

A STUDY OF THE EXPRESSED ATTITUDES OF 327 NURSES TOWARD  
DIRECT PATIENT CARE


by

Jeanne Pierson Zook, R.N., B.S.

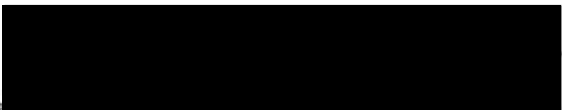
A Thesis Presented to the University of Oregon  
School of Nursing and the Graduate Council  
of the University of Oregon Medical School  
In Partial Fulfillment of the Requirements for the Degree  
Master of Science

June 6, 1968

APPROVED

A large black rectangular redaction box covering the signature of the Thesis Adviser.

Lucile Gregerson, Associate Professor, Thesis Adviser

A large black rectangular redaction box covering the signature of the Chairman of the Graduate Council.

Chairman, Graduate Council

This study was undertaken with the financial assistance of a United States  
Public Health Traineeship, Grant number NT-35-C10.

## ACKNOWLEDGMENTS

The writer wishes to express her appreciation to Miss Lucile Gregerson, Associate Professor under whose guidance and encouragement this study was prepared.

Appreciation is expressed to Dr. Paula Rohrbaugh for counsel and guidance in the study design, and to the nurses whose cooperation enabled the writer to carry out the study.

j.p.z.

## TABLE OF CONTENTS

CHAPTER	Page
I. INTRODUCTION . . . . .	1
Introduction to the Problem . . . . .	1
Statement of the Problem . . . . .	5
Purpose of the Study . . . . .	5
Hypotheses . . . . .	6
Limitations . . . . .	6
Assumptions . . . . .	7
Definitions . . . . .	7
Attitude . . . . .	7
Attitude scale . . . . .	8
Direct patient care . . . . .	8
Image . . . . .	8
Measurement of attitudes . . . . .	8
Nursing behavior . . . . .	8
Opinion . . . . .	9
Role . . . . .	9
Justification of the Study . . . . .	9
Steps of the Study . . . . .	9
Overview of the Study . . . . .	12
II. SURVEY OF RELATED LITERATURE AND STUDIES . . . . .	13
Attitudes and Attitude Research . . . . .	13
Neutral Items in the Thurstone Scale . . . . .	18
Other Methods Used in Attitude Research . . . . .	20
Changing Attitudes and Nursing Education . . . . .	22
The Attitudes and Values of Graduate Nurses . . . . .	28
The Nurse's Attitudes Toward Direct Patient Care and Quality of Care . . . . .	33
Innovations Being Used to Free Nurses for Direct Patient Care . . . . .	37
Summary of the Literature . . . . .	39

CHAPTER	Page
III. REPORT OF THE STUDY . . . . .	41
Design of the Study . . . . .	41
Selection and revision of the study instrument . . . . .	41
Pilot study . . . . .	43
Selection of the study population . . . . .	43
Procedure for collecting data . . . . .	44
Procedure for scoring the data . . . . .	45
The study participants . . . . .	46
Findings of the Study . . . . .	48
General Information . . . . .	48
Differences among the nurses by type of education . . . . .	50
Differences among nurses by decade of education . . . . .	55
Differences among nurses by clinical practice . . . . .	59
Differences among the nurses by position . . . . .	68
Differences among the nurses by patient care activity . . . . .	68
Comments on the use of the scale-product method . . . . .	72
Reliability Information . . . . .	72
Item Analysis Information . . . . .	73
IV. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS . . . . .	87
Summary of the Study . . . . .	87
Hypotheses Accepted and Rejected . . . . .	91
Conclusions . . . . .	91
Recommendations for Further Study . . . . .	93
BIBLIOGRAPHY . . . . .	95

CHAPTER	Page
APPENDICES . . . . .	102
A. CORRESPONDENCE . . . . .	103
B. INSTRUMENT FOR DATA COLLECTION . . . . .	113
C. SCALE VALUES . . . . .	123
D. MASTER TABULATION . . . . .	126
E. STATISTICAL FORMULAE . . . . .	129

## LIST OF TABLES

Table	Page
1. The Range of Final Scores of the Study Participants by Score Intervals of 100 . . . . .	49
2. Education Reported by Study Participants in Addition to the Basic Nursing Program. . . . .	51
3. Information Concerning the Scores of 324 Nurses by Type of Education . . . . .	52
4. A Comparison of Differences in Score Values For Nurses On an Attitude Scale Measuring Favorableness Toward Direct Patient Care in Relation to Type of Education . . . . .	54
5. A Comparison of Differences in Score Values For Nurses On an Attitude Scale Measuring Favorableness Toward Direct Patient Care in Relation to Period of Education. . . . .	58
6. A Comparison of Differences in Score Values For Nurses On an Attitude Scale Measuring Favorableness Toward Direct Patient Care in Relation to Clinical Practice of the Nurse . . . . .	64
7. A Comparison of Differences in Score Values For Nurses On An Attitude Scale Measuring Favorableness Toward Direct Patient Care in Relation to Position and Activity . . . . .	71
8. The Proportion of Respondents in the Upper and Lower Groups of 100 Who Obtained 5-6 Value Scores, With Phi Coefficients . . . . .	76



## CHAPTER I

### INTRODUCTION

#### Introduction to the Problem

A shift in nursing activities during the past two decades away from direct patient care toward the more technical and managerial tasks has been receiving attention in the literature (3,43,56). Some alternatives to this trend have been proposed (15,26,27,54,67). Outstanding reasons for the shift away from direct patient care activities appear to be, first, the changing educational preparation and competencies of the nurse (42,43,63), second, the quickening movement toward professionalization, with increasing expectations of the nurse (43,57), and third, the changing role of the nurse which has resulted from a gradual accretion of tasks formerly performed by the physician, increased technical functions, and the increasing necessity to direct the activities of ancillary workers who have been introduced into the patient care settings to offset the chronic undersupply of professional nurses (26,42,43).

Nursing literature reveals the following trends:

1. Nurses are engaged in many non-patient care activities (57).
2. Ancillary workers provide much of the direct, personal care (54).

3. Nurses indicate that patient care activities give them satisfaction (9, 28,55,56). Social scientists identify this satisfaction as a fulfillment of the nurse's role concept (9,40).

4. Nursing positions which carry greater prestige and remuneration (the rewards) are those in which there is little opportunity to administer direct care, thus a nurse has difficulty advancing in professional standing without leaving the core activity of the profession (47,52,54).

5. The nursing profession is becoming more self-directing, and nurses are to a greater extent able to control the nature of their practice. They are seeking patterns of practice which will provide high quality care to all persons requiring these services.

Saunders (56,57), Benne and Bennis (9), Malone (40), and others have written about the changes that are occurring in the nurse's role from a sociological viewpoint. Saunders (57) states,

Although it may be uncomfortable to those in nursing and nurse education, there is nothing particularly unhealthy from a sociological point of view in the present unsettled status in nursing. Role modifications are occurring. Functions are being transferred from one group to another. Privileges and responsibilities are being reshuffled and shifted. Although unpleasant for those experiencing it, it is quite natural and perhaps inevitable in a period of rapid technological change.

Saunders would have nurses adapt to the change by adopting attitudes appropriate to being the "managers" in the care settings, "seeing that the patient is nursed, rather than nursing him."

It is apparent to observers of the hospital and nursing scene that despite this well-intentioned advice of a decade ago, the unsettled conditions are still with us, and that nurses are, by and large, not satisfied with the quality or quantity of care that patients are receiving, nor with the system which perpetuates the present dilemma.

Dr. William H. Stewart, Surgeon-General of the United States (61), has called nursing a "troubled" profession. He elaborates,

. . . the present situation in which nursing is caught is partly due to the problem of low salaries, poor working conditions, the increasing demands upon nurses, and changes in their functions. The nurse has been required to do "more and more things, acquire more and more skills, as well as supervise more and more people." He notes that salaries are the most obvious cause of unrest among nurses, but pay is not the only problem. In a recent speech he said that the major complaint seems to be a sense of frustration because nurses are not able to take care of patients [italics not in the original] . "Nurses are deluged with paperwork, supervision, and training duties for the many layers of assistants--practical nurses, aides and orderlies--who function between them and the people who need care. In addition, because nursing services operate 24 hours a day, 365 days a year, professional nurses are frequently called upon to absorb the responsibilities of other health workers who work the conventional hours . . . . They are worried about the quality of care patients receive under such conditions."

The quality of care for patients is concerned with the relationships among the following:

1. The quantity of professional staff, and the level of their skills (2,28,64).

2. The quantity of non-professional staff, the level of their skills, and the amount of supervision required for safety of practice.
3. The numbers of non-nursing functions which nurses are required to perform (15,26).
4. The number of patients who require care, and their degree of incapacity.
5. The indices used to determine patient welfare (48).
6. The organization, policies, and philosophy of the institution or agency (34).
7. The morale, commitment, and attitudes of nursing personnel, their conceptions of the nurse's role, and of what constitutes quality care (65,67).

Reiter (54) and others identify direct patient care as the "heart of nursing." Sociologists have pointed out that nurses have been moving out of this activity which has formed the "heart" of their profession (57). The problem which exists in nursing is whether or not nurses will permit themselves to be diverted from this central activity sphere in which they have been the experts in times past, by the pressures of professionalization, educational advancement, advancing status, and a rapidly expanding technology, or whether they will find new patterns of care which will permit them to continue as the givers of direct patient care.

The American Journal of Nursing stated about recent unrest among

nurses in New York (8),

In most instances what finally made nurses act was their inability to care for patients. . . . Among the protests were the non-nursing duties that kept the nurses from the bedside . . . .

Nurses have begun to express their opinions in highly vocal manner, demonstrating their concern with this problem.

If the problem exists as extensively as it appears to, then nurses have opinions about the problem. It is these attitudes and opinions which this study has attempted to elicit with the use of the Vaughan Attitude Scale.

#### Statement of the Problem

The problem which exists in nursing, and to which this study is oriented, is that nursing behaviors have tended to shift away from direct patient care toward managerial and technical tasks during the past twenty years, with an apparent decrease in nurse and patient satisfaction (8, 15, 28, 61), and with concurrent concern that the quality of care afforded patients has declined (3, 26, 64).

#### Purpose of the Study

This study investigates the relationship between the favorableness of the nurse's attitude toward direct patient care and the nurse's statement that she does or does not give direct patient care. The study investigates the favorableness of the attitudes of nurses toward direct patient care who work in

varying clinical settings and who hold different positions in nursing. Growing from the study has come an investigation of the scale items through item analysis.

### Hypotheses

The following hypotheses are tested in the study: Differences in favorableness toward direct patient care exist between groups of nurses who:

1. practice nursing in varying clinical settings.
2. hold diverse hierarchical positions in nursing agencies.
3. have dissimilar educational preparation for nursing.
4. received their education in different decades.
5. do give direct patient care as compared to those who do not give direct patient care.

### Limitations

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

1. The study population was limited to registered nurses currently practicing nursing in the general metropolitan area of Portland, Oregon. Instructors of nursing were excluded from the study population.
2. The study was limited to the responses of 327 registered nurses to the Opinionnaire which served as the data collecting device. The statements of the Opinionnaire are those which appear in the Attitude Scale constructed

and validated by Sister Louise Marie Vaughan (66), which were placed in a multiple response option format originated by Likert (38).

### Assumptions

For the purpose of this study it is assumed that:

1. Nurses have overt and covert attitudes toward direct patient care which determine to some extent the positions which they accept and the performance of direct patient care in their practice.
2. Attitudes mediate a consistency of behavior, thus nursing behavior is a response to attitudes held by the nurse, to her role fulfillment, and to situational demands of her position.
3. Attitudes are measurable, but the measurement is subject to biases (social desirability, acquiescence, and others). The use of the anonymous mailed reply will obtain a relatively accurate divulging of attitudes (20).
4. The Vaughan Attitude Scale is a sufficiently validated instrument for the purposes of this study.
5. An understanding of the attitudes and opinions of nurses who practice in diverse clinical settings in this geographic area will assist nurses and other persons concerned with quality of patient care to take creative action toward a solution of the problem.

### Definitions

Attitude: an individual's social attitudes are an enduring syndrome

of response consistency with regard to a set of social objects (26). Attitudes are conceptualizations of aspects of personality which are inferred from habitual verbal and overt behavior. They are considered to be stable, mediating response consistencies. Most authors agree that isolated instances of behavior may not be taken as an indication of an individual's true attitudes, as situations influence behavior. Attitudes which cluster about one referent are conceived of as occurring along a favorable to unfavorable continuum.

Attitude scale: a group of statements which has been assembled by a standard technique, which expresses a range of opinion about some element of existence. One statement in a scale is called an item. Various numerical and non-numerical methods of tabulation are employed.

Direct patient care: situations in which plans for meeting the patient's nursing requirements are being implemented by a nurse who is consciously focusing on him as a person (66).

Image: a function of group thinking, a commonly held idea or conception symbolic of a basic group orientation.

Measurement of attitudes: any scheme for the rank ordering of individuals; a system defining the relationship of persons to one another in relation to a given variable by the use of numbers.

Nursing behavior: the sum of specific care tasks, the focus of the nurse's concern upon the patient, and the elements of the nurse-patient interaction.



Opinion: the verbal expression of an attitude; an idea which is open to debate, not a fact.

Role: a patterned sequence of learned actions or deeds performed by a person in an interaction situation; the pattern of attitudes inferred by the actions; the expected behavior attached to a social position.

### Justification of the Study

Conscious action by a professional group upon problems affecting the nature of their practice can bring about change. Nursing literature has identified as a problem the movement of the nurse away from the patient. Solutions are being posed elsewhere. It is justifiable that investigation of this area of concern be done at this time in view of the lack of information about the subject in this locale. It is of vital concern to the profession, to the patient, and to the nation's health that nursing practice be of a high quality, that it be available to those needing care, and that the most effective use be made of the nursing skills available. Changes which may result from the investigation may help dispel the frustrations of nurses and allow the release of the skills they possess to the benefit of all concerned.

### Steps of the Study

Sources of Data: The primary sources of data were the replies obtained from 327 participating nurses, using as a data collecting tool the

Vaughan Attitude Scale, adapted to the Likert-type multiple choice option, and the information Checklist which accompanied the scale.

Secondary sources of data were theses from the Libraries of the University of Washington and the University of Oregon Medical School, periodicals and books therein, and an unpublished Review of the First Nursing Research Conference which was kindly loaned by Shirley J. Gordon of the American Nurses' Association.

The steps of the study are as follows:

1. Nursing and related literature were searched to establish a frame of reference relative to the stated problem and to the measurement of attitudes.
2. Permission was obtained from Sister Vaughan and her publisher, Catholic University of America Press, to use the items of the attitude scale which she had formulated.
3. Further reading was done. The document on the nursing research conference which was recommended by Sister Vaughan was obtained from the offices of the American Nurses' Association.
4. The attitude studies which were described by Edwards and Kilpatrick, Eysenck and Crown were obtained. The decision was made to modify the Vaughan attitude scale to permit the range of replies with the Likert-type responses, and to use the scale product method described by Eysenck and Crown, and recommended by Dr. Emma Spaney to the First Nursing Research Conference.

5. The modified form of the scale was printed, adapting the name to "Opinionnaire."

6. A pilot study was carried out with registered nurse students at the University of Oregon School of Nursing. No difficulties were encountered in the study, thus no revision of the data collecting instrument was made.

7. A mailing list was compiled. The study population was selected at random from a list made available by the District One Office of the Oregon Nurses' Association. Listings had been obtained by that office in 1966 from the State Board of Nursing of all licensed nurses in the Portland area. The current list consisted of postcard returns from an information poll conducted by the District One Office. (Listings at the State Board of Nursing were unavailable during the study due to license renewal activity). The names of unemployed nurses and of nurse instructors were deleted from the sample.

8. Five hundred Opinionnaires were mailed to nurses on the above list on June 1, 1967. Replies were accepted for a period of five weeks.

9. Three hundred eighty-five Opinionnaires were returned (76%). These were sorted into groups by the clinical practice indicated by the respondent. Incomplete replies (more than 10 items omitted), replies by nursing instructors and unemployed nurses and all late replies (total of 58) were deleted from the study. Three hundred twenty-seven (65%) of the Opinionnaires were usable as data for the study.

10. The data were punched onto IBM cards and calculations were

performed by IBM computer 1401.

11. Additional computations were completed, t-tests were computed for significance, phi coefficients were calculated for each item to determine item discrimination. (Top and bottom scoring groups used were composed of 100 each, or 32%.

12. The study was written; findings were interpreted.

13. Conclusions were drawn from the data.

14. Recommendations for further study were made.

#### Overview of the Study

The remainder of this study has been divided into three chapters. Chapter II consists of a review of the pertinent nursing and social science literature and studies which are related to the topic. Chapter III contains a report of the study, with statistical analysis of the data, the results, and concludes with an interpretation and discussion of the findings. Chapter IV consists of a summary of the study, conclusions and recommendations for further study.

## CHAPTER II

### SURVEY OF RELATED LITERATURE AND STUDIES

#### Attitudes and Attitude Research

Quinn McNemar (38) summed up the most commonly held views of social attitudes thus:

The commonest element of most definitions of social attitude is that such an attitude is a readiness to act or react in a certain manner . . . an attitude, however real to the possessor, is an abstraction, the existence of which is inferred, either from non-verbal overt behavior, or from verbal and symbolic behavior. The term opinion is frequently defined as the expression of an attitude.

Cattell (13) stated that attitudes have "strength of desire and direction of action." He added, "An attitude is a dynamic trait, commonly arising from some deeper sentiment or innate drive which it seeks to satisfy."

The task of measuring attitudes would be somewhat simplified if it could be assumed that the expressed attitude is synonymous with the true, "held" attitude. Unfortunately, there may be a discrepancy between the two, as Bauer points out (7),

What one believes performs one kind of function for his personality, what he says performs another. Another way of saying this is that the ends a person is trying to achieve or the role in which he sees himself will influence what he says. The content of belief and statement is identical only under restricted circumstances in which the function of statement is simply communication of belief.

It is necessary to infer true attitudes from expressed opinions, and to do so with caution. Expressions of opinion are subject to "social desirability bias," as inferred above, and "acquiescence bias," which is the tendency to agree with a statement rather than to challenge it (4,23). True attitudes cannot always be inferred from behavior, as observed behavior may be quite misleading. Edwards (17) elaborates,

Another approach to the problem of investigating attitudes has been to observe the behavior of individuals with respect to a psychological object, rather than to ask direct questions about how they feel about the object. For example, if he were interested in the attitudes of individuals toward the Negro, he might spend considerable time waiting for the desired behavioral interactions between the individuals and Negroes to occur.

If the behavior with respect to the object does eventually occur, it, of course, may also fail to reveal the feelings of the individual. In many cases behavior is designed to conceal feelings. We are all aware of situations in which we have acted contrary to the way in which we felt because of various reasons. If a man dislikes fish--that is, has an unfavorable attitude toward fish--he might not choose to express this attitude at a dinner party at which fish is served because of his desire not to offend the hostess. Another individual may have a great fondness for steak, (a favorable attitude toward this psychological object) yet if we observe his behavior in the local meat market, we may note that he passes up the display of filet mignons and selects for purchase two pounds of wieners. This bit of behavior, of course, does not necessarily express his attitude toward either steak or wieners. The price of steak may be more than he cares to pay. The wieners may be purchased, not for his personal consumption, but for a picnic at which children will be the chief consumers. . . . These examples illustrate that there is no necessary one-to-one correspondence between overt behavior and attitudes. Attitudes, as factors influencing or determining behavior, may be one of many such, and not necessarily the most preponent.

Thus much of the research on attitudes has tended to gravitate toward various methods of eliciting verbal attitudes. Some researchers have attempted to validate this work with observation of behavior after or before the expression of the attitudes. McNemar, in his critique of methodology (1946) criticized the lack of validation of verbal attitudes. Thus in the better studies carried out, an attempt is made to correlate habitual behavior with expressed attitudes.

The notable advances in the measurement of attitudes have been proposed by Thurstone (1929), Likert (1932), Guttman, Edwards, Adorno, and others. The method which Thurstone proposed consisted of preparing a large number of statements about one psychological object with a wide range of intensity of affect. These statements are then submitted to a group of experts who rank the statements into an equal-appearing interval continuum (11 piles of statements, the extremes 1 and 11 being the negative and positive poles, and 6 having a neutral or indifferent value). An average was then taken of the judges' ratings of these statements, and the average value was assigned to each as a score value. Statements upon which the greatest agreement among judges was found (lowest Q value) were retained in the scale. In order to rate a person's attitude with this scale, the respondent agreed or disagreed with each statement receiving the value for each "agree" which was the mean of the judges' placement of that statement. The middle value (median) represented his score for that attitude. Thus persons could be compared as to the relative intensity of their attitudes (18, 23, 35, 65).

The above procedure was followed by Sister Vaughan (1965) in preparing the scale of attitudes toward direct patient care. The 257 statements which she used were prepared by 16 graduate students at the Catholic University of America according to Wang's criteria for attitude statements. The statements were submitted to 44 highly placed nurse educators and practitioners who rated them on an 11 interval continuum. Sixty-three statements were retained in the scale which had the lowest Q values. She then obtained a sample group of students who took the attitude scale, and who were rated by their instructors on their typical behavior of direct patient care. Seventy-eight percent of the students were rated by their instructors in the same interval or in the interval above or below that in which their scores occurred, demonstrating that a satisfactory relationship between the scale score and their typical behavior existed. Reliability for the whole test corrected by the Spearman-Brown formula was .66. Five hundred fifty more students in 7 collegiate and 4 diploma schools of nursing were given the scale, making a total of 835 students who participated in the project. Sister Vaughan found that the students were all quite favorable to direct patient care and did not differ from group to group (senior-sophomore, eastern-midwestern, diploma-degree schools). She thus concluded that students have favorable attitudes toward direct patient care.

Rensis Likert (1932) described another method (38) of assessing attitudes which eliminated the need for a judging group. This consisted of



similarly prepared statements which are unidimensional (measuring only one attitude) being submitted to respondents who are permitted to express their degree of and direction of favorableness. This is accomplished by offering the respondent 3, 5, or 6 alternatives with each statement. This example is taken from an early opinion poll of Likerts:

The United States should have the largest military and naval air fleets in the world.

Strongly approve (1)	Approve (2)	Undecided (3)	Disapprove (4)	Strongly disapprove (5)
----------------------------	----------------	------------------	-------------------	-------------------------------

The usual scale consisted of about 25 statements, and each statement yielded a value; these values were summed, which sum became the score of the individual. This method attracted numerous supporters, and has become widely used, as has the method by Thurstone.

Quinn McNemar (1946) discussed these and other methods in his critique of methodology (38), pointing out,

Both methods have merits and both have defects which might be overcome by a combination of the two. As indicated earlier, the Thurstone technique may not always lead to the selection of items which functionally fall along a single continuum, and it can be demonstrated algebraically that the internal consistency criterion alone is not a sufficient condition for selecting items which belong to a single dimension. Using both should help to realize this goal.

In the same article (38) he points out that,

In constructing scales it is now generally, though not universally, agreed that it is better to provide for multiple responses rather than a dichotomy.

Edwards and Kilpatrick (1948) published a study in which a combination was made of the two procedures, calling it the scale discrimination method (19). (This method includes the use of the scale analysis of Guttman, which is not discussed here.) A judging group is used, Q-values are obtained, the items obtaining the greater Q-values are eliminated (1/2 of the items). The items are then used in a multiple option Likert-type form, with the sum of the values constituting the score of the subject. All items are subjected to an item analysis to determine their relative ability to discriminate among the subjects. This procedure eliminates items upon which all the subjects agree, or in which there is too great a spread of answers.

Eysenck and Crown (1949) proposed a method in which the scale values of the Thurstone scale are multiplied by the value obtained from the Likert-type response, which they call the scale product method. This value (for each item) can then be divided by a constant, rounded off, and summed to obtain the score. (Elements of these two studies have been employed in this project as methodology.)

#### Neutral Items in the Thurstone Scale

Edwards, in several articles, has commented rather critically upon the "neutral" or 6.0-7.0 interval of Thurstone scales. It has been found that items which appear in Likert scales tend to fall at the extremes of affective expression. Thus,

Ferguson has demonstrated that items included in a scale constructed by the Likert method will be items which, if scaled by the method of equal-appearing intervals, have scale values at the extremes of the Thurstone continuum (16).

Edwards comments,

It is my contention that Thurstone's neutral items are . . . non-differentiating items. Consequently they would not be expected to appear in any great number in scales constructed by the method of summated ratings.

These items, he feels, are discarded by item analysis due to their low mean difference values. Edwards demonstrates that this occurs. He further states that the neutral interval may not indicate actual neutrality of attitude, but some of these items may be interpreted by subjects as "complete or active indifference." He states (16),

But items may be non-differentiating for a number of reasons. They may be non-differentiating because they are ambiguous, open to different interpretations, capable of being understood in different ways. They may be non-differentiating because they are ambivalent, express indecision. They may be non-differentiating because they are irrelevant, contribute nothing to the location of the individual on the issue. They may be non-differentiating because they are indifferent, express lack of concern or apathy with respect to the issue. (And of course they may be non-differentiating because they are factual--or at least interpreted as statements of fact rather than as statements of opinion.) Judges may, in other words, place an item in the middle categories because it is interpreted as expressing any one of these conditions. The middle categories, on the Thurstone continuum, may be simply the "catch-all" categories.

Edwards showed by means of the criterion of irrelevance, based upon an index of similarity (16,19), that the neutral items are irrelevant to the scale, adding

nothing to the measurement of the attitude in question.

In a 1954 text, Edwards (19) commented on the theoretical operating characteristics of the "neutral" statement,

Such neutral statements . . . are just as likely to be endorsed by those with favorable and unfavorable attitudes as by those with "neutral" attitudes on the equal-appearing continuum.

#### Other Methods Used in Attitude Research

Several other methods have been developed for the measurement of attitudes. Drawings and photographs have been used which evoke a response in the subject being tested. The Thematic Apperception Test (TAT) is an example of this method. Meyers (42) used a set of photographs of nursing situations which respondents selected on the basis of being the most typical of nursing today, of nursing 20 years ago, and of their own preference for nursing activity. On this basis she found four main value types of nurses: Type I, "ministering angel," Type II and Type III, Modern integrations, prefer to share patient with fellow worker, and Type IV, Technical-administrative orientation.

Open-ended statements have been used. Meyer employed this technique as well. The following are examples from her study:

1. Supervising the work of others \_\_\_\_\_.
2. The patient's visitors \_\_\_\_\_.
8. Most doctors \_\_\_\_\_.



## Changing Attitudes and Nursing Education

Nurses fulfill a specific role in society as they function in health-related positions. A role, the expected behavior associated with a given position, is a complex of activities and attitudes which are learned as being appropriate to that position. The role is in some respects associated with the "image" which the incumbent of the role, the peers, members of other groups and society in general have of that position.

Saunders states (56),

It would be difficult to say what is the most common collective image nurses hold of themselves . . . .

The public image of the nurse is that of a person who gives bedside care (49).

Benne and Bennis (9) discussed the public image of the nurse, and its effect upon prospective students and student nurses,

We suspect that this self-image of "real" nursing (bedside care) gets established in a number of ways. The non-nursing public probably has an image of "the nurse" always at the bedside of the patient. This may be an untutored image, but it is nevertheless a reality. When persons choose nursing as a career, they choose at least partly on the basis of this public image. They bring this image of "real" nursing with them to school, and often the schools don't dislodge it, even where they try to do so.

Smith (60) speaks of the structure of the nursing school which acts as a culture group within which the student of nursing acquires attitudes (is aculturated).

A hospital, and similarly a school of nursing, may be considered as a society having the characteristics of

a culture--or a subculture--in the anthropological sense. Each subculture has its own unique configuration of directives for behavior while at the same time it shares certain of these with other subcultures. Members of a social group share a system of values which pattern behavior . . . . Each individual has a place or a status within a social system. Associated with that status are culture patterns, attitudes, values, and behavioral expectations of others, constituting the concept role.

Sherif et al. (59), have this to say about how individuals acquire social attitudes in order to become a member of a group,

The process by which he comes to behave as a member of X group and to consider himself as a member is accomplished through acquiring the attitudes appropriate for each.

Bauer (7), in clarifying the relationship between opinion and personality makes the following statement about how the opinions (attitudes) of the group to which the individual belongs assist him in demonstrating the "correct" behavior for membership in that group,

. . . the existence of institutionalized opinions with regard to certain social functions gives sanction to and supports the behavior associated with these functions and roles. In these respects, opinion helps us solve the problem of order.

Thus schools of nursing have for some time recognized their function in shaping the attitudes of students to the appropriate goals and activities within the profession. Most schools state, either in catalogs or in course objectives, that they have as one of their goals the changing of attitudes. Several studies reveal that these goals are accomplished.

Hughes et al. (28) cite a study of the expectations and attitudes of 105 senior

students in which the aspiration to do direct patient care was markedly tied to the stated emphasis of the school,

Direct patient care was named as their ultimate objective by over half of the seniors in church-connected schools; only 28% of the seniors in other schools named direct patient care. Of the seniors in other schools, the great majority aimed at nursing specialties where bedside duties play a small part or no part at all. It is interesting that this division of ambitions as between the schools corresponds to the emphasis on types of nursing to be found in the school's bulletins.

Brooks (10,11,12) studied 883 freshman nursing students entering 24 schools of nursing (13 diploma, 5 Associate degree, and 6 basic Baccalaureate programs) for attitudes of authoritarianism, humanitarianism and stereo-types. In all three samples attitudes were fairly consistent, the only significant difference being found was the associate degree students who were lower in authoritarianism. On retest, after the completion of one year in a program, the attitudes of all groups were significantly different from the first testing in all categories. She concluded that the only factor which consistently influenced a change in attitude was nursing education. Other factors tested were socio-economic background, religion, intelligence, environment, and self-concept.

Baker (5,6) published several studies of the attitudes of nursing students, identifying the direction of change which occurred with education. Beginning nursing students are dependent upon their faculty, showing little variability in behavior. As they mature, their attitudes vary toward independence and more variability (5). In a later study, Baker concluded that students who have strong



attitudes of powerlessness, anomie, normlessness, and who seek status change, do not obtain satisfaction from the performance of career activities (9).

Eron (1955) tested first and third year nursing students for humanitarianism, authoritarianism, and cynicism, and found that humanitarianism and cynicism decreased with age, experience, and nursing education (20).

Johannsen et al. (29) demonstrated attitudinal and personality changes which occurred during a psychiatric affiliation. They noted that the students' own anxieties were exaggerated during the affiliation. The Opinions about Mental Illness Scale and California Inventory of Personality were used to test for authoritarianism, benevolence, mental hygiene, ideology, social restrictiveness and interpersonal etiology of psychiatric illness. They concluded that highly authoritarian students changed less during the affiliation than students displaying a low degree of this trait.

Thompson (1963) showed that the attitude scores of sophomore nursing students at the University of Oregon School of Nursing who had received a course in "interpersonal relations" were significantly different (pre-test and post-test) than a control group (college students) who had not taken the course. Her instruments were the F Scale and Personal Relationships Test (62).

Wiens (1966) demonstrated that 55 nursing students from four schools of nursing who were enrolled in a psychiatric affiliation showed significant changes in attitude toward behavior disorders between pre and post-test scores (Saslow-Mensch Scale of Attitudes toward Behavior Disorders). She concluded that

although the attitudes of 75% of the students changed in a positive direction, there was no change in 25% and that greater change could have been effected in all groups (69).

Nahm (1948) found that 93% of the 428 senior students she interviewed in 12 schools of nursing in Minnesota gained satisfaction from direct patient care, and that their major complaint was insufficient time to give adequate care to patients (45).

The Malone, Berkowitz and Klein study (N=15) showed that although nursing students enjoyed giving direct patient care, they aspired to non-patient care activities after graduation. They saw that the rewards of the profession went to the administrators and teachers. This was despite the fact that as graduate nurses in an administrative or teaching role they would be unable to fulfill their role concept by giving direct care to patients (41).

Vaughan, studying the attitudes of 835 first and terminal year nursing students in 11 schools toward direct patient care, found no differences among groups, indicating that all were favorable toward direct patient care (66).

Bauer (7) makes a statement which explains the tendency of students, and others placed into new groups, to approximate the attitudes which are held out to them as being laudable, thus,

By being exposed to similar circumstances, by being coerced into similar behavior, by having similar goals extended to them, people tend to form similar opinions. This similarity either as held or expressed, tends to produce regularity of behavior, and to support regularity of behavior in persons.

Certain attitudes and opinions are institutionalized-- they go along with the performance of a social role. Actually it is not only the incumbent of the status which defines his role. To the extent that opinions are expressed, they are instruments for bringing the weight of the role to bear on others as a coercive or implementary force.

Nursing educators in general recognize that changes in attitude need to be made in the student of nursing, and that they are charged with that responsibility (62). The few studies cited here indicate that such changes are accomplished.

Sells and Trites (58) have this to say about attitude change through education,

Attitude change is constantly occurring as a result of learning and the individual and situational influences described above. To achieve some deliberate changes it appears possible to communicate directly with individuals . . . or to manipulate the situation, the social group, group norms and structure.

Thus it is seen that one of the reasons that attitudes are fluctuating in nursing students is that they are adopting the attitudes which they perceive as appropriate to the social role to which they aspire. Graduate practitioners carry with them many of the attitudes which they learned in schools of nursing, and have acquired new attitudes which are the result of acting in the social role of nurse, and which they perceive in their peers, to identify them with the particular group within which they function.

. . . a man working fills a role with which he is identified. For a sense of belongingness, role, hence, structure, is essential (58).

Bauer points out,

The opinions which members of a given society have bear a determinate relationship to the social organization of that society (this is especially true of the role organization of that society).

It might thus be said that nursing educators, in order to build the role image within the student, build opinions and attitudes in the student which will strengthen her ability to function in the nurse's role in a desirable manner.

#### The Attitudes and Values of Graduate Nurses

It has been found that there are marked differences among graduate nurses in several of the major clinical specialties and between the various positions in nursing. There appear to be several predominant value-types which recur in numerous studies. The major premises which have been tested are that there are person-oriented nurses, and task- or technique-oriented nurses. Recent work has also uncovered variations in speech characteristics among nurses in various settings. Habenstein and Christ elaborated upon the "traditionalizer," "professionalizer," and "utilizer" value-orientations (28). Vaillot (66,67) has written of the "committed" nurse, who values the person of the patient, and invests herself in his care. It is not yet clear from the studies whether nurses choose a specialty or a position due to personality or attitudinal factors, or whether, once in that position, they are molded into the distinctive types which have been found. It seems reasonable to believe that both processes

are operative.

Task- and technique-centeredness in nurses has raised comment that nursing has become "depersonalized." Within this viewpoint, concern has been voiced that patients are treated as objects, rather than as persons.

Lydia Hall (15) states, "Next to jail, a person loses more identity in the hospital than any other place." Abdellah (3) says,

To an increasing extent, health services are now provided through institutions, replacing many functions previously carried by the family and the home. With this development has come little adjustment in the operation and organization of institutions themselves. The change in locale, combined with increasing complexity and specialization in the provision of services has produced a depersonalization of patient care.

Pellegrino (52) has called it a "dehumanization,"

Medicine and with it nursing have not as yet succeeded in adjusting fully to the greatly expanded potentialities, demands, and responsibilities imposed by the changing character of science and society. As a result our professions share a serious and difficult dilemma. On the one hand we have available and are using effectively new and potent techniques which can alleviate and eradicate much of human illness. On the other hand we hear--with distressing frequency--that modern medicine and nursing are becoming dehumanized. Our patients and our colleagues are tempted to look backward to a simpler but more satisfying kind of medical and nursing practice. It appears that the application of facts, provided by the burgeoning of modern science, has produced a certain alienation of medicine and its many allied professions from the society which they serve.

Johnson (30) elaborates upon the forces which have changed nursing since the 19th Century as being,

. . . the discoveries which began to illuminate and lead to control of the process of infection . . . rapid advance in medical science and technology . . . the rate of hospitalization of patients increased and there began a growth in the size, number, and complexity of hospitals . . . . These were not the only factors but they have been important ones in leading to the kind of nursing practice which we have today. It is a practice which tends to be technical and administrative in orientation and sterile and static in character. The nurse's motivational orientation has turned from comfort, her ancient heritage, to cure, the physician's responsibility, and from service to patients to commitment to the bureaucratic principles of the hospital or health agency. Her contacts with patients are characterized by a high degree of standardization, routinization, and impersonalization, and her methods and modes of practice are experientially based, unchanging, and rarely questioned.

Narvan and Stauffacher (46) found a difference in the personality structure of 196 neuro-psychiatric nurses as compared with 167 general medical surgical nurses which suggested that the general medical surgical nurses were more work-oriented than patient-oriented.

Lentz and Michaels (31,32) followed this in 1959 and 1960 with studies of the differences between medical and surgical nurses. They found that there were differences in their nurse-patient relations, technical skills, cooperativeness, intelligence, and "nice-people" ratings, with the medical group being generally more "person" oriented, and the surgical group being more "task" oriented (N=256). They also investigated to what extent nurses were good in both patient relations and technical skills, and 40% of all the nurses fell into this "prized category," some from both clinical practice groups. This corresponds roughly

to the findings of Meyer, who found that value types II and III formed 47% of her sample.

Lentz and Michaels (33) again investigated medical and surgical nurses (1965) and found that medical nurses were more often rated as excellent in nurse-patient relations and were more people-minded, while surgical nurses expressed little or no interest in the psychological aspects of nursing care and considerably more interest in nursing techniques, and scored higher on all aspects of technical care (N=384). They discovered that nurses who preferred mixed medical and surgical wards scored lowest in both nurse-patient relations and technical skill.

Raskin, Boruchow, and Golob (55) tested 160 nurses on 24 personality and attitude variables. They concluded that distinctive personality and attitudinal variables characterize nurses from task- to person-oriented treatment settings, that leadership skills (the ability to assume responsibility, act independently, give orders) were related to the person-orientation and to career-satisfaction. They state,

Task orientation or the tendency to emphasize the skilled-technical aspects of nursing appears to be an expression of a general inability to get close to people and a pervasive need for proscriptions, limitations and controls in ones social and personal relationships.

Meyer (42), in a three-year study in Los Angeles, elicited the opinions of nurses (N=292), by the use of photographs of nursing situations, open-ended statements, and adjective choices. She concluded that practicing nurses hold

values and attitudes which fall into three broad groups. She called the nurses who prefer an undivided relationship with a patient the "Ministering Angel" group, and these formed 27% of her study population at one extreme (Type I). At the opposite extreme she found 27% of the nurses who preferred a relationship with a fellow worker, whom she named the "Technical-Administrative" (Type IV). Between these extremes were the nurses who prefer to share the patient with a fellow worker, whom she called the Modern Integration (46%). These she subdivided into Type II, Orientation to patient (32%) and Type III, Orientation to fellow worker (14%). Her study concluded that nurses are characterized by these value types, and that they present a spectrum of attitudes from tenderness to technique.

Smith (60) found discrepancies in role-specific values of head nurses and nursing educators, indicating that they held quite different values about some of the activities and functions within nursing. Lukens (36) tested the values, attitudes and needs of registered nurse graduate students in a Master's degree program (N-238) and found that those in the medical-surgical specialty were markedly different from those students in the psychiatric specialty, having a higher need for science knowledge, practical action, organization, order, physical activity, achievement, motivation, applied interest, dependency, and intellectual development. The medical-surgical group were also more authoritarian, more educable, had higher religious and humanitarian values, and they valued background knowledge more than work setting.



A study by Wiens, et al. (68) of nurses in supervisory and head-nurse positions as compared to staff nurses using speech patterns and interview behavior found that there are differences between these groups in their assertiveness and self-concepts. The nurses in leadership roles were characterized by longer durations of utterance than the staff-nurse group, which generally typifies the assertive, dominant personality. No analysis was made of interview content in the study.

Molde, in an unpublished thesis (44), used a similar technique in testing surgical and psychiatric nurses, and found that they fell into a speech pattern which indicates that the psychiatric nurses are more person-oriented (longer speech, longer duration of latency) than the comparatively clipped, short speech pattern of the surgical nurses. The conclusion is thus drawn that there are typical personality types in several of the clinical nursing specialties.

#### The Nurse's Attitudes Toward Direct Patient Care and Quality of Care

Several articles have appeared which indicate that the quality of patient care is dependent upon the number of professional nurses which are available for, or present in a care setting (2,34,64). A statement in the introduction to this paper (page 3) indicates that quality is dependent upon the relationship between the number of nurses and the other elements of the care setting. This premise was tested by Abdellah and Levine (2), who found that in all services

except the obstetrical service, there was a strong relationship between the number of hours of professional nursing service available and the amount of patient satisfaction.

Another study by Levine (34) found that the numbers of nurses on a hospital staff had very little correlation with patient welfare. He concluded that many of the nursing personnel in private general hospitals were not being utilized effectively when compared with nurses in federal hospitals of comparable size.

Aydelotte et al. (48), found that nurses did not increase the amount of time spent with patients when additional staff was provided. The researchers failed to find any relationship between nurse staffing and patient welfare. Hughes et al. (28), states,

Both quality and quantity of interaction are governed in part by the absolute numbers of persons involved in a given situation . . . . the illustration holds implications for those who assume that the solution to all nursing problems lie in obtaining more nurses. The investigators discovered that the interaction of patients with nursing personnel increased with the number of nurses, up to a total of five. As the number of nurses on the unit increased to more than five, they began interacting more with each other and less with the patients.

From this and similar findings one sees that while the quantity of nurses does affect quality and satisfaction, additional factors influence the nurse-patient relationship. One of these is the nurse's attitude toward the patient, and toward direct patient care. Vaughan (65) states, "The quality of nurse-patient interaction is undoubtedly influenced by the nurse's attitude toward direct patient care."

Vaillot (66) states, "It is now fully realized that the shortage of nurses is not mere quantitative matter" (sic).

Lydia E. Hall (26) propounds the idea that there is no "shortage of nurses," but rather a "shortage of nursing," and has founded the Loeb Center for Nursing and Rehabilitation in New York where professional nurses provide all the direct patient care. She states,

Nurses and others who work (in medical centers) have got caught up in the CURE activities which are emphasized to the neglect of CARE, the kind that is essential in helping the patient get to the CORE of his difficulties.

Her contention that nurses have gotten caught up in "practical doctoring" and paper work agrees with statements by Saunders, Meyers, Benne and Bennis, and others. She feels that nurses have no time left to nurse the patient, and little inclination to leave the "doctoring" tasks which seem to give them a greater status.

Sledge and Rohrer (55) reported that nurses at Charity Hospital, New Orleans, state that their greatest satisfactions lie in giving direct patient care, and yet the nurses who made these statements seemed to avoid the opportunity to do bedside nursing.

Mereness (41), in an article, "The Nurse's Self-Image and Her Practice," clarifies this point,

The nurse, like other human beings, has a tendency to focus attention and time upon the tasks which help her fulfill her idealized image of herself as a professional

worker --and which contribute to a feeling that she is making a significant contribution to the well-being of another person . . . . One way to help the nurse cope is to provide experiences which will alter her professional self-image which guides conduct and dictates action . . . .

Benne and Bennis (9) have identified the nurse's self-image as being principally that of giving patient care.

A nurse's self-image that puts bedside care of patients at the heart of legitimate functions of nursing appears in many conversations and interviews we have held with nurses. Other functions may be expected of nurses, and advancement in status and pay often requires the performance of other functions. But bedside care is still--to many nurses--"real" nursing.

Nurses are beginning to examine more critically the nature, quality and components of their practice, and are frequently concluding that present patterns need to be altered in order to adequately provide for quality patient care. Several years ago Claire Garron, in the article, "Back to the Bedside" (39), stated,

Nursing's public relations are damaged more and more as patients leave the hospitals saying "the only time I saw an R.N. was when I needed medication."

Sister Vaillot (66) states,

Patients' complaints concern the all-too-rare contacts with nurses, their hurried attitude, their apparent lack of interest in patients' problems.

Margaret-Isabel Gibson (22) wrote,

"I just don't have time." "We are so busy." "We are so short of nurses." These are the complaints. . . . Is there really a shortage of nurses or a shortage of good

nursing care? . . . . How many minutes are wasted or spent on things other than for the benefit of the patient?

Lydia Hall (15) maintains that nurses' talents are being used to compensate for the shortage of other hospital workers. "As a result," the patient has little opportunity to experience professional nursing."

#### Innovations Being Used to Free Nurses for Direct Patient Care

Several serious attempts have been made to discover different patterns of providing for the services which have been impinging upon the nurse's time spent with patients.

The Unit Manager idea has been implemented in many hospitals. Henderson (27) writes,

Where we have seen unit management working it seems to free the nurse. If she truly wants to be at the bedside, her swing away from things and toward the patient appears to be accelerating.

Another method being tried is that of the "expert nurse," clinical specialist, or Nurse-Clinician. Reiter (54) asserts,

Patients benefited not only from the direct care the nurse-clinician gave, but from her informed perception of the care they needed as she passed this on to others. Her methods of giving care provided other nursing personnel with moral leadership and instruction by demonstration. And her own participation in giving care, coupled with the obviously high value she placed on this, gave real status to the provision of direct nursing care.

Dolores Little (47), addressing the American College of Surgeons, proposed that the remedy be the bestowing of status and remuneration upon "nurse specialists" who elect to advance while giving direct patient care,

Our need to get back to the bedside is preached and expounded by many of our para-medical colleagues, as well as ourselves. . . . One way to get there is to eliminate the number of nonprofessional personnel; then we are forced to care for patients. Another way is to give status and recognition and economic reward to the bedside practitioner--a reversal of today's status ladder, where every rung takes you farther from the patient.

The Loeb Center for Nursing and Rehabilitation attached to the Montefiore Hospital and Medical Center in New York has been mentioned. The Center has no doctor in attendance, and is given to the nursing of patients who are past the critical stage of their illness, and whose therapy is provided wholly by nurses, "with the patient," whose wishes for his treatment are heeded, and who is taught about his care as he is cared for. Figures indicate that these patients recover more quickly than those in general hospitals, and stay well for longer periods of time (26).

Walker (50), of Indiana University, sees the solution in producing a nurse who will be a composite of all the best in the old and the best in the new traditions,

Tomorrow will bring a contradictory situation . . . the professional nurse . . . will become more like the old-time nurse to whom many of us dedicate hours of nostalgia, and yet she will be very different from this nurse. She will be concerned with the bed bath, the prevention of pressure sores, the dressing of wounds . . .

but there will be a difference. She will not be less concerned with the biological sciences, but she will be more concerned with the social sciences. She will not be less concerned with psychiatry, but more concerned with the control of infection.

Sister Madeleine C. Vaillot (67) has written about the committed nurse, and the involvement of such a nurse in the concerns of the patient, creating the "I-Thou" relationship, an intimate bond between two persons. As the nurse involves herself in the personal tragedies of her patient, she grows as a person, becomes a fuller being, while at the same time being less concerned with things and more concerned with persons. This alignment of nursing with existential thought, while not to be viewed as a method, is rather the means of releasing the self-potential of nurses to become directly involved with patients.

For the committed nurse, the ability to give of herself for another's benefit . . . is a way of life . . . and her involvement with her patient is but an overflow of her inner plenitude, of her richness of being . . . . instead of "bestowing" her services upon the patient, she shares with him a human experience: he gives her warmth even as she cares for him.

#### Summary of the Literature

Methods of measuring attitudes which relate to this topic were presented, with a discussion of the neutral items appearing in Thurstone scales. A short review was made of the effects of education in general, and of nursing education upon changes in attitudes. The attitudes and values of graduate nurse

practitioners were discussed, and pertinent studies were presented. Remarks upon the relationship between quality of patient care and the nurse's attitude toward giving patient care were reviewed. Several changes in nursing care patterns which are currently being tried, which relieve the nurse of the non-patient care responsibilities were mentioned. A short discussion of nursing commitment as related to the existential themes of philosophy concluded the chapter.



## CHAPTER III

### REPORT OF THE STUDY

#### Design of the Study

The study was undertaken for the purpose of investigating the attitudes of registered nurses toward direct patient care. The study instrument used was the Attitude Scale developed by Sister Louise Marie Vaughan, which elicits attitudes toward direct patient care. The study follows the steps outlined in Chapter One. The limitations and assumptions, as stated in Chapter One, have been the defining propositions of the study. The following hypotheses have been tested. Differences in favorableness toward direct patient care exist between groups of nurses who:

1. practice nursing in varying clinical settings
2. hold diverse hierarchical positions in nursing agencies
3. have dissimilar educational preparation for nursing
4. received their education in different decades
5. do give direct patient care as compared with those who do not give direct patient care

Selection and revision of the study instrument. Following an initial review of the literature, Sister Vaughan's Attitude Scale was selected as being an appropriate data-collecting instrument for the study. The scale had been

devised through the use of the Thurstone technique for scale construction, and was well validated in her study. The reliability was rather low (.66 corrected by Spearman-Brown formula), however suggestions made by Dr. Emma Spaney to the Nursing Research Conference (ANA, New York, April 5-7, 1965) as a means of improving this figure have been incorporated into this study. She suggested using the scale product method (21), which has been done. It consists of the multiplication of the values derived from a Likert-type multiple-choice response to the items of the scale, by the original scale values derived from the placement of the items on an 11 point scale by the 44 nurse judges. Additional comments and suggestions by Dr. Spaney appear in the report of the Conference (4).

Sister Vaughan and the Catholic University of America Press granted permission to use the scale. (See correspondence, Appendix A.) It was then modified in format by placing six response options after each item, as it appears in Appendix B. Six choices were used rather than five in order to avoid the neutral "undecided" response in the center position. The "undecided" response was split into "agree slightly" and "disagree slightly" in order to keep a dichotomy of direction. The 63 items of the scale were all retained in this modified format. It was decided that all of the items would be used, and that an item analysis would be performed in order to discover which of the items were functioning to differentiate the participants with favorable attitudes toward the study variable from those who expressed unfavorable attitudes toward the variable. Edwards and Kilpatrick's technique (19) formed the underlying structure for

the item analysis procedure, with Guilford (24) supplying the formulae and theoretical frame of reference.

The Attitude Scale was retitled an "Opinionnaire" in the final form, as this title is equally acceptable, and seemed to reduce the "test" quality of the scale. This judgment was based upon remarks by Green (23), and upon the remarks which Sister Vaughan addressed to the participants of her study in the instructions she gave them.

A checklist was devised to accompany the Opinionnaire, which collected the information from the study participants about their education, place and type of employment, position, and activity regarding direct patient care. This checklist was discussed in two research classes, and the suggestions made were incorporated into the final format.

Pilot study. Twenty-seven registered nurse students at the University of Oregon School of Nursing participated in the pilot study. Several of them expressed difficulty in marking responses to the items in which a double negative was formed by the combination of the original statement and the "disagree" responses. However, all of the nurses completed the Opinionnaire in the modified format, and it was decided to retain the Opinionnaire in that form for the study. Computation of the scale product values proved to be feasible. No data obtained in the pilot study were used in the final study.

Selection of the study population. Five hundred names of registered professional nurses were selected at random from a listing of nurses in the

Portland, Oregon metropolitan area. The list was obtained from the District One Office of the Oregon Nurses' Association. The list consisted of confirmed current addresses and professional information for all nurses who had responded to a survey made the previous year by that office. (The listings of nurses at the State Board of Nursing were not available at the time of the study due to license renewal activity.) Nurses who were currently employed full or part time and who were not instructors of nursing were placed on the list. Five hundred names were desired in order to assure that groups of nurses would be large enough to test statistically.

Procedure for collecting data. Five hundred Opinionnaires were printed and assembled. They were mailed to the five hundred nurses whose names had been selected for the study, with an envelope provided for the return of the completed form. During the five-week period following this mailing, three hundred eighty-five Opinionnaires were returned, as follows:

Opinionnaires returned unused:	8
Opinionnaires used, one page blank or omitted 10 or more items:	30
Opinionnaires returned late (after 5 weeks):	8
Opinionnaires returned, nurse unemployed:	6
Opinionnaires returned, nurse instructor:	6
Opinionnaires complete, usable for the study:	327

Procedure for scoring the data. The Opinionnaire items were scored by the scale product method described by Eysenck and Crown (21), in which the original Thurstone scale values are multiplied by the values 1-6 attached to the multiple response categories. (Likert, Eysenck and Crown and others use the values 0-5 for the values of the responses, however the multiplication by a zero cancelled out the scale score for the lowest response. For this reason values 1 through 6 were adopted.) The greatest value, six, is assigned to the "disagree strongly" response on the negative items (first half of the test, items 1 through 32) and to the "agree strongly" response on the positive items (last half of the scale, items 33-63). Thus the neutral items (those with a scale value of 6), numbers 27 through 37, are divided in the two scoring directions. These decisions are based upon the Edwards and Kilpatrick technique (19) and upon the responses of the nurses in the pilot study.

The scale values in the Vaughan Scale are derived from the placement of 257 opinion statements into 11 equal-appearing intervals by 44 nurse judges. The items on which the judges showed the greatest agreement (lowest Q-values) were retained in the present scale by Sister Vaughan. The scale values are an averaging of the positions to which the judges assigned the items. These range from 1.647 to 11.371 (see the Appendix C.) Thus when they are multiplied by the 1 to 6 values of the responses in this study, item scores range from  $1 \times 1.647 = 1.647$  through  $6 \times 11.371 = 68.226$ . Where an occasional item was omitted, it was assigned a value of 3.5, the theoretically neutral midpoint between

0.5 and 6.5. (This does not assume that the participants' attitude for the item was neutral.) Item scores were summed to produce the final score for the individual, as in Likert's procedure. Test scores ranged from 1544.735 to 2273.474. These computations were carried out by IBM computer of the 1401 series.

The study participants were assigned to groups according to their type of education, decade of education, clinical practice, position held, and professional activity (does or does not give direct patient care). A mean and standard deviation were calculated for all groups. Differences between the means were tested for significance by the "t" test. The data from the study form a roughly normal distribution, which supports the use of "t." (The formula for the "t" test appears in Appendix E.) The values for "t" are interpreted on a probability table according to degrees of freedom ( $N_1 - 1 + N_2 - 1$ ). A probability of .05 indicates that in 95 out of one hundred chances a real difference exists between the two groups on the variable under study. A probability of .01 means that in 99 out of one hundred chances a real difference exists. A probability of .001 shows the same condition in 999 out of one thousand chances.

The study participants. The 327 participants in the study were grouped by type of clinical practice as follows:

Nurses who work in medical units	38
Nurses who work in surgical units (includes surgical (38), urology (4), orthopedics (12), ophthalmology (1), recovery rooms (1) and emergency surgeries (3), hemodialysis (1)	55
Nurses who work in pediatric units	12

Nurses who work in operating rooms	23
Nurses who work in obstetrical services	21
Nurses who work in mixed units, "float" assignments, who supervise several units, or who designated only "hospital"	67
Nurses who work on psychiatric units	4
Nurses who perform intravenous therapy	3*
Nurse who works in a Central Supply service	1*
Nurses who work in a Nursing Home	22
Public Health and school nurses (3)	30
Industrial Nurses	10
Office and Clinic Nurses	34
Private Duty Nurses	6
Research assistant	1*

\*Those nurses whose clinical groups were too small to be tested were included in the designation, Total hospital-based nurses, of which there were 225.

Four nurses held the Master's Degree, and of these, three were public health nurses, and one was an administrator. Ninety-three nurses held the baccalaureate degree, two hundred twenty-two were graduates of hospital diploma programs and five were graduates of an Associate degree program.

Of the nurses who designated the position they hold, one hundred sixty-one indicated the staff nurse position, 78 indicated that they were head nurses or "charge" nurses, and 50 indicated that they were either supervisors or

administrators. Some nurses held positions in which these designations did not apply.

Two hundred twenty nurses were employed full time, and one hundred seven were employed in part-time positions.

Two hundred fifty nurses stated that they give direct patient care in their professional activity, while seventy-five nurses indicated that they do not give direct patient care. Two nurses did not reply to this question.

#### Findings of the Study

General information. This study was undertaken to discover the favorableness of nurses toward direct patient care. The favorableness that the study participants feel toward direct patient care has been judged by the amount of agreement which they expressed with the 63 statements which comprise the Attitude Scale (Opinionnaire) which served as the data-collecting instrument for the study. Each item of the scale has a value which was gained through a Thurstone judging procedure, as described in Chapter II. The scale values are reproduced in Appendix C.

The items were placed in a Likert-type response format, which allowed the study participants a choice between six possible responses, and which were assigned values one through six depending upon their direction and degree of favorableness with direct patient care. These values were multiplied by the Thurstone scale values to produce the item score. These products were multiplied



to three decimal places, as the scale scores appear in three decimal places. It may be added that this gives an appearance of great exactness, which some authors agree is not warranted in the measurement of attitudes. All statistical calculations were performed with the scores bearing three decimal places.

Table one contains a breakdown of the nurse participants' scores into intervals of 100. The scores are presented here in whole numbers. The lowest score obtained in the study was 1544, and the highest score obtained in the study was 2273.

Table 1: The Range of Final Scores of the Study Participants by Score Intervals of 100

Interval	Frequency of Scores in the Interval	Percentage of Scores in the Interval
1544-1599	6	1.8%
1600-1699	12	3.7%
1700-1799	37	11.4%
1800-1899	88	27 %
1900-1999	89	27.4%
2000-2099	59	18.1%
2100-2199	26	8 %
2200-2273	8	2.4%

The mean of the scores was 1923.37, and the standard deviation 138.5. One hundred sixty-eight scores were below the mean, and 157 were above the mean. The median score was 1918. Figure one demonstrates the distribution of scores by standard deviations from the mean.

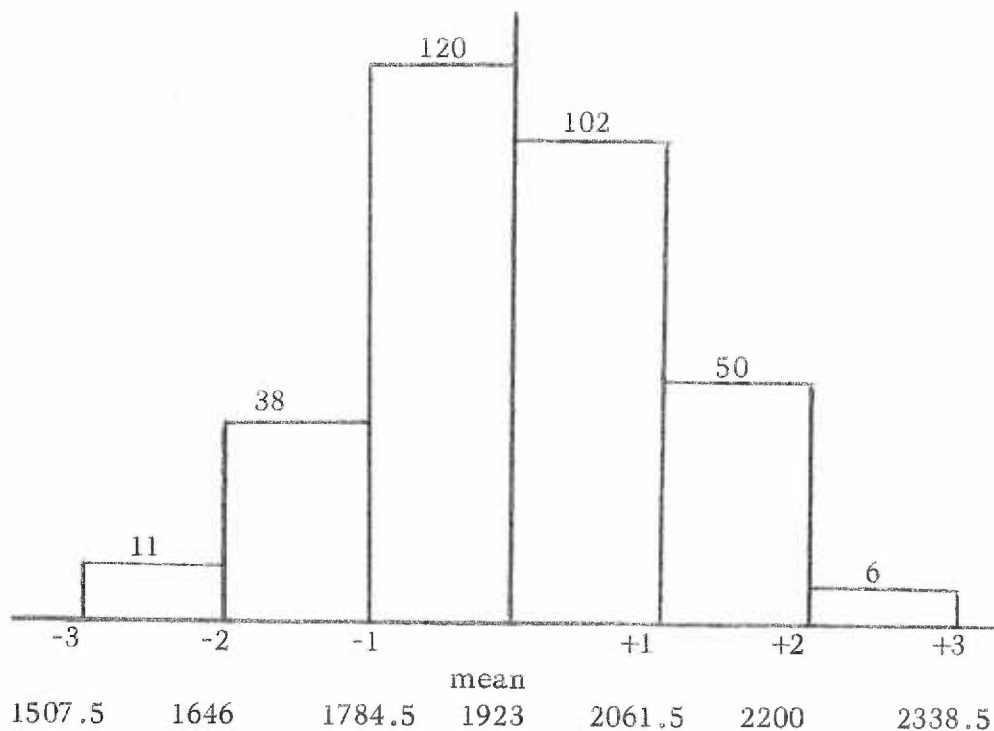


Figure 1. Distribution of 327 Test Scores of the Study Participants on the Vaughan Attitude Scale Measuring Attitudes Toward Direct Patient Care, Obtained by the Scale Product Method

Differences among the nurses by type of education. The four levels of education among the nurses were the Associate degree, Baccalaureate degree, the Master's degree, and hospital diploma. Two nurses indicated that they had taken "refresher" courses. One reported that she is working toward the Baccalaureate degree. The most recent nursing education of a credit-bearing

nature was counted as the "decade of most recent education." It is rather widely assumed that attitudes are affected by education, and the division of education into ten-year periods takes into account that there have been changing emphases in nursing education during these time periods. It also infers some indirect information about the relative age of the participants.

Two nurses reported baccalaureate degrees in a major other than nursing, one in economics, another unspecified. Fourteen nurses report college or university courses in addition to their basic program. Four nurses held post-graduate "diplomas" in obstetrics or midwifery. Two nurse anesthetists had taken courses in anaesthesiology. Seven nurses reported having attended special courses through inservice facilities such as intensive care, coronary care, public health and other unspecified workshops. Table two summarizes this information.

Table 2. Education Reported by Study Participants in Addition to the Basic Nursing Program

Baccalaureate Degree other than nursing		2
College or university courses		14
"Post-graduate" certificates	Obstetrics	3
	Midwifery	1
	Public Health	1
	Anaesthesiology	2
Inservice courses and workshops		7
"Refresher" courses		<u>2</u>
		32

The nurses were divided into four groups according to their basic nursing education, or if additional degrees had been earned, then by the highest credential held in nursing. Of these four levels, the Master's degree group obtained the highest mean score, 1978. Those holding the Bachelor's degree had a mean score of 1951. Diploma graduates, the largest group, received a mean score of 1912, and the five Associate degree graduates obtained 1868 as a mean score.

Table 3. Information Concerning the Scores of 324 Nurses by Type of Education

Credential	N	Mean	Range	S.D.
Associate Degree	5	1868	1781-1989	82.5
Diploma	222	1912	1544-2205	136.5
Baccalaureate Degree	93	1951	1573-2273	141.1
Master's Degree	4	1978	1807-2083	107.5

The Baccalaureate degree and Associate degree groups were found to differ significantly ( $p=.05$ ), although the results must be interpreted cautiously as the Associate Degree group is too small to yield results which can be interpreted with confidence. The nurses holding the Baccalaureate degree differed significantly from the nurses holding hospital diplomas ( $p=.05$ ). This result is based upon large groups, and although the means are not as widely separated as several of the others, the conclusion can be drawn that there is a difference between graduates of these two types of programs in favorableness expressed toward direct patient care.

A large mean difference was obtained between the Master's Degree group and the Diploma and Associate Degree groups; however, the extremely small size of the sample made it impossible to compare them adequately. The Baccalaureate and Master's Degree groups showed the least difference between the means.

Figure two illustrates the mean scores of the educational groups represented in the study.

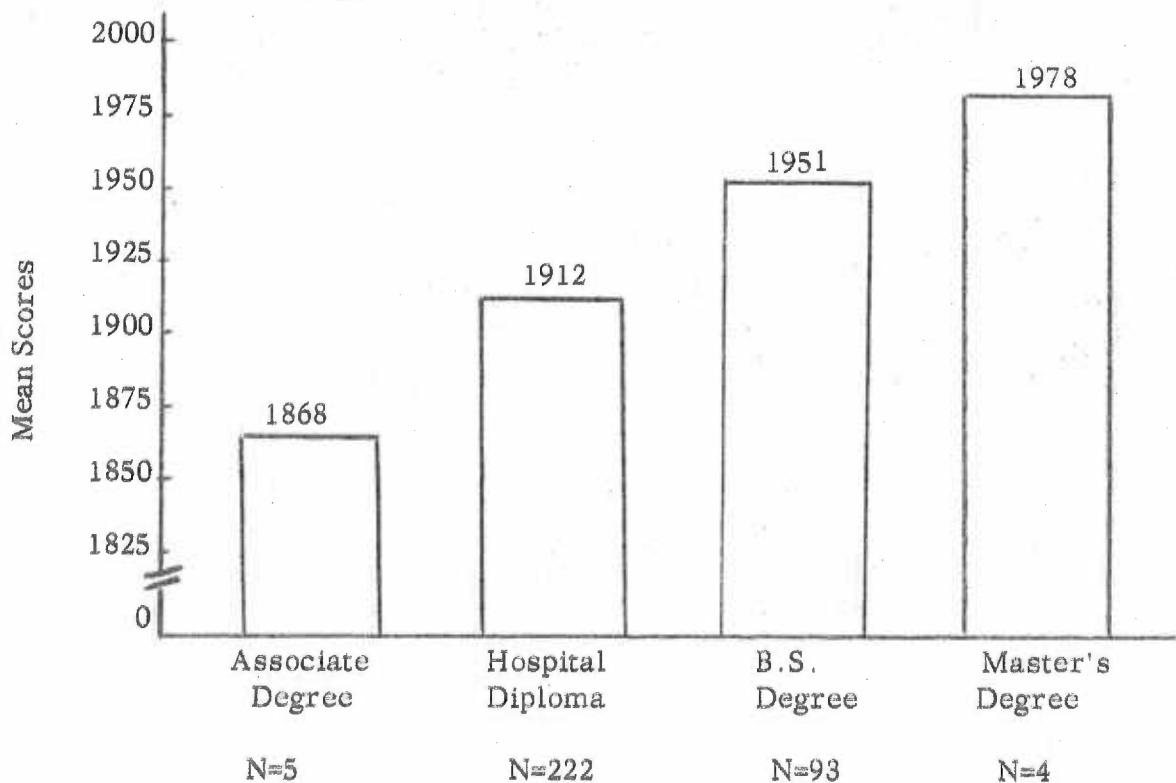


Figure 2. Comparison of the Mean Scores of Nurse Participants Toward Direct Patient Care by Type of Education

Table four compares the scale values of nurses by educational preparation for nursing, the mean differences, "t" scores, and the significance levels of the results of the "t" tests. (The formula used for computing "t" is given in Appendix E.)

Table 4. A Comparison of Differences in Score Values For Nurses On an Attitude Scale Measuring Favorableness Toward Direct Patient Care in Relation to Type of Education

Types of Education Compared	Sample N	df	$M_1 - M_2$	t	significance
Associate Degree - Diploma	5	225*	47.046	1.113	ns
Associate Degree - Baccalaureate	5	96	83.01	2.013	.05
Associate Degree - Master's Degree	5	7	109.68	1.470	ns
Baccalaureate Degree - Diploma	93	230*	39.96	2.249	.05
Baccalaureate Degree - Master's Degree	93	4	26.67	.418	ns
Diploma - Master's Degree	222	4	66.634	1.062	ns

\*at this level, "t" becomes a critical ratio.

Differences among the nurses by decade of education. Several differences were demonstrated among the groups by decade of education. The nurses in the 1930-39 group gained the lowest mean score, thus a difference between this group and the nurses educated since 1960 occurred at the  $p = .001$  level, and between them and the 1950-59 graduates at the  $p = .05$  level.

The 1920-29 graduates had the next higher mean, and these nurses differed from the 1960 and later group at a  $p = .1$ , which is below accepted significance levels, possibly due to the small N of this group.

The 1940-49 group differed from the 1960 and later group at a  $p = .001$ . The 1950-59 group differed from the 1960 and later group at a  $p = .02$  (higher than .05 but lower than .01).

These figures show that some differences of a significant character exist among the study participants in attitude toward direct patient care when they are grouped according to decade of education. That this difference reflects a difference of educational philosophy of their nursing education cannot be fully implied. This may be simply a demonstration of the differences in attitude of the age groups involved. Condon, in her thesis (14) using the same attitude tool, concluded that similar differences demonstrated that the age of the nurse influences the attitude toward direct patient care, i.e., the older the nurse, the less positive the attitude. Thus, the difference demonstrated may be and probably is, the result of a combination of factors, and cannot be attributed to either age or decade of education without more investigation.

Figure three illustrates the mean scores of the study participants divided into groups according to the decade of most recent nursing education. The significance of the difference between the means has been indicated below the graph.

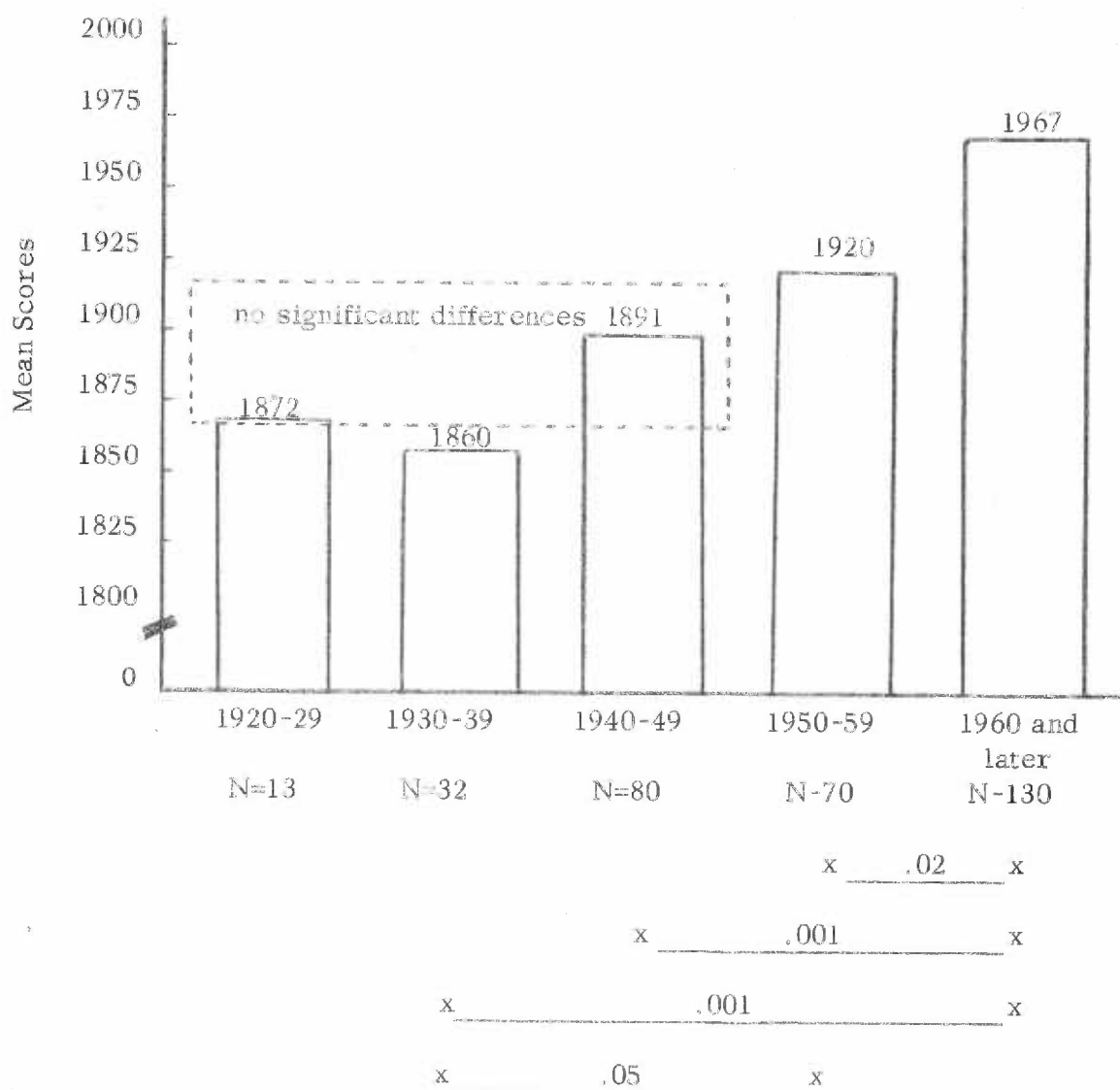


Figure 3. Comparison of the Mean Scores and the Significant Differences of the Nurse Participants Toward Direct Patient Care by Decade of Education



Table five presents the means, differences between the means, the scores of the "t" tests and their significance for the nurses when compared by groups according to the decade in which their most recent education for nursing occurred.

Table 5. A Comparison of Differences in Score Values For Nurses On an Attitude Scale Measuring Favorableness Toward Direct Patient Care in Relation to Period of Education

Decade of Most Recent Education Compared	Sample		df	$M_1 - M_2$	t	significance
	N	N				
1920-1929 with 1930-1939	13	32	43	11.25	.246	ns
1920-1929 with 1940-1949	13	80	91	19.52	.379	ns
1920-1929 with 1950-1959	13	70	81	48.6	.930	ns
1920-1929 with 1960 and after	13	130	141*	95.56	1.877	.1
1930-1939 with 1940-1949	32	80	110	30.77	1.083	ns
1930-1939 with 1950-1959	32	70	110	59.84	2.007	.05
1930-1939 with 1960 and after	32	130	160*	106.817	3.879	.001
1940-1949 with 1950-1959	80	70	148*	29.071	.738	ns
1940-1949 with 1960 and after	80	130	208*	76.042	4.288	.001
1950-1959 with 1960 and after	70	130	198*	46.971	2.353	.02

\*at this level "t" becomes a critical ratio.

Differences among nurses by clinical practice. It has been found in several studies that differences exist among nurses in carrying clinical practice settings. Lentz and Michael's studies (31, 32, 33) have established the "task" and "person" orientations of the surgical, medical and psychiatric nurses. Raskin, Baruchow and Golob's extensive testing of nurses (53) corroborated the previous studies. They concluded that nurses with an inability to sustain warm interpersonal relationships with patients are more apt to become task orientated, and a greater number of these persons appear to be among the surgical group. Molde (44) further investigated this hypothesis with the analysis of the interview characteristics of surgical and psychiatric nurses. Lukens (36) made an extensive personality investigation of a group of registered nurse graduate students in medical-surgical and psychiatric clinical specializations, and found distinct differences between them in needs, values, authoritarianism, emotional patterns, and background knowledge.

In the present study nurses were divided into groups according to their present type of clinical nursing practice. This in no way assumes that this is the type of work that they most prefer, nor that they are habitually employed in this field. "T" tests were significant in some instances. Several of the differences which were found include groups with an extremely small N, which cannot be used as conclusive evidence of these differences, but may offer an indication of trends. The public health group (N=30) demonstrated the highest mean score (2006), followed by nurses who work on Pediatric units (N=12),

mean 1971). Private Duty nurses obtained a mean score of 1955, however only 6 nurses are in the group. The large group of nurses on mixed services (N=67) gained a mean score of 1950. The composition of this group is stipulated later. Office nurses scored quite high, with a mean of 1947. These five groups form an upper population which are similar in favorableness toward direct patient care. There are no statistical differences among them.

Two groups are fairly low, the Medical group with a mean of 1851 (N=38) and the Obstetrical nurses, with a mean of 1863 (N=21). These may be said to form a single population with regard to the study variable.

A number of groups can be said to hold moderately favorable attitudes toward direct patient care as indicated by the means of these groups:

Industrial Nurses (N=10)	1895
Surgical Nurses (N=55)	1902
Nursing Home Nurses (N=22)	1903
Psychiatric Nurses (N=4)	1905
Operating Room Nurses (N=23)	1913

A group including all hospital-based nurses (N=225) shows a mean score of 1912, comparing to the above groupings. No statistical differences were found between the above groups of nurses.

The large Mixed services group (N=67) was thus designated because Lentz and Michaels (33) found that a similar group scored lowest in nurse-patient relations and in technical care. Thus all persons who indicated that they worked

on mixed wards, undesignated wards, float assignments, or who supervised several wards were placed in this group. The very high mean (1950) caused question, so the group was further analyzed in the following manner:

	<u>Range of Scores</u>	<u>Mean</u>
Intensive care unit nurses (N=7)	1834-2089	2003
Supervisors-Administrators (N=26)	1785-2163	1981.8
Staff Nurses, mixed wards and "float" (N=24)	1562-2133	1910.8
Head Nurses (N=13)	1631-2129	1914.7

The intensive care units provide a setting in which nurses are engaged in constant direct patient care, thus it is interesting to note the high mean of this small group. The staff nurses in this mixed group appear to have a low mean, but it is slightly higher than the mean of either the medical or surgical nurse groups in this study, thus the finding appears to disagree with the findings of Lentz and Michaels. The Supervisors and Head Nurse groups are considered elsewhere in an analysis of the entire sample of their positions. The scores and means here show the general trend of the larger groups. The high mean of the Mixed Services group appears to reflect the higher scores of the intensive care and the supervisor-administrator portions of the sample.

The pediatric nurse group scored high in favorableness toward direct patient care and thus demonstrated a difference between themselves and the medical ( $p=.01$ ), obstetrical nurses ( $p=.05$ ), and the psychiatric nurses ( $p=.1$ ).

The private duty nurse group (N=6) obtained a mean score high enough to produce a difference between themselves and the psychiatric nurses ( $p=.05$ ), medical nurses ( $p=.001$ ), surgical nurses ( $p=.05$ ), and the obstetrical nurses ( $p=.01$ ) despite the extremely small size of the group.

Differences were demonstrated between the public health nurses and the following groups: all hospital nurses  $p=.01$ , industrial nurses  $p=.01$ , nursing home nurses  $p=.01$ .

Some comment is offered regarding the low means of the medical and psychiatric nurses in view of the fact that the definition used in the study for direct patient care (and printed for the study participants in their instructions) contains a definite element of the patient-centered philosophy of nursing. As was noted earlier, these two groups are considered to be more "person oriented" than other groups of nurses. It is possible that this particular sample of nurses is less person centered than previous samples of medical nurses. It is also possible that some element in the scale is operating against the person-centeredness factor.

Figure four summarizes the information about the mean scores obtained by the clinical practice groups of nurses. Additional information about the tests for significance is presented in Table six.

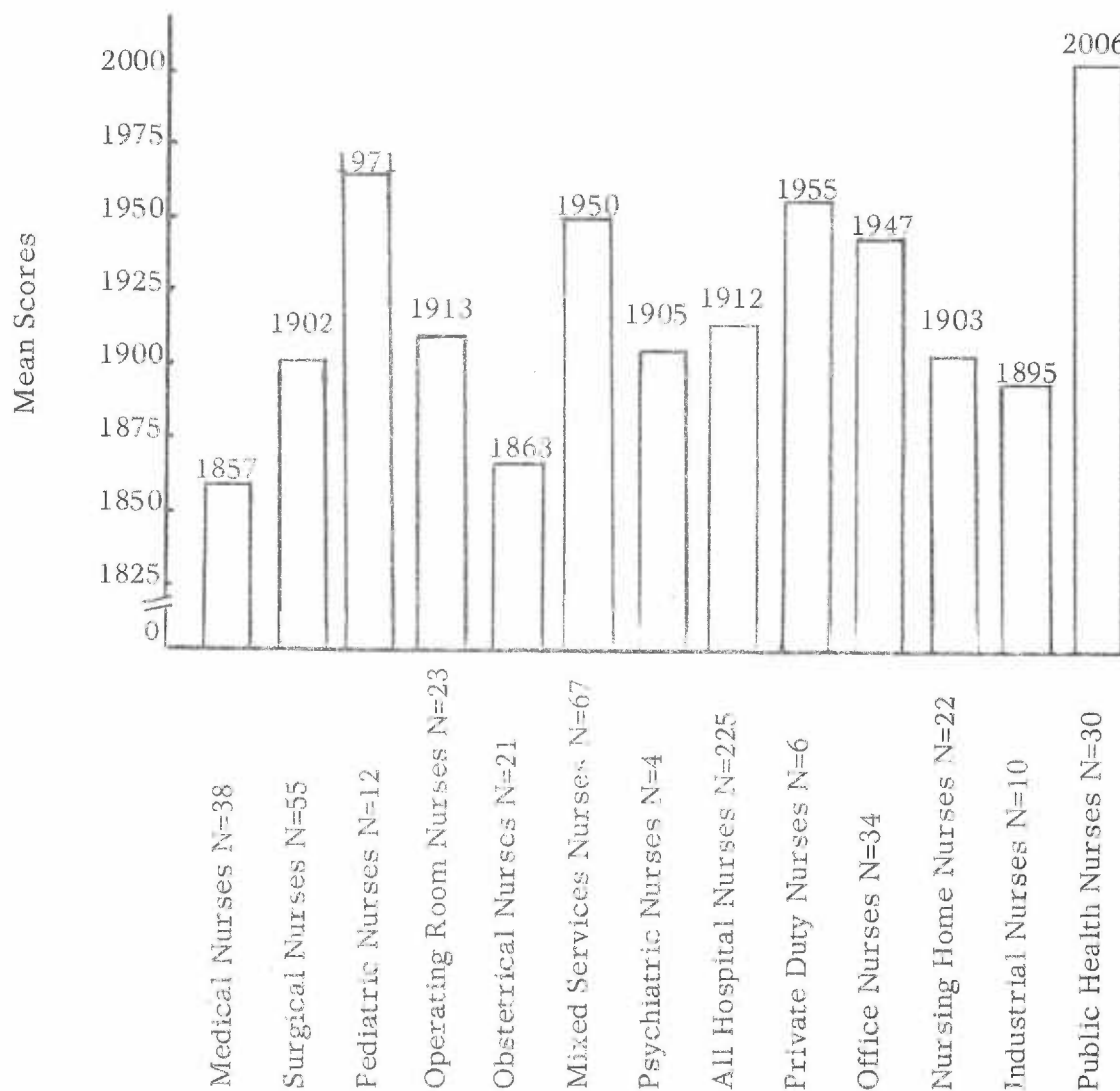


Figure 4. Comparison of the Mean Scores of the Nurse Participants Toward Direct Patient Care by Clinical Practice

Table six presents a compilation of the information about the tests for significance performed with the mean scores of the study participants grouped according to their present field of clinical practice.

Table 6. A Comparison of Differences in Score Values For Nurses On an Attitude Scale Measuring Favorableness Toward Direct Patient Care in Relation to Clinical Practice of the Nurse

Clinical Practice Groups Compared	Sample		df	M <sub>1</sub> - M <sub>2</sub>	t	significance
	N	N				
Medical Nurses - Surgical Nurses	38	55	91	51.262	1.836	.1
Medical Nurses - Pediatric Nurses	38	12	48	113.895	2.815	.01
Medical Nurses - Operating Room Nurses	38	23	59	56.094	1.348	ns
Medical Nurses - Obstetrical Nurses	38	21	57	6.202	.178	ns
Medical Nurses - Mixed Units and Undesignated Services	38	67	103	92.961	3.303	.01
Medical Nurses - Psychiatric Nurses	38	4	40	48.589	1.846	ns
Medical Nurses - Private Duty Nurses	38	6	42	97.764	3.602	.001
Surgical Nurses - Pediatric Nurses	55	12	65	62.633	1.714	ns
Surgical Nurses - Operating Room Nurses	55	23	76	4.832	.127	ns
Surgical Nurses - Obstetrical Nurses	55	21	74	45.06	1.499	ns
Surgical Nurses - Mixed Services Nurses	55	67	120*	41.699	1.883	.1

(continued on next page)



Table 6. (continued)

Clinical Practice Groups Compared	Sample			M <sub>1</sub> - M <sub>2</sub>	t	significance
	N	df	N			
Surgical Nurses - Psychiatric Nurses	55	4	57	3.327	.135	ns
Surgical Nurses - Private Duty Nurses	55	6	59	46.612	2.230	.05
Pediatric Nurses - Operating Room Nurses	12	23	33	57.801	1.611	ns
Pediatric Nurses - Mixed or Undesignated	12	67	77	20.934	.554	ns
Pediatric Nurses - Obstetrical Nurses	12	21	31	107.693	2.567	.05
Pediatric Nurses - Psychiatric Nurses	12	4	14	65.306	1.848	.1
Pediatric Nurses - Private Duty Nurses	12	6	16	16.021	.044	ns
Operating Room Nurses - Obstetrical Nurses	23	21	42	49.882	1.158	ns
Operating Room Nurses - Mixed Services	23	67	89	36.887	.970	ns
Operating Room Nurses - Psychiatric Nurses	23	4	25	7.505	.208	ns
Operating Room Nurses - Private Duty Nurses	23	6	27	31.780	.562	ns

(continued on next page)

Table 6. (continued)

Clinical Practice Groups Compared	Sample		df	M <sub>1</sub> - M <sub>2</sub>	t	significance
	N	N				
Obstetrical Nurses - Mixed Services	21	67	86	86.759	2.868	.01
Obstetrical Nurses - Psychiatric Nurses	21	4	23	42.672	1.483	ns
Obstetrical Nurses - Private Duty Nurses	21	6	25	91.672	3.122	.01
Mixed Services - Psychiatric Nurses	67	4	69	44.372	2.209	.05
Mixed Services - Private Duty Nurses	67	6	71	4.913	.231	ns
Private Duty Nurses - Psychiatric Nurses	6	4	8	49.285	2.635	.05
All Hospital Nurses** - Office Nurses	225	34	257*	35.142	1.689	ns
All Hospital Nurses** - Nursing Home Nurses	225	22	245*	8.473	.318	ns
All Hospital Nurses** - Industrial Nurses	225	10	233*	16.939	.398	ns
All Hospital Nurses** - Public Health Nurses	225	30	253*	94.537	3.248	.01
Office Nurses - Nursing Home Nurses	34	22	54	43.615	1.402	ns
Office Nurses - Industrial Nurses	34	10	42	52.081	1.604	ns

(concluded on next page)

Table 6. (concluded)

Clinical Practice Groups Compared	Sample		df	M <sub>1</sub> - M <sub>2</sub>	t	significance
	N	N				
Office Nurses - Public Health Nurses	34	30	62	59.395	1.785	.1
Nursing Home Nurses - Industrial Nurses	22	10	30	8.466	.235	ns
Nursing Home Nurses - Public Health Nurses	22	30	50	103.10	2.773	.01
Industrial Nurses - Public Health Nurses	10	30	38	111.476	2.949	.01

\*at this level, "t" becomes a critical ratio.

\*\*excludes Private Duty Nurses

Differences among the nurses by position. The nurses were re-categorized according to the hierarchical positions which they held in nursing agencies where these designations applied. No statistical difference was found between staff nurses and head nurses, the means of the two groups being very close. The supervisor-administrator group differed from both the head nurse and staff nurse groups. Thus the hypothesis that a difference in favorableness toward direct patient care exists between nurses who hold diverse hierarchical positions in nursing agencies is substantiated. No assumption is made as to the reason for this difference. However, it is to be noted that the nurses holding positions which are more closely related to the administration of patient care are less favorable in their attitudes than those who, by virtue of their positions, are less involved with direct patient care.

Differences among the nurses by patient care activity. No difference was demonstrated between the group of nurses who indicated that they give direct patient care and those who indicated that they do not give such care. The majority of nurses indicated that they give some care, although some indicated "rarely," "sometimes," "occasionally," and similar qualifications of the statement. Thus the hypothesis that the nurse's attitude toward direct patient care will influence whether or not she gives such care is rejected. Since no observation was undertaken to determine the quality of care, nor the frequency with which it is administered, no conclusions may be drawn in this area.

Figure five shows the relationship of the three groups of nurses whose activities within nursing agencies were such that they were included in the groups designated as staff nurses, head nurses, and supervisors-administrators. The mean scores of these groups are shown here. Included in this figure is a comparison of the mean scores of the nurses who give direct patient care with the mean score of those nurses who do not give direct patient care in their practice.

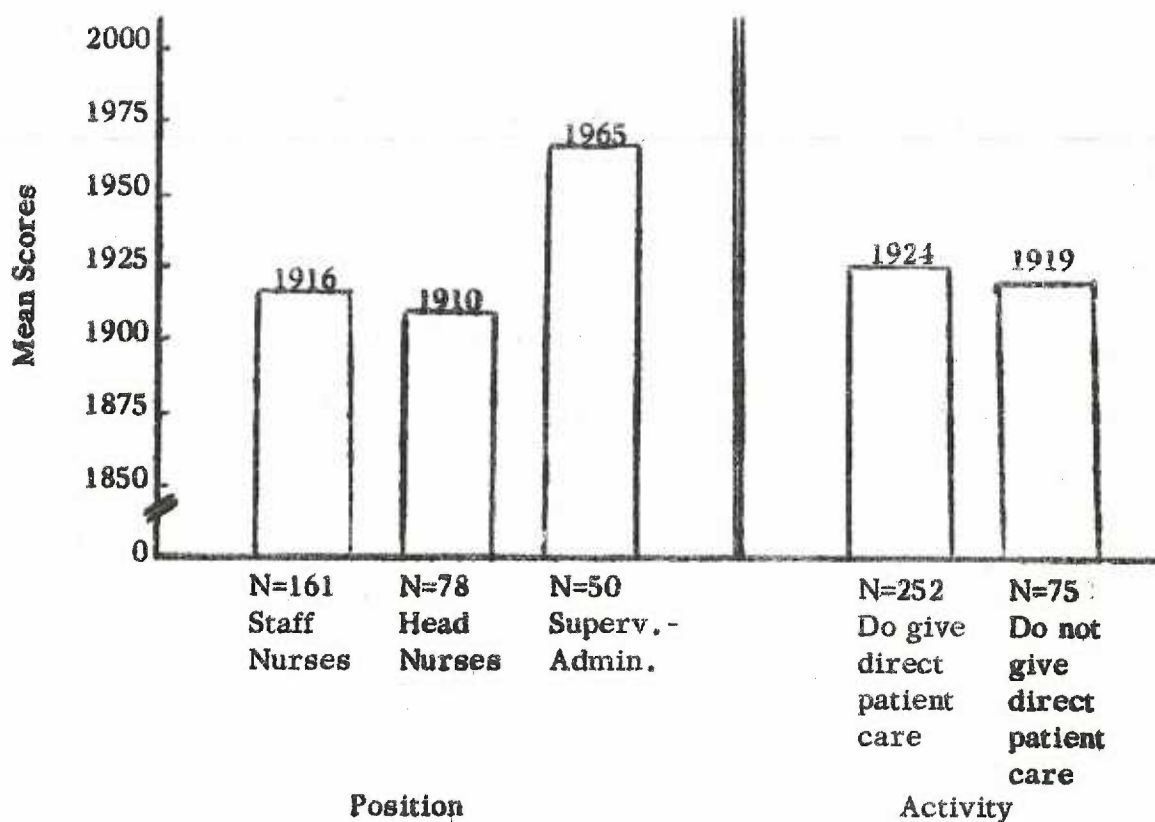


Figure 5. Comparison of the Mean Scores of Nurse Participants Toward Direct Patient Care by Position and by Activity

Table seven is a compilation of the data about the means of the groups made by comparison of the positions held by the participating nurses. Included in the table are the differences between the means, the "t" tests and the significance levels of these tests. The second portion of the table presents information about the comparison of the nurses who stated that they give direct patient care, with those nurses who stated that they do not give direct patient care.

Table 7. A Comparison of Differences in Score Values For Nurses On an Attitude Scale Measuring Favorableness Toward Direct Patient Care in Relation to Position and Activity

Positions Compared	Sample				t	significance
	N	df	$M_1 - M_2$	t		
Staff Nurse - Head Nurse	161	78	5.917	.300	ns	
Staff Nurse - Supervisor or Administrator	161	50	49.510	2.63	.01	
Head Nurse - Supervisor or Administrator	78	50	55.427	2.55	.02	
Nurses who give direct patient care compared with nurses who do NOT give direct care	250	75	4.419	.219	ns	

\*at this level "t" becomes a critical ratio.

Comments on the use of the scale-product method. The rather wide spread of scores in this study with the use of the scale product method lends support to the use of this method, despite the additional computations required. Studies which have utilized the Vaughan Scale with the Thurstone scoring method, where the median score is taken as representative of the participant's attitude, appear to have found a clumping of the means of medians in the 9.00 to 11.00 range, depending upon a few decimal places to demonstrate differences in attitude. The present method spreads the scores by allowing the respondents a latitude of choice of both direction and degree, and then increases this difference by incorporating the combined judgments of experts who have ranked the statements. The scores are thus weighted values. The disadvantage to this method seems to be that the scores in the latter half of the scale contribute a greater weight to the total score than the scores in the first portion, due to the progressive scale values.

#### Reliability Information

In the original project by Sister Louise Marie Vaughan, the reliability of this Attitude Scale was computed with the Pearson  $r$ , and yielded a coefficient of .49 as an indication of the correlation of the odd-even items of the scale. This was corrected with the Spearman-Brown formula to .66 for the whole test reliability. Suggestions made by Dr. Spaney at the American Nurses' Association Research Conference (1965) that the scale be used with the scale product method in order to achieve a more favorable reliability have been carried out in this study.



Correlation was computed in the present study on the half tests by IBM Computer, which yielded the coefficient .906. This was corrected by the Spearman-Brown formula to .949 or .95 for the whole test. This improvement in the reliability of the test greatly enhances the use of this instrument for future research and in employment or other nursing situations.

#### Item Analysis Information

The Attitude Scale developed by Sister Louise Marie Vaughan which served as the data-collecting instrument for this study is relatively new, and holds promise of being further developed for use in nursing agencies and research. Item analysis has been undertaken in this study to assist those who will be working with the development of the scale. Sister Vaughan recommended that such a procedure be done (65). Since the population of the present study was large enough to warrant undertaking this additional step, the analysis was carried out.

The phi-coefficient has been used as the basis for determining the relative power of the items to discriminate between those respondents having favorable attitudes, and those having less favorable attitudes toward the study variable, direct patient care. The use of the phi coefficient is recommended by Edwards and Kilpatrick (19) as an appropriate procedure to be followed in selecting the items which discriminate most effectively. The formula used was obtained from Guilford (24), and is reproduced in Appendix E.

Guilford (24) defends the use of the phi coefficient as an item analysis procedure with the following:

The use of the phi coefficient in item analysis when the criterion is a continuous variable needs some defense. The point bi-serial  $r$  is the most appropriate coefficient to use for a realistic indication of item-criterion correlation. If  $r_{phi}$  is the coefficient we want, a phi coefficient errs by being systematically too small, when the dichotomy is of the upper and lower halves. Under the same conditions, both  $r_b$  (biserial correlation) and  $r_t$  (tetrachoric correlation) are systematically too large, and hence err in the opposite direction . . . .

One advantage of phi is that no assumption need be made concerning the form of score distribution. Another advantage is that the tail proportions can be almost anything one desires-- .5N, .33N, .27N, .25N, and so on. This makes it possible to use the same abac, regardless of the number examined, provided N is not less than 200. The more of the middle of the distribution excluded, the larger phi becomes; consequently coefficients of this kind cannot be directly compared unless they come from the use of the same tail proportions . . . .

In the following analysis, 100 persons were used in the upper and lower groups, as Guilford suggests, which facilitates obtaining the proportion. This places 32% of the group into the tails of the phi computations. The responses of the participants were divided arbitrarily, with the 5-6 value responses being assigned to the "passing" category, and the 1-2-3-4 responses remaining as the "non-passing" category. Since the values are assigned to the items in two scoring directions, items 1-32 have the 5-6 value attached to the "disagree" and the "strongly disagree" responses, and items 33-63 have the 5-6 values attached to the "agree" and "agree strongly" responses. This item analysis thus

differentiates between the responses showing a greater amount of affect in the direction of the study variable, and the more neutral and negative responses.

Table eight is a compilation of the item analysis information. Since the upper and lower scoring groups were of 100 persons each, the figures given are the frequencies with which they responded to the answers bearing a five or six value. (Refer to the explanation of these values, page 44.)

The phi coefficient represents a statistical comparison of these frequencies. The larger the coefficient, the better was the discriminatory power of the item with this sample of nurses.

Table 8. The Proportion of Respondents in the Upper and Lower Groups of 100 Who Obtained 5-6 Value Scores, With Phi Coefficients

	Number in top scoring 100 participants who answered "disagree" (5) or "disagree strongly" (6)	Number in low scoring 100 participants who answered "disagree" (5) or "disagree strongly" (6)	Phi coefficient
1. The fears of most patients are ridiculous.	94	82	.18
2. Bedside nursing is ideal for nurses who do not intend to contribute substantially to modern nursing.	92	78	.19
3. Movements to keep the professional nurse at the bedside should be restricted.	87	65	.26
4. The average nurse should not be expected to develop insight into human behavior.	100	89	.24
5. Checking narcotics and stock drugs is one of my favorite responsibilities.	77	66	.12
6. I function best in the chart room and medication room.	76	54	.23
7. I spend time in the patient's room only when I have a specific task to do.	88	66	.26

(continued on next page)

Table 8. (continued)

	Number in top scoring 100 participants who answered "disagree" (5) or "disagree strongly" (6)	Number in low scoring 100 participants who answered "disagree" (5) or "disagree strongly" (6)	Phi coefficient
8. Graduate nurses should not be expected to give general a. m. care.	82	62	.22
9. Most bedside nursing can be done by aides and orderlies.	53	34	.19
10. Teaching the patient holds no particular interest for me.	96	73	.31
11. Nurse-patient relationships are being over-emphasized.	94	75	.26
12. Care of equipment is one of my primary concerns.	57	43	.14
13. I do not agree with the concepts regarding the therapeutic use of self.	73	36	.35
14. Too much emphasis is placed on human relations in the contemporary nursing curriculum.	86	63	.26
15. Usually the patient cannot contribute to his plan of care.	87	58	.35

(continued on next page)

Table 8. (continued)

	Number in top scoring 100 participants who answered "disagree" (5) or "disagree strongly" (6)	Number in low scoring 100 participants who answered "disagree" (5) or "disagree strongly" (6)	Phi coefficient
16. Nurses educated according to the functional plan of patient care should not be expected to change.	89	71	.22
17. I prefer checking doctor's orders to giving the patient a bath.	54	24	.32
18. The importance of nursing care plans has been overstressed.	78	45	.34
19. Too many patients expect the nurse to spend extra time with them.	72	42	.30
20. I like functional nursing when I am responsible for the medications.	42	18	.26
21. Patients' relatives are frequently a nuisance in the hospital.	49	17	.32
22. I think that scheduled hours for visitation should be strictly enforced.	58	23	.36
23. I find it difficult to be tolerant of a patient who disobeys a doctor's order for bedrest.	40	18	.23

(continued on next page)

Table 8. (continued)

	Number in top scoring 100 participants who answered "disagree" (5) or "disagree strongly" (6)	Number in low scoring 100 participants who answered "disagree" (5) or "disagree strongly" (6)	Phi coefficient
24. Nurses rarely have extra time to spend listening to patients.	36	21	.16
25. I like to be responsible for the same nursing techniques each day.	69	36	.33
26. With early ambulation back rubs are no longer really necessary for caring for most patients.	69	62	.07
27. The head nurse is the best judge of patient care.	53	41	.12
28. I cannot say whether or not I am satisfied with today's nursing care.	55	19	.37
29. It is hard to decide whether today's bedside nursing is good or bad.	50	21	.30
30. Functional nursing has some advantage to contribute to patient care.	7	1	.16
31. Patient centered nursing has some advantages and some disadvantages.	20	3	.23

(continued on next page)

Table 8. (continued)

	Number in top scoring 100 participants who answered "agree" (5) or "agree strongly" (6)	Number in low scoring 100 participants who answered "agree" (5) or "agree strongly" (6)	Phi coefficient
32. Doctors should not correct nurses in front of patients.	3	0	.12
33. Advantages of patients being in wards are greater than dis- advantages.	41	27	.15
34. Professional nurses need to place more emphasis on specialization.	30	17	.15
35. Intercommunication systems in patient care have advantages and disadvantages.	67	69	-.02
36. There seems to be something wrong with patient care today.	58	37	.21
37. Bedside nursing is both satisfy- ing and discouraging.	58	60	-.02
38. Modern hospital equipment has helped to improve bedside nursing.	82	88	-.08
39. A shift from routine visiting hours should be permitted on holidays.	81	45	.36
40. Patients' relatives should be shown respect and deference.	99	78	.33

(continued on next page)



Table 8. (continued)

	Number in top scoring 100 participants who answered "agree" (5) or "agree strongly" (6)	Number in low scoring 100 participants who answered "agree" (5) or "agree strongly" (6)	Phi coefficient
41. I think that nurses have an obligation to make relatives feel welcome in the hospital.	95	69	.34
42. Nurses should take more interest in the patient's family.	89	39	.52
43. I enjoy interpreting community resources to the patient.	80	38	.43
44. I appreciate knowing the patient's family.	98	58	.49
45. The patient's opinion of his care should be considered.	99	73	.38
46. I like to anticipate the wishes of the aphasic patient.	90	61	.33
47. Nurses should try to analyze the needs of the crying patient.	97	86	.05
48. I like to assist the patient who is having difficulty at home to get in touch with the social worker.	88	42	.49

(continued on next page)

Table 8. (continued)

	Number in top scoring 100 participants who answered "agree" (5) or "agree strongly" (6)	Number in low scoring 100 participants who answered "agree" (5) or "agree strongly" (6)	Phi coefficient
49. Family members contribute to continuity of patient care.	95	71	.31
50. Successful use of nursing measures to induce a patient's sleep is satisfying to me.	99	78	.32
51. It is important to know how the patient feels about his discharge from the hospital.	98	77	.32
52. I feel comfortable just sitting in a room talking with a patient.	89	44	.48
53. A crying patient should be permitted to air his feelings.	99	88	.22
54. I am willing to change my routine to meet the patient's needs.	99	80	.31
55. It is important to instruct the pre-operative patient about what to expect after surgery.	99	88	.22
56. Therapeutic use of self is a good means of providing more adequate nursing care.	97	62	.43

(concluded on next page)

Table 8. (concluded)

	Number in top scoring 100 participants who answered "agree" (5) or "agree strongly" (6)	Number in low scoring 100 participants who answered "agree" (5) or "agree strongly" (6)	Phi coefficient
57. It is necessary for the nurse to be aware of the reactions she calls forth in others.	100	88	.25
58. More emphasis should be placed on nurse-patient interaction.	97	46	.56
59. The patient has a right to the expression of a negative attitude toward hospitalization.	94	72	.32
60. The patient should be encouraged to talk about his fears of surgery.	99	74	.37
61. Understanding emotional needs of the patient is essential to good nursing care.	99	94	.18
62. The nurse should try to understand how the patient feels about his illness.	100	92	.21
63. It may be better sometimes to listen to the patient than to give him a sedative.	100	91	.22

In order of descending values, the phi coefficients ranged thus:

.56	58
.52	42
.49	44, 48
.48	52
.43	43, 56
.38	45
.37	28, 60
.36	22, 39
.35	13, 15
.34	18, 41
.33	25, 40, 46
.32	17, 21, 50, 51, 59
.31	10, 49, 54
.30	19, 29
.26	3, 7, 11, 14, 20
.25	57
.24	4
.23	6, 23, 31
.22	8, 16, 52, 55, 63
.21	36, 62
.19	2, 9
.18	1, 61
.16	24, 30
.15	33, 34
.14	12
.12	5, 27, 32
.07	26
.05	47
-.02	35, 37
-.08	38

The figures with the negative values may be considered either negative or positive, as the scoring directions were arbitrary. In any case, the values of these three negative coefficients are so low that the items are of questionable value.

Recommendations based upon this information are made in the concluding chapter of the study.

The results of the study may be summarized in the following manner:

Significant differences have been shown to exist between groups of nurses in favorableness toward direct patient care. Several of these differences are rather surprising, such as the relatively low favorableness of staff and head nurses as compared to administrators and supervisors, who are less actively involved in direct patient care. Another of the rather surprising results of the study was the low favorableness of the medical nurses and psychiatric nurses toward direct patient care, in view of the well established person-orientation of these groups in previous studies. The obstetrical and medical nurses were the least favorable groups toward direct patient care.

The groups of nurses whose favorableness toward direct patient care was the greatest were the public health, pediatric, private duty, office nurses, and within the mixed services group, the nurses working in intensive care units. Significant differences were found between these nurses and the lower scoring groups mentioned previously. Significant differences were also found between these groups and several of the more moderately favorable groups.

In order of descending favorableness toward direct patient care the four groups representing differing programs of educational preparation were the Master's degree, Baccalaureate degree, hospital diploma and Associate degree nurses. One may conclude that, in general, the more preparation for nursing obtained by the nurse, the more favorable is her attitude toward direct patient care.

An analysis of the favorableness of the opinions expressed by nurses educated in succeeding decades shows that the nurses who graduated in 1960 and later have the highest scores, with decreasing scores in the previous decades, with the exception of the 1930-39 decade, which was slightly lower than the 1920-29 decade. Significant differences between several of these groups were shown to exist. One may conclude that in general, the more recent the education of the nurse, the more favorable is her attitude toward direct patient care.

The study failed to demonstrate any difference in favorableness between nurses who administer directly to patients and those whose practice does not necessitate giving direct care to patients. It is reasonable to suspect that such differences may exist, but that the study instrument and checklist were not sufficiently sensitive to detect these differences.

The item analysis reveals that there are some areas of nursing in which a distinct dichotomy of opinion exists between the nurses in the upper scoring 100 participants of the study, and the low scoring 100 persons.

The correlation coefficient of .95 was sufficiently high to warrant the assumption that the test items were functioning reliably in testing the study participants.

## CHAPTER IV

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Summary of the Study

This study was undertaken to discover the relationship between the favorableness toward direct patient care and the clinical activity of nurses. Nurses with differing educational backgrounds obtained during five successive decades, and who work in three hierarchical positions were tested for their favorableness toward the variable, direct patient care. The data-collecting tool was a compilation of 63 opinion statements devised by Sister Louise Marie Vaughan by the Thurstone technique. The original attitude scale statements were placed in a Likert-type response format, allowing a range of six possible responses to each item. Values of one through six were assigned to the responses, which were later multiplied by the Thurstone scale values in a technique for scoring devised by Eysenck and Crown, called the scale product method. Scores from this procedure were obtained by summing the item scores.

Grouping of the study participants was performed with information supplied by them on a checklist accompanying the scale. Group means were obtained which were submitted to "t" tests. The results and interpretation of the statistical tests were presented. Differences were found to exist between:

Medical and pediatric nurses  $p=.01$

Medical nurses and mixed services nurses  $p=.01$

Medical nurses and private duty nurses  $p=.001$

The mean score of the medical nurses was the lowest obtained mean. This raises several questions, for medical nurses have been found in previous studies (Lentz and Michaels, (31,32,33); Raskin, et al., (53) to be predominantly person-centered in their orientation to nursing. Favorableness toward direct patient care seems to be related to this concept of person-centeredness, thus the finding seems inconsistent.

Surgical nurses and private duty nurses  $p=.05$

Pediatric nurses and obstetrical nurses  $p=.05$

Pediatric nurses and medical nurses  $p=.01$

Pediatric nurses and psychiatric nurses  $p=.1$

The mean score of the pediatric group was the highest of the hospital-based nurses (unless the seven Intensive care unit nurses within the mixed services group is considered separately). This group thus demonstrated a significant difference from the groups with low mean scores.

Mixed services nurses and obstetrical nurses  $p=.01$

Mixed services nurses and medical nurses  $p=.01$

Mixed services nurses and psychiatric nurses  $p=.05$

The mixed services group is composed of nurses who work in hospital units in which patients are not segregated by the usual clinical designations, or nurses



who work on more than one service. The types of nurses who compose this group are presented in the study. No conclusions may be drawn from these findings as the group is exceedingly heterogenous. Within the group, the seven intensive care unit nurses obtained a very high mean, approximating the mean of the public health nurse group, followed by a moderately high mean of the 26 supervisors. The staff nurses within this group who work on mixed category wards or on several wards obtained the lowest within group mean, however it was higher than the means of the surgical and medical nurse groups, and not different statistically from them.

Private duty nurses and psychiatric nurses differed  $p=.05$ , however the two groups are too small to support decisions.

Public health nurses and all hospital nurses	$p=.01$
Public health nurses and nursing home nurses	$p=.01$
Public health nurses and industrial nurses	$p=.01$
Public health nurses and office nurses	$p=.1$

The public health nurses, pediatric nurses, private duty nurses and office nurses form a generally upper range of favorableness toward direct patient care. The intensive care unit nurses were not tested separately, however they fall into this upper group.

In a generally moderate range of favorableness toward direct patient care are the surgical, operating room, psychiatric, nursing home and industrial nurses. In a lower range of favorableness toward the variable are the medical and

obstetrical nurse groups.

Differences were shown to exist between the expressed attitudes of supervisors-administrators and the staff and head nurse group ( $p = .01$  and  $.02$ ). No difference was demonstrated in expression of favorableness between those nurses who give direct patient care and those who do not give care.

Differences in favorableness toward direct patient care were found between the Baccalaureate and Associate degree groups of nurses, and between the Baccalaureate and hospital diploma groups of nurses at the  $.05$  level of confidence. Other tests were non-significant in character, due to the small size of the Associate degree and Master's degree groups. The means of the groups, in decreasing order of favorableness, were the Master's degree, Baccalaureate degree, hospital diploma, and Associate degree.

Differences were found among the respondents by period of education. The group educated in the decade 1930-39 obtained the lowest mean score, being followed by the 1920-29 group, with the 1940-49, 1950-59 and 1960 and later groups having progressively higher means. Differences at the  $p = .001$  level of confidence were shown to exist between the 1940-49 and the 1960 and later, and the 1930-39 and the 1960 and later groups. At the  $p = .02$  level, a difference was demonstrated between the 1950-59 and 1960 and later educational groups. The 1930-39 decade differed at the  $p = .05$  level from the 1950-59 group. The question was raised as to whether the differences shown may be a reflection of educational influences, or whether the differences being demonstrated reflect variances which

arise from the ages of the nurses.

### Hypotheses Accepted and Rejected

On the basis of the study findings the following hypotheses were accepted:

1. Differences in favorableness toward direct patient care exist between groups of nurses who practice nursing in varying clinical settings.
2. Differences in favorableness toward direct patient care exist between groups of nurses who hold diverse hierarchical positions in nursing agencies.
3. Differences in favorableness toward direct patient care exist between groups of nurses who have dissimilar educational preparation.
4. Differences in favorableness toward direct patient care exist between groups of nurses who received their education in different decades.

The following hypothesis is rejected on the basis of the findings of this study:

1. Differences in favorableness toward direct patient care exist among groups of nurses who give direct patient care as compared to those who do not give direct patient care.

### Conclusions

The study was a descriptive survey of attitudes which nurses were willing to express about direct patient care, the "heart" activity of their profession.

The findings of this study lead to the following conclusions:

1. The Vaughan Attitude Scale On Direct Patient Care is a useful tool for eliciting the attitudes of graduate nurse practitioners toward direct patient care in the revised format.
2. The Scale contains some items which are more effective in discriminating between nurses with favorable attitudes and those with unfavorable attitudes toward the variable.
3. Nurses who have favorable and unfavorable attitudes toward direct patient care give nursing care to patients when their positions make this activity necessary.
4. In general, the more recent the education of the nurse, the more positive is her attitude toward direct patient care.
5. In general, the more education in nursing the nurse has had, the more positive is her expressed attitude toward direct patient care.
6. In general, supervisors and administrators express a more favorable attitude toward direct patient care than do staff and head nurses.
7. Medical nurses in this study expressed a low degree of favorableness toward direct patient care, which appears to contradict the findings of previous research that these nurses are, in general, more person-oriented as opposed to the task-oriented concept.
8. Public health, private duty, pediatric, office and intensive care nurses express highly favorable attitudes toward direct patient care, while medical and obstetrical nurses express a less favorable attitude toward direct patient care.

Other groups are moderate in the expression of their favorableness toward the study variable, ranging between these extremes.

### Recommendations for Further Study

Based upon the findings and conclusions of the study, the following recommendations for further study are made:

1. Validity studies be made with graduate nurse practitioners.
2. Factor analysis be performed on the scale to determine what factors other than favorableness toward direct patient care are being elicited.
3. Matrix correlations be run with the present data or in future studies to determine the nature of the inter-relationships of the items of the scale.
4. Revision of the scale be performed in view of the item analysis information available, with possible shortening of the scale; that subsequent to the revision a study be done to compare the present scale with the revision.
5. Determination of the utilization of this scale in employment situations.
6. Investigation of the relationship between favorableness toward direct patient care and a person-centered orientation to nursing as compared with a task-centered orientation.
7. A study investigating the correlation between habitual nursing behavior and the attitude toward direct patient care.
8. A longitudinal study be undertaken to determine what changes occur in the attitudes of prospective students, students in schools of nursing, and recent

graduates with regard to attitudes toward direct patient care and the influences which increase or decrease favorableness.

9. Development of an instrument to accompany the attitude scale for nurses, to determine patient's opinions of care rendered by the nurses whose attitudes are elicited toward direct patient care.

10. Development of an accompanying form for peer judgments of the quality of nursing care rendered by nurses whose attitudes toward direct patient care are elicited.

11. Adaptation of the scale to permit its use with auxiliary nursing personnel.

12. In view of the favorable reliability coefficient of the test obtained in this study, it is recommended that future studies use the Scale Product method with the Likert format in order to utilize a method which enhances the theoretical and statistical bases of the scale, and which will provide comparable information about the scale (or a revision of the scale).

## BIBLIOGRAPHY

## BIBLIOGRAPHY

1. Abdellah, Faye G., "The Decision is Yours," Nursing Outlook, 9:232-233, April 1961.
2. Abdellah, Faye G., and Eugene Levine, Effect of Nurse Staffing on Satisfactions With Nursing Care. Chicago, American Hospital Association, 1958.
3. Abdellah, Faye G., and others, Patient-Centered Approaches to Nursing. New York, Macmillan Company, 1961.
4. American Nurses' Association, Proceedings of the First Nursing Research Conference. (Unpublished) New York, 1965.
5. Baker, Sheldon R., "A Study of Attitude Change in a College Program of Nursing Education," Nursing Research, 13:345-347, Fall 1964.
6. \_\_\_\_\_, "The Relationship of Social Attitudes to Manifest Needs," Nursing Research, 14:345-346, Fall 1965.
7. Bauer, Raymond A., and Henry Reicken, "Opinion in Relation to Personality and Social Organization," Journal of Opinion and Attitude Research, 3:513-529, Winter 1949-50.
8. Belote, Martha, "Nurses are Making It Happen," American Journal of Nursing, 67:2:285-289, February 1967.
9. Benne, Kenneth D. and Warren Bennis, "Role Confusion and Conflict; What is 'Real' Nursing?," American Journal of Nursing, 59:3:380-383, March 1959. (See also American Journal of Nursing, 59:196-198, February 1959).
10. Brooks, Beatrice R., "A Comparison of Student Profiles," Nursing World, 134:19-22,34, May 1960.
11. \_\_\_\_\_, "Student Attitudes, How They Change," Nursing World, 134:24-27,30, July 1960.
12. \_\_\_\_\_, "Student Attitudes, How They Differ," Nursing World, 134:28-31,38, June 1960.



13. Cattell, Raymond B., Personality, A Systematic and Factual Study. New York, McGraw-Hill Book Company, 1958.
14. Condor, Maxine, A Study of the Attitudes of Selected Navy Nurses Toward Direct Patient Care. Unpublished Master's thesis, The University of Washington, Seattle, 1966.
15. "Dissipation of Nursing Talents Scored at Pioneer Convention," Boston University Alumni News, 2:15, June 20, 1967.
16. Edwards, Allen L., "Critique of Neutral Items in Attitude Scales," Psychological Review, 53:159-169, May 1946.
17. \_\_\_\_\_, Techniques of Attitude Scale Construction. New York, Appleton-Century-Crofts, Inc., 1957.
18. Edwards, Allen L. and K. Claire Kenney, "A Comparison of the Thurstone and Likert Techniques of Attitude Scale Construction," Journal of Applied Psychology, 30:72-83, February 1946.
19. Edwards, Allen L. and Franklin P. Kilpatrick, "Technique for Construction of Attitude Scales," Journal of Applied Psychology, 32:374-384, 1948.
20. Eron, Leonard D., "The Effects of Nursing Education on Attitudes," Nursing Research, 4:24-27, June 1955.
21. Eysenck, H. J. and S. Crown, "An Experimental Study in Opinion-Attitude Methodology," International Journal of Opinion and Attitude Research, 3:47-83, Spring 1949.
22. Gibson, Margaret-Isabel, "Put the Heart Back Into Nursing," Canadian Nurse, 58:522, June 1962.
23. Green, Bert F., "Attitude Measurement," Vol. I of Handbook of Social Psychology. Edited by Gardner Lindzey. 2 vols. Reading, Mass., Addison-Wesley Publishing Company. 1954.
24. Guilford, J. P., Psychometric Methods. New York, McGraw-Hill Book Company, 1954.

25. Habenstein, Robert W., and Edwin A. Christ, Professionalizer, Traditionalizer, and Utilizer. Columbia, Mo., University of Missouri, 1955. (As cited in Vaillot, Sister Madeleine Clemence, Commitment to Nursing, Philadelphia, J. B. Lippincott Company, 1962.)
26. Hall, Lydia E., "Another View of Nursing Care and Quality," Continuity of Patient Care. Edited by K. Mary Straub and Kitty S. Parker. Washington, D.C., The Catholic University of America Press, 1966.
27. Henderson, Cynthia, "Freeing the Nurse to Nurse," American Journal of Nursing, 64:3:72-77, March 1964.
28. Hughes, Everett C., Helen M. Hughes, and Irwin Deutscher, Twenty Thousand Nurses Tell Their Story. Philadelphia, J. B. Lippincott Company, 1958.
29. Johannsen, Walter J., Sister M. Constance Redel, and Ronald G. Engel, "Personality and Attitudinal Changes During Psychiatric Nursing Affiliation," Nursing Research, 13:342-344, 1964.
30. Johnson, Dorothy E., "Today's Action Will Determine Tomorrow's Nursing," Nursing Outlook, 13:9:38-41, September 1965.
31. Lentz, Edith M. and Robert G. Michaels, "Comparative Ratings of Medical and Surgical Nurses," Nursing Research, 9:198-202, Fall 1958.
32. \_\_\_\_\_, "Comparisons Between Medical and Surgical Nurses," Nursing Research, 8:192-197, Fall 1960.
33. \_\_\_\_\_, "Personality Contrasts Among Medical and Surgical Nurses," Nursing Research, 14:43-50, Winter 1965.
34. Levine, Eugene, "Nurse Staffing in Hospitals," American Journal of Nursing, 61:9:65-68, September 1961.
35. Likert, Rensis, "A Technique for the Measurement of Attitudes," Archives of Psychology, 22:5-55, 1932.
36. Lukens, Lois G., "Personality Patterns and Choice of Clinical Nursing Specialization," Nursing Research, 14:3:210-220, 1965.

37. Lyng, Mary Louise, A Study of the Attitudes of Professional Nurses Toward Direct Patient Care in a Selected Hospital. Unpublished Master's thesis, The University of Washington, Seattle, 1965.
38. McNemar, Quinn, "Opinion-Attitude Methodology," Psychological Bulletin, 43:4:289-374, July 1946.
39. MacRostie, Mary, "Back to the Bedside," R.N., 21:6:35-39, June 1958.
40. Malone, Mary, Norman H. Berkowitz and Malcolm W. Klein, "The Paradox in Nursing," American Journal of Nursing, 61:9:52-55, September 1961.
41. Mereness, Dorothy, "Your Self-Image and Your Practice," American Journal of Nursing, 66:2:96-100, January 1966.
42. Meyer, Genevieve R., Tenderness and Technique: Nursing Values in Transition. Los Angeles, Institute of Industrial Relations, University of California, 1960.
43. Meyer, Ralph H., "Professional Status of Nursing," Hospital Topics, 42:5:35-39, 1964.
44. Molde, Donald A., Presumed Task versus 'Person' Orientation as Reflected in Speech Characteristics of Surgical and Psychiatric Nurses in a Standardized Interview. Unpublished Master's thesis, The University of Oregon Medical School, Portland, 1966.
45. Nahm, Helen, "Satisfaction With Nursing," Journal of Applied Psychology, 32:335-343, August 1948.
46. Narvan, Leslie and James C. Stauffacher, "A Comparative Analysis of the Personality Structure of Psychiatric and Non-Psychiatric Nurses," Nursing Research, 7:64-67, June 1958.
47. "Nurse Specialist Defined by ACS Speaker," American Journal of Nursing, 65:5:20, May 1965.
48. Nurse Utilization Project Staff, An Investigation of the Relation Between Nursing Activity and Patient Welfare. Iowa City, State University of Iowa, 1960.
49. "Nursing's Image and Recruitment," Nursing Outlook, 14:4:25, April 1, 1966 (Editorial).

50. "Old Time Nurse to Return with a Difference," American Journal of Nursing, 65:2:32, February, 1965.
51. Osgood, Charles, George J. Succi, and Percy H. Tannenbaum, The Measurement of Meaning. Urbana, Illinois, University of Illinois Press, 1957.
52. Pelligrino, Edmund D., "The Nurse Must Know, The Nurse Must Speak," American Journal of Nursing, 60:3:360-363, March, 1960.
53. Raskin, Allen, Joan K. Boruchow, and Risa Golob, "The Concept of Task versus Person Orientation in Nursing," Journal of Applied Psychology, 49:3:182-187, 1965.
54. Reiter, Frances, "The Nurse-Clinician," American Journal of Nursing, 66:274-280, February 1966.
55. Reissman, Leonard and John H. Rohrer, Change and Dilemma in the Nursing Profession. New York, G. P. Putnam's Sons, 1957.
56. Saunders, Lyle B., "Permanence and Change," American Journal of Nursing, 58:971-975, July 1958.
57. \_\_\_\_\_, "The Changing Role of Nurses," American Journal of Nursing, 54:1094-1098, September 1954.
58. Sells, Saul B., and David K. Trites, "Attitudes," Encyclopedia of Educational Research (3rd ed.), 102-112. New York, The Macmillan Company, 1960.
59. Sherif, Carolyn, Muzafer Sherif, and Roger Nebergall, Attitude and Attitude Change. Philadelphia, W. B. Saunders Company, 1965.
60. Smith, Kathryn M., "Discrepancies in the Role-Specific Values of Head Nurses and Nursing Educators," Nursing Research, 14:3:196-202, Summer 1965.
61. "The Surgeon-General Looks at Nursing," American Journal of Nursing, 67:1:64-67, January 1967.
62. Thompson, Judith K., A Study of Interpersonal Attitudes of Student Nurses. Unpublished Master's thesis, The University of Oregon School of Nursing, Portland, 1963.

63. Tschudin, Mary S., "Educational Preparation Needed by the Nurse in the Future," Nursing Outlook, 12:4:32-33, April 1964.
64. U.S. Public Health Service, Toward Quality in Nursing, Needs and Goals. Report of the Surgeon-General's Consultant Group on Nursing, Publication 992. Washington: Government Printing Office, 1963.
65. Vaughan, Sister Louise Marie, Attitudes of Nursing Students Toward Direct Patient Care. Doctoral Thesis. Washington, Catholic University of America Press, 1964.
66. Vaillot, Sister Madeleine Clemence, Commitment to Nursing, A Philosophic Investigation. Philadelphia, J. B. Lippincott Company, 1962.
67. \_\_\_\_\_, "Existentialism: A Philosophy of Commitment," American Journal of Nursing, 66:3:501-505, March 1966.
68. Wiens, Arthur N., and others, "Interview Interaction Behavior of Supervisors, Head Nurses and Staff Nurses," Nursing Research, 14:322-329, Fall 1965.
69. Wiens, Ruth H., Attitude Changes in Students During a Psychiatric Nursing Affiliation. Unpublished Master's thesis, The University of Oregon School of Nursing, Portland, 1965.

APPENDICES

APPENDIX A  
CORRESPONDENCE

2503 N. E. Skidmore Street  
Portland, Oregon 97211  
September 8, 1967

Sister Louise Marie Vaughan  
Dean, Marymount College  
Salina, Kansas 67401

Dear Sister Vaughan,

You will recall my letter to you of November 19, 1966, requesting permission to use your Attitude Scale in my research upon which to base my Master's degree thesis. I am happy to report that the bulk of the project has been completed, and that the thesis is nearly complete. Oral examinations will be held later this fall.

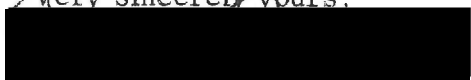
I was sure that you would be interested in some of the results of the study. The thesis is titled, "A Study of the Expressed Attitudes of 327 Nurses Toward Direct Patient Care." The modifications in the scale which were suggested by Dr. Spaney at the First Nursing Research Conference were carried out. The scale items were all retained, and were placed in a Likert-type format, using the Eysenck and Crown scale product method of scoring.

Since the study population was sufficiently large to warrant doing item analysis, this has been done. You will be very happy to learn that the scale yielded a Pearson correlation coefficient of the odd-even half tests of .906, which was corrected to .950. This speaks well for the future use of your scale. I am sure that you continue to be interested in the development of the scale, although your present position probably does not allow a great deal of time for this type of activity.

I am happy to report that I have obtained a teaching position at the Good Samaritan Hospital School of Nursing in Portland. I am looking forward to this interlude of experience before my husband and I return to the Republic of Congo next year to resume our missionary activities there.

It has been a real privilege to work with your scale in this project, and to feel that I have shared in the ongoing development of the scale as a research instrument.

Very sincerely yours,

  
Mrs. Jeanne P. Zook



# MARYMOUNT COLLEGE

EAST IRON AVENUE AND MARYMOUNT ROAD • SALINA, KANSAS 67401

---

OFFICE OF ACADEMIC DEAN

September 18, 1967

Mrs. Jeanne P. Zook  
2503 N.E. Skidmore Street  
Portland, Oregon 97211

Dear Mrs. Zook,

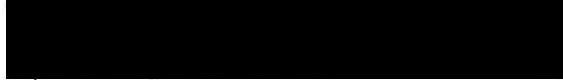
Your recent letter brought very good news. Indeed, a coefficient of .95 is excellent! I am so glad that you followed Dr. Spaney's recommendations.

Since you have done such a fine job of improving the reliability of the scale, I am wondering if you would like to send your results to Dr. Lucille E. Notter of the American Nurses Association. I am sure the A.N.A. Research Conference Group would be pleased to learn of the contribution you have made to nursing research through your thesis. The A.N.A. should make note of your findings in any additional reference to my study. I hope you will be able to send a short resumé of your findings to Dr. Notter.

It sounds as though you and your husband will be giving of your talents and skills in an area that is in great need of generous and proficient missionaries. I wish you much success in your future endeavors.

I have enjoyed knowing you via the mail and am very pleased that you decided to develop my scale further for your graduate dissertation. I certainly placed it in competent hands when I agreed to your use of it for your research. I hope we shall meet each other in person sometime.

Sincerely,

  
Sister Louise Marie  
Dean

2503 N. E. Skidmore St.  
Portland, Oregon 97211  
June 27, 1967


Lydia E. Hall  
Loeb Center for Nursing and Rehabilitation  
Montefiore Hospital and Medical Center  
New York, New York

Dear Miss Hall,

I am a regularly enrolled student at the University of Oregon School of Nursing, in the program leading to the Master of Science Degree in Nursing. I am at present writing the thesis. My subject is research based upon the attitude scale of Sister Louise Marie Vaughan which deals with the attitudes of Nurses toward direct patient care. Since my research is based upon her work, I will not be able to publish it.

I would like your permission to use several quotations from your article, "Another View of Nursing Care and Quality" which appears in the book, Continuity of Patient Care by Mary Straub and Kitty Parker. You have made several statements which I would like to use in the chapter on related literature which support the view of the nurse giving direct patient care. I will be most careful to give credit for the statements in footnotes. As I have mentioned, the thesis will not be published. It will be placed in the library of the University of Oregon Medical School after it has been accepted. I will be most grateful for your permission to quote from this article.

Sincerely yours,



(Mrs.) Jeanne P. Zook

THE SOLOMON AND BETTY LOEB MEMORIAL HOME  
THE LOEB CENTER FOR NURSING AND REHABILITATION

AT MONTEFIORE HOSPITAL AND MEDICAL CENTER

STEBEN AVENUE and 210th STREET, BRONX, N. Y. 10467



LYDIA E. HALL, R.N., M.A.  
Administrative Director

July 10, 1967

Mrs. Jeanne P. Zook  
2503 N.E. Skidmore Street  
Portland, Oregon 97211

Dear Mrs. Zook:

Mrs. Hall is away because of illness. However, I have spoken with her and she has indicated her permission for you to use quotations from her article "Another View of Nursing Care and Quality", which appears in the book Continuity of Patient Care by Mary Straub and Kitty Parker.

It would be of interest to Mrs. Hall if you might be able to share with her in some way how you have used the quotations. We recognize that it will not be published, but if in any way you could duplicate the content which involved the quotations, she would be interested in seeing it.

Best wishes and good luck on the completion of your thesis.

Sincerely yours,

  
Genroe J. Alfaro, R.N.  
Assistant Director

ga/rp

2503 N. E. Skidmore Street  
Portland, Oregon 97211  
November 19, 1966

Sister Louise Marie Vaughan  
Dean, Marymount College  
Salina, Kansas 67401

Dear Sister Vaughan,

I am a student at the University of Oregon School of Nursing, enrolled in the program leading to the Master's Degree in Nursing. I have recently purchased your doctoral dissertation, "Attitudes of Nursing Students Toward Direct Patient Care." Allow me to congratulate you for the quality of the study, and for the promise it holds for more research in this most central area of nursing.

I have obtained the permission of my advisors to pursue a study for my thesis on the attitudes of nurses about this topic. I was delighted to find your scale which is already validated and accepted by nationally known nurses (I am referring to the articles which appeared in the Nursing Research and the American Journal of Nursing). I would like very much to use your scale for a study such as the one which you mentioned in the first recommendation (page 135). May I have your permission to use the scale? I am writing to the University which published the study to request their permission also.

I am enclosing a proposed checklist which would serve as the means of delineating populations within the graduate nurse group. I would be most happy for any suggestions which you would care to make about the type of data to be collected. One of your recommendations suggested the revision of the scale. Have you any ideas formulated about types of revisions which would improve reliability? I have wondered whether the reliability could be improved by deleting the "neutral" items in the center of the scale which cluster at the 6.0 value? I would appreciate your comment about this, and whether this would make a difference in the granting of permission to use the scale? I will welcome your comments in any of these areas.

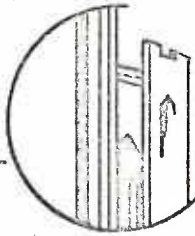
If you are aware of any other nurses doing research at this time with your scale I will be very happy to receive their names and addresses so that I can correspond with them.

I really feel very fortunate to be able to do a study in an area where the groundwork has been so competently laid. A number of nurses here who have seen your thesis have been very enthusiastic about it, and have encouraged me to pursue this as a topic. I will consider it a real privilege to use your scale.

Yours very sincerely,

A large black rectangular redaction box covering the signature area.

(Mrs.) Jeanne P. Zook



# Marymount College

East Iron Avenue and Marymount Road  
SALINA, KANSAS 67401

OFFICE OF DEAN

November 25, 1966

Mrs. Jeanne Zook  
2503 N.E. Skidmore Street  
Portland, Oregon

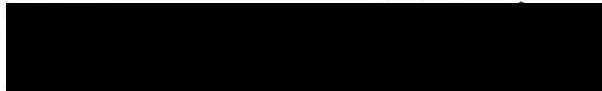
Dear Mrs. Zook:

Your letter of November 19 has been received. You may have my permission to use the attitude scale which I developed for my doctoral dissertation. However, I must tell you very frankly that I am not satisfied with the degree of validity and reliability which it demonstrated and have strongly advised that it be revised with the intention of increasing these two factors so essential to any experimentally developed scale. I think Thurstone's method could be used but certain specific modifications might result in a scale with higher validity and reliability.

In regard to your request relevant to the "neutral" items being deleted, my honest opinion is that this step in itself would not be sufficient to increase the scale's validity or reliability. My suggestion for you is that you secure a recent publication from a research conference sponsored by the American Nurses' Association. My study is reviewed well there and you will note some significant observations and suggestions. This publication is entitled First Nursing Research Conference-April 5-7, 1965 and may be purchased from the A.N.A. headquarters.

The checklist you developed seems appropriate, relevant, and concise. Be assured of my best wishes for the results of your study. I will be interested in learning about your findings and conclusions.

Sincerely,

  
Sister Louise Marie  
Dean

SLM:dr

Enclosure: 1

2503 N. E. Skidmore Street  
Portland, Oregon 97211  
November 16, 1966


Catholic University of America Press, Inc.  
Washington, D.C. 20017

Dear Sirs,

I am a regularly enrolled student at the University of Oregon School of Nursing, Graduate Division, pursuing a program leading to the Master's Degree in Nursing Education. As a thesis I am hoping to pursue a study of the attitudes of nurses toward direct nursing care. I am hoping to use as an instrument for data collection the attitudes scale devised by Sister Louise Marie Vaughan in her doctoral thesis, "Attitudes of Nursing Students Toward Direct Patient Care." This dissertation was published by your press in 1964. I am hereby requesting permission to reproduce all or part of this Attitude Scale as it appears in her finished work. Credit will be given your press as the source of material.

I have requested permission from Sister Vaughan also for the use of her material. Thank you for your consideration of this matter.

Very sincerely,



(Mrs.) Jeanne P. Zook

THE CATHOLIC UNIVERSITY OF AMERICA PRESS

620 MICHIGAN AVENUE, N. E.

WASHINGTON, D. C. 20017



December 5, 1966

Mrs. Jeanne Zook  
2503 N E Skidmore St.  
Portland, Oregon 97211

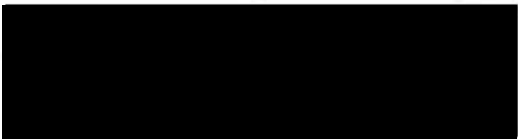
Dear Mrs. Zook:

In reference to your letter of November 16, permission is hereby granted to use the Attitude Scale devised by Sr. Louise Marie Vaughan in her doctoral dissertation "Attitudes of Nursing Students Toward Direct Patient Care." It is understood that this material will be used in your thesis and that it will not be used for commercial purposes.

It is further understood that credit will be given to the author, the book and the publisher. It would be appreciated if you would note that the book originally published in 1964 was reprinted by popular demand in 1966.

With every good wish,

Very sincerely yours,

  
Rt. Rev. Msgr. James A. Magner  
Director

JAM:sct



APPENDIX B  
INSTRUMENT FOR DATA COLLECTION

2503 N.E. Skidmore Street  
Portland, Oregon 97211  
May 30, 1967

Dear Registered Nurse,

In partial fulfillment of the requirements for a Master's Degree at the University of Oregon School of Nursing, I am undertaking a study regarding the attitudes of employed registered nurses toward direct patient care. Your name has been chosen at random from a listing of nurses in the Portland area. I invite your participation in the study, and hope that you will gain personal satisfaction from participation in the research effort.

The enclosed Opinionnaire is the product of a doctoral study by Sister Vaughan about which you may have read. It can be completed in about 15 minutes. A stamped, self-addressed envelope is enclosed for your convenience. I will appreciate having you return the completed Opinionnaire before June 30th, 1967.


You will find a number on the last page of the Opinionnaire which corresponds to your name on the mailing list. This list will be destroyed at the completion of the study, and you will in no way be identified for your participation. I hope that you will feel free to express your attitudes toward direct patient care in this way, as there is considerable interest in the outcome of this study. We sincerely hope that it can be discovered what nurses are feeling about giving direct nursing care to patients. The value of this study will depend upon the honest expression of your attitudes and upon your complete responses to every part of it.

Upon completion, the study will be available in the University of Oregon Medical School Library. Thank you for your assistance.

Sincerely yours,

  
(Mrs.) Jeanne P. Zook

Mrs. Zook is a regularly enrolled graduate student at the University of Oregon School of Nursing. Your cooperation with Mrs. Zook in assisting her to collect her data for the study will be appreciated.

  
Lucile Gregerson  
Associate Professor  
Thesis Advisor

This is an attitude Opinionnaire. It is made up of opinions that have been expressed by nurses. There are no right or wrong answers, You are only asked to indicate how much you agree or disagree with each statement. Here are some examples:

I like to give morning care to a paralytic patient.

Disagree strongly  
Disagree somewhat  
Disagree slightly  
Agree slightly  
Agree somewhat  
Agree strongly

Geriatric Nursing challenges the abilities of the nurse.

Please read each statement carefully and show how much you agree or disagree with the value expressed.

Before you begin, indicate on the checklist your present position in nursing, and your preparation. As you check number 6, keep in mind the following definition of direct patient care:

Direct patient care refers to those situations in which the plans for meeting a patient's nursing requirements are being implemented by a nurse who is consciously focusing on him as a person.

When you have completed the Opinionnaire and Checklist, please return them by mail as soon as possible. Do NOT return this instruction sheet or the cover letter.

## CHECKLIST

1. Your highest earned credential in Nursing (check one):

Associate Degree \_\_\_\_\_  
 Baccalaureate Degree \_\_\_\_\_  
 Diploma \_\_\_\_\_  
 Master's Degree \_\_\_\_\_  
 Other (please specify) \_\_\_\_\_

2. The decade in which your most recent education occurred (check one):

Previous to 1920 \_\_\_\_\_  
 1920-1929 \_\_\_\_\_  
 1930-1939 \_\_\_\_\_  
 1940-1949 \_\_\_\_\_  
 1950-1959 \_\_\_\_\_  
 Since 1960 \_\_\_\_\_

3. The place of your present practice (check one in each column if appropriate):

Hospital _____	4. Medical Unit _____
Office _____	Surgical Unit _____
Nursing Home _____	Pediatrics _____
Occupational- _____	Psychiatry _____
Industrial _____	Oper. rooms _____
Public Health _____	Obstetrics _____
Other (specify) _____	Other (specify) _____

5. Your present position is (check one):

Staff Nurse _____	Full time _____	Part time _____
Private Duty Nurse _____		
Head Nurse or _____		
Asst. Head N, _____		
Supervisor or _____		
Administrator _____		
Instructor _____		
Other (specify) _____		

6. I give direct patient care, \_\_\_\_\_  
 I do not give direct patient care, \_\_\_\_\_















APPENDIX C  
SCALE VALUES

---

---

No.	Scale Value
1	1.647
2	1.666
3	1.687
4	1.733
5	1.733
6	1.814
7	1.846
8	1.846
9	1.880
10	1.880
11	1.916
12	1.750
13	1.750
14	2.076
15	2.230
16	2.272
17	2.307
18	2.454
19	2.562
20	2.700
21	2.800
22	2.800
23	3.000
24	3.133
25	3.388
26	4.000
27	6.260
28	6.370
29	6.384
30	6.400
31	6.434
32	6.545
33	6.548
34	6.565
35	6.655
36	6.758
37	6.846
38	7.583
39	7.916
40	9.777

(concluded on next page)

No.	Scale Value
41	9.923
42	10.000
43	10.428
44	10.478
45	10.636
46	10.666
47	10.692
48	10.705
49	10.769
50	10.818
51	10.882
52	10.900
53	11.043
54	11.043
55	11.083
56	11.153
57	11.153
58	11.153
59	11.153
60	11.312
61	11.352
62	11.371
63	11.371

APPENDIX D  
MASTER TABULATION

Groups of Nurses Which Were Tested for Differences in the Study  
With Group Means and Standard Deviations

	N	Mean	Standard Deviation
Associate Degree Education	5	1868.954	82.494
Hospital Diploma Program	222	1912	136.461
Baccalaureate Degree	93	1951.964	141.153
Master's Degree in Nursing	4	1978.643	107.517
Education 1920-1929	13	1872.210	171.772
Education 1930-1939	32	1860.961	139.135
Education 1940-1949	80	1891.736	119.421
Education 1950-1959	70	1920.807	135.181
Education 1960 and later	130	1967.778	131.469
Medical Nurses	38	1857.350	141.435
Surgical Nurses	55	1908.612	113.590
Pediatric Nurses	12	1971.245	109.836
Operating Room Nurses	23	1913.444	161.861
Obstetrical Nurses	21	1863.552	115.261
Mixed or Undesignated Services	67	1950.311	128.779
Psychiatric Nurses	4	1905.939	17.742
Private Duty Nurses	6	1955.224	99.506
All Hospital Nurses (excludes Private Duty Nurses)	225	1912.170	139.548

(concluded on next page)

	N	Mean	Standard Deviation
Office and Clinic Nurses	34	1947.312	106.829
Nursing Home Nurses	22	1903.697	114.217
Industrial Nurses	10	1895.231	77.537
Public Health Nurses (includes 3 School Nurses)	30	2006.707	148.620
Staff Nurses	161	1916.376	145.721
Head Nurses	78	1910.459	140.958
Supervisors and Administrators	50	1965.886	101.846
Nurses who give direct patient care	250	1924.388	142.009
Nurses who do not give direct patient care	75	1919.969	124.890



APPENDIX E  
STATISTICAL FORMULAE

Degrees of freedom are calculated as  $df = N_1 - 1 + N_2 - 1$ .

Standard deviations were calculated by the formula:

$$s = \sqrt{\frac{\sum x^2}{N-1}}$$

The student "t" test was computed by the formula:

$$t = \frac{M_1 - M_2}{\sigma \text{ diff}}$$

The Pearson product moment correlation formula was used in the computation of the test reliability with the use of the formula:

$$r = \frac{\frac{\sum XY}{N} - M_x M_y}{\sigma_x \sigma_y}$$

The phi coefficient was used as an indication of item discrimination in the item analysis, and was computed by the formula given by Guilford (24).

$$\frac{P_u - P_l}{2\sqrt{pq}}$$

where

p = proportion passing the item

q = 1 minus p

l = lower

u = upper

Typed by  
Gladys Morgan



AN ABSTRACT OF THE THESIS OF

Jeanne P. Zook

For the Master of Science in Nursing

Date of the granting of the degree: June 6, 1968

Title: A Study of the Expressed Attitudes of  
327 Nurses Toward Direct Patient Care

APPROVED: 

---

Lucile Gregerson, Associate Professor  
(Thesis Adviser)

## ABSTRACT

### The Problem

This study was oriented to the apparent shift in professional nursing activities away from direct patient care which has been noted in recent years. The shift in the roles and responsibilities of the graduate professional nurses has been accompanied by an apparent decrease in nurse and patient satisfaction, and has generated concern that the quality of patient care has declined. The study was a descriptive survey of the expressed attitudes of registered nurses about direct patient care.

### Description of the Procedure

This study of the favorableness of registered professional nurses toward direct patient care was undertaken to discover the relationship of these attitudes to the nurse's clinical practice, the decade and type of education for nursing, the position held in a nursing agency, and the nurse's activity in giving direct patient care. The research was accomplished through the use of the Vaughan Attitude Scale revised into a Likert-type response format, with scoring being carried out by the scale product method of Eysenck and Crown. Five hundred nurses selected at random were polled by mail, with 385 replying, of which 327 replies were included in the study.

### Summary of the Results

From the data obtained from the study participants, the following con-

clusions were drawn:

Medical and obstetrical nurses are less favorable toward direct patient care than other clinical practice groups. Public health, pediatric, private duty, office and intensive care unit nurses are more favorable toward direct patient care than nurses in other clinical practice areas. Significant differences were shown to exist between these groups, as well as between nurses in several of the more moderately favorable groups, such as those employed in surgical, psychiatric units, industrial nursing, nursing homes, and mixed wards in hospitals.

In general, the more education the nurse had, the more favorable was her attitude. The four groups in descending order of favorableness were: Master's degree, Baccalaureate degree, hospital diploma, Associate degree. Differences were demonstrated between the Baccalaureate degree graduates and the latter two groups.

In general, the more recent the education of the nurse, the more favorable her attitude toward direct patient care. The 1960 and later group had the most favorable attitude, with preceding decades being decreasingly favorable. The lowest group mean was obtained by the 1930-39 graduates, who were exceeded slightly by the 1920-29 group.

No difference in favorableness toward direct patient care was found between nurses who administer direct care to patients and those who do not. When grouped by nursing position held, the supervisor-administrator group



was significantly more favorable than the head nurse and staff nurse groups .

An item analysis of the 63 scale items by use of the phi coefficient revealed items ranging in discriminatory power ranging from .56 to -.08 . An odd-even correlation of the half tests obtained .906 with the Pearson r , which corrected by the Spearman-Brown formula to .95 for the whole test .

### Conclusions

The study was a descriptive survey of attitudes which nurses were willing to express about direct patient care, the "heart" activity of their profession . The findings of this study lead to the following conclusions:

1. The Vaughan Attitude Scale On Direct Patient Care is a useful tool for eliciting the attitudes of graduate nurse practitioners toward direct patient care in the revised format .
2. The Scale contains some items which are more effective in discriminating between nurses with favorable attitudes and those with unfavorable attitudes toward the variable .
3. Nurses who have favorable and unfavorable attitudes toward direct patient care give nursing care to patients when their positions make this activity necessary .
4. In general, the more recent the education of the nurse, the more positive is her attitude toward direct patient care .
5. In general, the more education in nursing the nurse has had, the more

positive is her expressed attitude toward direct patient care.

6. In general, supervisors and administrators express a more favorable attitude toward direct patient care than do staff and head nurses.

7. Medical nurses in this study expressed a low degree of favorableness toward direct patient care, which appears to contradict the findings of previous research that these nurses are, in general, more person-oriented as opposed to the task-oriented concept.

8. Public health, private duty, pediatric, office and intensive care nurses express highly favorable attitudes toward direct patient care, while medical and obstetrical nurses express a less favorable attitude toward direct patient care. Other groups are moderate in the expression of their favorableness toward the study variable, ranging between these extremes.

### Recommendations

Based upon the findings and conclusions of the study, the following recommendations for further research were made:

1. Validity studies be made with graduate nurse practitioners.
2. Factor analysis be performed on the scale to determine what factors other than favorableness toward direct patient care are being elicited.
3. Matrix correlations be run with the present data or in future studies to determine the nature of the inter-relationships of the items of the scale.
4. Revision of the scale be performed in view of the item analysis information available, with possible shortening of the scale; that subsequent to the revision a study be done to compare the present scale with the revision.

5. Determination of the utilization of this scale in employment situations.
6. Investigation of the relationship between favorableness toward direct patient care and a person-centered orientation to nursing as compared with a task-centered orientation.
7. A study investigating the correlation between habitual nursing behavior and the attitude toward direct patient care.
8. A longitudinal study be undertaken to determine what changes occur in the attitudes of prospective students, students in schools of nursing, and recent graduates with regard to attitudes toward direct patient care and the influences which increase or decrease favorableness.
9. Development of an instrument to accompany the attitude scale for nurses, to determine patient's opinions of care rendered by the nurses whose attitudes are elicited toward direct patient care.
10. Development of an accompanying form for peer judgments of the quality of nursing care rendered by nurses whose attitudes toward direct patient care are elicited.
11. Adaptation of the scale to permit its use with auxiliary nursing personnel.
12. In view of the favorable reliability coefficient of the test obtained in this study, it is recommended that future studies use the Scale Product method with the Likert format in order to utilize a method which enhances the theoretical and statistical bases of the scale, and which will provide comparable information about the scale (or a revision of the scale).