44	.33	.33	1.0000				
Ra2	.46	.64	.57	.53	.50	.30	1.0000			
Ra3	-.37	-.46	-.25	-.30	-.25	.08	-.14	1.0000		
Ra4	.50	.58	.60	.58	.58	.50	.87	-.02	1.0000	
Ra5	.44	.13	.47	.35	.40	.73	.40	.09	.28	1.000

AFFECTIVE STATEMENTS; positive
a1. I am excited about Therapeutic Touch.
a2. I am glad there are health care treatments such as Therapeutic Touch.
a3. I feel reassured when I read about Therapeutic Touch.
a4. I have pleasant feelings when I read about Therapeutic Touch.
a5. I feel calm whan I read about Therapeutic Touch.

AFFECTIVE STATEMENTS; negative (scores reversed)
Ra1. I am afraid to receive Therapeutic Touch.
Ra2. I am not happy that there are health care interventions such as Therapeutic Touch.
Ra3. I feel anxious when I read about Therapeutic Touch.
Ra4. I have unpleasant feelings when I read about Therapeutic Touch.
Ra5. I feel nervous about Therapeutic Touch.

Table 10
Inter-Item Correlation Matrix of Cognitive Items (n=20)

	c1	c2	c3	c4	c5	Rc1	Rc2	Rc3	Rc4	Rc5
c1	1.0000									
c2	.33	1.0000								
c3	.48	.86	1.0000							
c4	.62	.60	.67	1.0000						
c5	.53	.77	.80	.74	1.0000					
Rc1	.52	.35	.53	.32	.50	1.0000				
Rc2	.57	.62	.62	.59	.72	.67	1.0000			
Rc3	.53	.63	.75	.57	.64	.71	.82	1.0000		
Rc4	.36	.66	.68	.49	.68	.57	.79	.73	1.0000	
Rc5	.03	.33	.12	.03	.29	.54	.64	.53	.51	1.000

COGNITIVE STATEMENTS; positive
c1. I believe human energy fields exist.
c2. I believe Therapeutic Touch can reduce unpleasant symptoms.
c3. I believe human energy fields can be felt and massaged.
c4. I think Therapeutic Touch could help me.
c5. I think Therapeutic Touch could have beneficial effects.

COGNITIVE STATEMENTS; negative (reversed scores)
Rc1. I do not believe human energy fields exist.
Rc2. I do not believe Therapeutic Touch can reduce unpleasant symptoms.
Rc3. I do not believe human energy fields can be felt and massaged.
Rc4. I do not think Therapeutic Touch could help me.
Rc5. I do not think Therapeutic Touch can have beneficial effects.

Table 11
Inter-Item Correlation Matrix of Behavioral Items (n=20)

	b1	b2	b3	b4	b5	Rb1	Rb2	Rb3	Rb4	Rb5
b1	1.0000									
b2	.37	1.0000								
b3	.72	.77	1.0000							
b4	.36	-.04	.20	1.0000						
b5	.55	-.19	.25	.74	1.0000					
Rb1	.91	.40	.67	.27	.42	1.0000				
Rb2	.37	1.0000	.77	-.04	.21	.40	1.0000			
Rb3	.17	.07	.17	.77	.67	.19	.07	1.0000		
Rb4	.76	.47	.64	.27	.17	.84	.47	.06	1.0000	
Rb5	.47	.21	.46	-.02	.20	.69	.21	.04	.50	1.000

BEHAVIORAL STATEMENTS; positive
b1. I would be willing to receive Therapeutic Touch treatments along with my prescribed cancer treatments.
b2. I intend to tell my family and/or friends about Therapeutic Touch.
b3. I plan to read more about Therapeutic Touch.
b4. I intend to seek further information about Therapeutic Touch.
b5. I would be willing to receive one brief Therapeutic Touch treatment.

BEHAVIORAL STATEMENTS; negative (reversed scores)
Rb1. I would not be willing to receive Therapeutic Touch treatments along with my prescribed cancer treatments.
Rb2. I will not to tell anyone about what I've read on Therapeutic Touch.
Rb3. I do not plan to read anything more about Therapeutic Touch.
Rb4. I will not seek further information about Therapeutic Touch.
Rb5. I would not be willing to receive one brief Therapeutic Touch treatment.

APPENDIX D
RESPONSES TO OPEN-ENDED QUESTIONS

Responses to Open-Ended Questions

Responses to: "What other feelings or reactions do you have to Therapeutic Touch?"

* Don't know if it could help but am open to information and new options.
* I am not skeptical, just don't know enough.
* I really don't have any (questions or reactions).
* I had a real rough time with chemo. I was really nauseated. If this would work I would be willing to try anything.
* I am doing Chi Kong on my own everyday. It relaxes me.
* Having had similar massage, I am glad it has come to the medical field.
* I have had my energy field worked on and it is a wonderful experience I would go through the process again.
* It is not authentic in my estimation. I question the source.
* I do believe that human beings do not stop at the skin too, but are made up of spirit, soul, and body.
* I would be glad to try anything that will help me to feel better and be better (anything reasonable).
* I feel TT might be very relaxing a time to be in touch with one's feelings.
* I one has 'an open mind' and can't simply 'agree' or 'disagree' one can't supply an accurate answer. Too many of the questions I would reply 'maybe'.
* Unsure if it works or not.
* I think it would be especially appropriate during chemo or radiation treatment during those months as close as possible to the actual treatment.
* I am sure this is an avenue we need to learn how to tune into.
* Not so much excited as curious.
* Do not know enough about what has been accomplished by TT.
* It sounds interesting and I would be willing to try it.
* No feelings- just interest to read further and explore subject.
* I haven't thought about it or read about it.
* Willing to try any type of treatment if not interfering with treatments already. As long as competent personnel are in charge and statistics are available -nothing 'hokey-pokey'.
* I feel anything is possible and much healing comes from unseen sources I believe in a power greater than what can be seen I have experienced direction that has been life saving to me and my family and not always understood.

Responses to: "What further information would you like to know about Therapeutic Touch?"

* What has been the affect so far on those who have tried it?
  Will it be used as an adjunct or by itself?
  I do know that touch and close proximity to someone having a panic attack helps.
* When and where it is done.
* Where can I get more information?
* I would like to read all I could get.
* According to my scientific husband there are four forces in nature; the strong nuclear force, the weak nuclear force, electromagnatism, and gravity.
  For someone alone in her fear of cancer, this treatment might be a blessing.
* All I can get.
* Where did it come from, what is its source?
* I don't know.
* I would be most interested in the results of the survey.
* None at this time.
* At present I'm not looking for information
  but I'd like a list of names and phone numbers in case I want the info in the future
* I wish I had easily available contact with those who practice it.
* Benefits of it.
  Don't know enough about it or what has been proven.
* Do not know enough now to be specific
* I would like to read about the therapy it is new to me.
* Where available and if covered by insurance.
* I am interested in its progress and availability.

Responses to: "Would you be willing to receive Therapeutic Touch? Why or why not?"

* Possibly- I'm usually willing to try anything new.
* I don't know.
* I would try once.
* Yes.
* Yes I would be willing to try TT. Like anyone else I have alot of doubts. But I also have read alot about how we can heal our own bodies with positive thinking. It's important to me that I make decisions about my health and not leave it up to the doctors. I want to be in control of my medical treatments.
* Yes. Because I feel it would be very beneficial.
* No, as I said, I question the source.
* My daughter is a geriatric Nurse Practitioner and I went to some seminar with her about 5 years ago. The nurses were starting to use TT there, one day I had a migraine headache and they tried it on me. I didn's get any results but I would be willing to try again.

* Yes I am most interested in any treatment that might help me and others.
* At present I do not need further treatment.
* No.
* Yes.
* I would love to, to learn more about it, and experience it.
* Yes to see how I would feel. Until one tries a new treatment you aren't going to know if it works for you or not. I also feel your faith can heal as well as your mind. If you tell yourself you're sick, you're going to make yourself sicker than you are. Your state of mind is 50% of your healing.
* No.
* Not sure at this point.
* Yes to see what it is like.
* No.
* Basically my breast cancer is cured at this time- have no need for treatment.
* Yes.
* If my doctor thought it would help.
* Maybe after seeing statistics and depending on cost.
* Yes. I believe in the power of all life seen and unseen. I feel it exists before what is called birth and also what is called death. Someone famous said 'we understand that which is seen in the unseen'.

Responses to: "What have you heard about Therapeutic Touch?"

* Not much, just hear name.
* Chi Kung
* I have been having polarity massage which is very similar.
* Pretty much what the description on the previous page described.
* It's an energy field around your body.
* I've read about TT in Nursing Magazine some time ago.
* Not enough to understand it completely.
* I read part of a book by a woman who began the approach.
* Talked about it through visual imagery classes.
* That it's good for your mind-I don't know about body.

Responses to: List other treatments received for breast cancer.

* drug therapy
* Tomoxifin
* Tomoxifin
* Migase, other drugs
* psychotherapy, visual imagery classes
* faith in God
* Tomoxifin experiment
* Tomoxifin

APPENDIX E
LETTERS OF AGREEMENT FOR DATA COLLECTION

Letter of Instruction for Staff Nurse

Dear Staff Nurse,

Thank you for agreeing to participate in the data collection process for my graduate thesis entitled "Attitudes Toward Therapeutic Touch: A Pilot Study of Women with Breast Cancer". Your assistance is greatly appreciated.

Your responsibilities include the distribution and collection of the manilla envelopes which contain the study questionnaire. Attached by staple to the outside of the envelope is the Explanatory Letter with Consent Information, which the subject is instructed to remove and keep.

Subjects are women being treated for breast cancer at the this primary care clinic. They will be identified by yourselves through the tumor registry. Each day, please look at the schedule and the tumor registry for women who have breast cancer and will be seen that day. Women receiving chemotherapy will be presented the manilla envelope once settled in the treatment room. Women who will not be treated with chemotherapy will be given the manilla envelope while in the waiting room.

Upon presentation of the manilla envelope, please inform potential subjects of the following:

> "This envelope contains a questionnaire about a nursing intervention. Please read the Explanatory Letter and follow the instructions if you would like to participate in the study."

You are not expected to answer questions about Therapeutic Touch, rather, you can be a resource for the subjects regarding how to fill out the questionnaire. If potential subjects wish to participate, they must complete the questionnaire as instructed, replace it in the envelope, then return it to you. If potential subjects do not wish to participate, they are instructed to replace the questionnaire in the manilla envelope and return it to you. If subjects would like a report of research findings, they are instructed to write their address only at the bottom of the Explanatory Letter, tear off this portion and hand it in to a staff nurse. Any questions regarding the instructions and completion of the questionnaire are directed to you, the staff nurse.

When manilla envelopes are returned to you, please place them all together in a pile at the designated location to be agreed upon during our meeting, and leave them unopened. In this way, you will not know who did or did not participate in the study by completing the questionnaire. Anonymity is therefore guaranteed for the subjects. I will pick up the envelopes once per week. Data collection will be conducted for a minimum of eight weeks, with a goal of obtaining a minimum of thirty subjects.

I will be meeting with each of you, the staff nurses, and your supervisor to further discuss the data collection procedures for this study. Please refer to the Study Summary, the Explanatory Letter with Consent Information, and the "Attitudes Toward Therapeutic Touch" questionnaire as attached. If you have any questions or concerns regarding your role in this study, I can be contacted at the numbers listed below. Thank you once again for your assistance.

Sincerely,

Julie Thomas-Beckett RN

Julie Thomas-Beckett R.N.

Letter of Agreement for Data Collection

The graduate thesis study of Julie Thomas-Beckett R.N. entitled "Attitudes Toward Therapeutic Touch: A Pilot Study for Women with Breast Cancer", will utilize the Breslin Cancer Center and the Michigan State University Clinical Center for data collection. Subjects include women being treated for breast cancer at the clinic, as identified by the nurses through the tumor registry. Subjects who are able to read and write English will be given the study questionnaire entitled "Attitudes Toward Therapeutic Touch" which consists of three parts. The first part is aimed at obtaining demographic data. Part two consists of the description of Therapeutic Touch and thirty Likert scale items hypothesized to measure the affective, cognitive, and behavioral components of attitudes. The third part consists of three open-ended questions designed to obtain further information on the components of attitude.

Subject participation in the study consists of completing the questionnaire while in the clinic. The questionnaire will be distributed and collected by Maureen O'Higgins, R.N. at the Michigan State University Clinical Center. An explanatory letter with consent information is attached to the outside of the envelope. The voluntary agreement to participate is indicated by the completion and return of the questionnaire.

Data collection has been approved by the Human Subjects committee entitled UCRIHS from Michigan State University, and the Nursing Research Review Committee from Ingham Medical Center.

Data will be collected for the next three weeks as an adjunct to the original site of data collection; the Breslin Cancer Center. The principal investigator will be available during the first day of data collection to ensure a smooth process. Each week, envelopes containing returned questionnaires will be collected and removed from the setting by the principal investigator. Maureen O'Higgins will be the contact person for the principal investigator during data collection procedures.

I, Maureen O'Higgins, agree with the above information and will act as contact person for the principal investigator of the study, "Attitudes Toward Therapeutic Touch: A Pilot Study for Women with Breast Cancer".

signed Maureen O'Higgins date 2/5/91

I, Julie Thomas-Beckett RN, agree to follow the guidelines of the Michigan State University Clinical Center for research during the data collection for the thesis study entitled "Attitudes Toward Therapeutic Touch: A Pilot Study for Women with Breast Cancer".

signed Julie Thomas-Beckett RN date 2-13-91

APPENDIX F
HUMAN SUBJECTS APPROVAL

MICHIGAN STATE UNIVERSITY

OFFICE OF VICE PRESIDENT FOR RESEARCH
AND DEAN OF THE GRADUATE SCHOOL

EAST LANSING • MICHIGAN • 48824-1046

November 26, 1990

Julie G. Thomas-Beckett
1604 Alpha Street
Lansing, MI 48910-1802

RE: ATTITUDES TOWARD THERAPEUTIC TOUCH: A PILOT STUDY FOR WOMEN WITH BREAST CANCER, IRB# 90-492

Dear Ms. Thomas-Beckett:

The above project is exempt from full UCRIHS review. I have reviewed the proposed research protocol and find that the rights and welfare of human subjects appear to be protected. You have approval to conduct the research.

You are reminded that UCRIHS approval is valid for one calendar year. If you plan to continue this project beyond one year, please make provisions for obtaining appropriate UCRIHS approval one month prior to November 16, 1991.

Any changes in procedures involving human subjects must be reviewed by the UCRIHS prior to initiation of the change. UCRIHS must also be notified promptly of any problems (unexpected side effects, complaints, etc.) involving human subjects during the course of the work.

Thank you for bringing this project to our attention. If we can be of any future help, please do not hesitate to let us know.

Sincerely,

David E. Wright, Ph.D.
Chair, UCRIHS

DEW/ deo

cc: Dr. Clare Collins