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A STUDY OF INTERPERSONAL ATTITUDES
OF STUDENT NURSES

by

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A THESIS

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CHAPTER I
INTRODUCTION

Background of the Problem

As has been reflected in recent nursing literature, the philosophy of nursing education today is based on the belief that education should assist the student to develop the skills, attitudes and appreciations necessary for contributing to and living satisfyingly in a democratic society (34). This has resulted in a growing awareness in schools of nursing that modern nursing requires an increasing degree of competency in interpersonal relations. Attitudes are of special importance, as it is agreed that they play a predominate role in determining thoughts and learning processes as well as in determining conclusions and influencing acceptance of facts (38). This realization that attitudes, the way a person feels and tends to react to a condition, a principle or an individual, are probably more determinative of behavior than mere cognitive understanding, has resulted in nursing schools listing with impressive frequency among their objectives, aims to develop desirable attitudes of various types.

The nature of the concepts and theories of learning accounts for the view that psychological, sociological and psychiatric nursing concepts

should be integrated throughout the basic curriculum.(26). In response to this both the diploma nursing program and the basic degree program are adding or expanding desirable courses and experiences to help students achieve a well rounded concept of human behavior in all clinical nursing areas. The sociological and psychological aspects of behavior are no longer separated for study solely under a subject heading of psychiatric nursing; they are becoming incorporated into most of the subjects offered throughout the student's clinical period. Recognizing this as being sound curriculum practice, The University of Oregon School of Nursing recently established additional courses designed to improve interpersonal relationship and communication skills of the students. The courses are offered early in the nursing major as a foundation for the integration of psychological, sociological and psychiatric nursing concepts throughout the remainder of the curriculum.

Statement of the Problem

The recently increasing emphasis on attitudes, emotions, needs, interpersonal relationships, and their roles in behavior and well-being has not been without effect on the thinking of persons engaged in the nursing profession. This has been reflected in the recent preoccupation of nurse researchers, educators, supervisors and administrators with such topics as "attitudes of student nurses", "teaching nurse-patient relationships", "attitudes toward patients and patient care" and "interpersonal relationships in nursing". Yet relatively little is known of the basis upon which attitudes are developed, nor how to bring about desirable changes in them (31).

It has been found that students enter a school of nursing with certain attitudes related to the profession of nursing and to nursing activities which will affect their nursing experience, and that some attitudes held by students tend to remain constant while others change during the student's period in school (17). Very little systematic work has yet appeared in which an attempt has been made to specify those changes and to pinpoint those aspects of the student's schooling and experience which engender change.

The purpose of this study is to determine if there is any significant change in attitudes on the part of the student toward interpersonal relations as a result of taking a specific course in human relations during the first six months of the clinical nursing period.

Hypothesis

Student nurses' communication skills and attitudes in interpersonal relationships can be modified to a significant degree when the student nurses understand the nature of the techniques they use in their human relations. More specifically, attitude changes will be measured by two tests that have been developed to evaluate attitudes and response tendencies in interpersonal relations. These tests are the Nursing Personnel Relationships Test and the F - scale (Appendix A). Following are predictions of expected changes in attitudes measured by the tests, in the experimental nursing student group.

1. Differences between the pre-test and post-test scores on the Nursing Personnel Relationships Test (40). The experimental group will show significantly greater decreases in the Evaluative, Hostile and Probing categories of response and significantly greater increase in the Understanding and Supportive

categories of response than will the control group.

2. Differences between the pre-test and post-test scores on the F - scale (1). The experimental group will show a significantly greater shift toward the democratic end of the scale than will the control group.

Assumptions

The following assumptions are made for the purpose of this study:

1. Attitudes are identifiable and measurable.
2. Attitudes vary along a continuum.
3. Measurable attitudes are common to the group.
4. These attitudes are held by many people.
5. The two tests used measure attitudes.
6. The tests are sensitive enough measures to detect possible changes in attitudes resulting from the course.
7. The control group is adequate for purposes of this study.

Justification for the Study

From the time the student applies for admission to the school of nursing, her learning experiences are oriented toward helping her in the improvement of interpersonal skills. Interpersonal relationships are considered important in motivating and in determining social, emotional and intellectual behaviors (34). Both attitudes and skills in interpersonal relations do frequently determine the reaction of individuals. The reaction is not always direct but may be inhibited and may not express itself except on critical occasions (3, 37).

Educators and psychologists have long recognized that the growth and development of attitudes and the improvement of interpersonal skills

involve the integration of numerous specific responses of a similar type and are among the most significant outcomes of the learning situation (4, 14, 32, 38). The attitudes and skills in interpersonal relationships in nursing cannot be assumed to result entirely from general nursing experiences, but must be taught. Stagner has stated that the greatest need both from the viewpoint of the schools and society as a whole, is for studies in the field of attitude development and modification.

To the nurse, attitudes and skills in interpersonal relations are of special importance because she generally has the most intimate and daily contact with the patient, and in terms of time alone has the opportunity for the most significant interactions with the patient. Her attitudes toward patients can well have decisive effects upon the course of treatment (11). When this is granted, the importance and value of attitude evaluation and measurement becomes clear at once.

Today the measurement of attitudes and opinions has become a vital part of most educational systems. Such measurements are especially useful in nursing, for the student, as well as the instructor, in the instructor's task of improving interpersonal relations, for finding possible sources of tension within the groups and as a source of information useful in providing more meaningful and improved content in the curriculum.

Limitations of the Study

The scope of this study will be confined to two groups of students; sophomore nursing students enrolled in the nursing program at the University of Oregon School of Nursing and freshman pre-nursing students

attending Portland State College, both located in Portland, Oregon. It will be limited to information obtained through the Nursing Personnel Relationships Test and the F - scale.

The procedures do not rely on observations of actions, but rather are examples of how the students react when asked to express their opinions in particular formal situations. Because of this, it has been possible to establish objectively quantifiable measures of student behavior in the test situations. Consequently, investigators have been able to determine the reliability, and to some extent the validity of these measures. It is difficult to specify precisely to what extent a student's behavior in these test situations will transfer to "real" situations. However, behavior in "real" situations is extremely difficult to measure and quantify objectively. In addition the test measures have some degree of generality beyond any particular limited set of "real" situations.

Further limitations include the assumption that attitudes exist, are relatively stable but subject to change through instruction, and are measurable. They may certainly be changeable and subject to rationalization and deception and although attitude scales can provide useful sociological data, they do not necessarily clarify the underlying psychological conditions.

Plan for the Study

1. Sources of data.

Data for this study consist of pre-test and post-test replies to the Nursing Personnel Relationships Test and the F-- Scale distributed to two groups of students, an experimental and control group. The

experimental group included a total of 76 sophomore students enrolled in the nursing program at a selected collegiate school of nursing in Oregon. This group participated, during a six months period, in a human relations course. The control group included a total of 21 freshman college students enrolled in the pre-nursing program at a selected college in Oregon. Although this group is not entirely a matched control group, it was the most appropriate available group for this study.

2. Procedures for collection of data.

The data gathering instruments for this study were two questionnaires. The Nursing Personnel Relationships Test consists of a series of eighteen excerpts from statements of fictitious nurses, nurse supervisors, nursing students and others, relating difficulties in which they are involved. For each situation five alternative responses, Evaluative, Hostile, Probing, Supportive and Understanding, representing five different attitudes are provided (40). In each case the student is instructed to read the statement and select one of the five responses. The F - scale consists of thirty statements which measure attitudes on a continuum ranging from authoritarian to democratic or equalitarian (7). For each statement the respondent is instructed to agree or disagree on a six-step discrimination scale.

Both student groups participated in pre- and post-testing. Upon completion of the pre-testing a psychiatric nursing instructor conducted a course in interpersonal relationships and communication skills to the 76 sophomore nursing students (experimental group). This course was taught in small groups over a period of six months, each group meeting for a

one-hour session weekly. The classes were regularly scheduled group discussions in which the students could seek help in solving any of the problems they had encountered in the clinical and school situations. This help was forthcoming from the instructor as well as from the student group. The 21 freshman college pre-nursing students (control group) did not receive any such comparable course.

Following the course and at an interval of approximately six months both groups retook the same two tests and the scores were compared to determine any significant changes in attitudes toward interpersonal relations.

3. Validation of the instruments.

A review of the literature and related studies indicate that both instruments have been used in present form for several years in various studies and in each case they have appeared to be sufficiently valid and reliable for use.

4. Treatment of the data.

Students' responses on the two tests were assigned numerical values, scores were compared to determine significant changes and are summarized and presented in table and graph forms in the chapter relating to findings. Statistical analyses include the following comparisons of means or medians for each test:

- a. Pre-test scores between control and experimental groups.
- b. Post-test scores between control and experimental groups.
- c. Pre- and post-test scores for each group.

For the relatively normal score distributions, the t-test (for

independent and correlated samples as required) is used. For the very skewed distributions, non-parametric comparisons (median test for independent samples and sign test for correlated samples) are used.

Overview

A review of the literature and related studies is presented in Chapter II including definition of terms, origin, types, development and changes of attitudes, and attitudes in interpersonal relationships and education. In Chapter III the instruments of measurement, the subjects and the procedures are discussed. Chapter IV consists of the presentation and interpretation of the findings. A summary of the study, conclusions and recommendations are presented in Chapter V.

CHAPTER II

REVIEW OF LITERATURE AND RELATED STUDIES

Introduction

The purposes of education have for a long time included the development of the intellectual abilities of the individual and the acquisition of knowledge. Today the goals have been extended to include the emotional growth of the individual as well as more constructive relationships with people. This has resulted in a new direction in education in recent years, primarily through the recognition of the vital significance of human relationships in the learning process (42). Conforming to these broadened goals and widened objectives in education of fostering personality adjustment and growth, more and more schools are including in their curricula material concerned with the total personality and not merely with the intellect, but with emotions, behavior and attitudes.

Definitions

The two terms "attitudes" and "interpersonal relationships" are defined for the purpose of this study as follows:

1. Attitudes.

An attitude is an enduring organization of motivational, emotional, perceptual and cognitive processes with respect to some aspect of the individual's world (19).

This definition asserts that attitudes have both intellectual and emotional aspects. The intellectual or cognitive aspects of attitudes are often referred to as beliefs (19). Attitudes, however, frequently have a goal-character or motivating force, while beliefs can be emotionally neutral. Belief is a necessary aspect of attitude, but as defined above, attitude also implies motivational or dynamic qualities. For this reason attitudes may usually be classified as "pro" or "con". Finally, the definition suggests that attitudes are the result of certain perceptual organizations - they exist only in context. For example, a thesis in preparation evokes rather different attitudes on the part of the author than does the completed thesis.

2. Interpersonal Relationships.

An interpersonal relationship is an interaction process, involving emotional, intellectual and social activity, between two or more persons (16).

Essentially all social and professional activities require interpersonal relationships. The definition emphasizes that both emotional and intellectual qualities are important in interpersonal relations. From the definition of attitude given above it is clear that attitudes may be of fundamental importance in determining the nature and course of interpersonal relationships. Thus a segregationist with strong attitudes toward members of minority races is strictly limited by these attitudes in his interpersonal relationships with such individuals.

Origin and Types of Attitudes

Since the work of Ach and other investigators late in the nineteenth

century the role of attitudes has been recognized as important in determining thoughts, memories, and learning processes. Today it is generally agreed that attitudes not only determine the conclusions derived from facts but also influence the acceptance of these facts (19, 38).

Initially the concept of attitudes included mental set, task set, and intention, as well as the relatively permanent biases of politics, economics and religion. Through usage, however, the concept has become limited almost entirely to mean social attitudes, referring to long-lasting predispositions to perceive social situations in a certain manner and to act accordingly. While some attitudes are felt to be highly personal in character, others are ultimately social in character (38).

G. W. Allport (2) has distinguished four common conditions involved in the making of attitudes:

1. The integration of many specific responses of a similar type (approval of a few masterpieces of Greek art leads to an enthusiasm for all classical antiquity).
2. The individuation of a definite mental set from a more primitive approaching or avoiding response (English schools are admired because of a general liking for British culture).
3. The effects of some trauma or fixation resulting from a startling and dramatic experience (a student abandons his medical career because of a repugnance to dissection).
4. Ready-made adoption through imitation of a majority group or of experts possessing prestige (a brilliant Mathematics professor pokes fun at all Education courses, and his submissive students accept this as justified).

Similar distinctions according to origin have been made by R. Stagner and M. Sherman. Stagner differentiates attitudes in four ways according to the processes from which they arise: 1) integration, 2) trauma, 3) differentiation, and 4) adoption (38). Sherman classifies attitudes

according to origin as follows: 1) collective, 2) pressure, 3) conflict and crisis, and 4) imitative attitudes (37).

There are many other classifications of attitudes, most of them highly arbitrary, which do not effectively differentiate them. Some psychologists have distinguished between different kinds of attitudes according to the general or specific nature of attitude objects, their intensity, the freedom of expression by the individual, and their frequency of occurrence (35, 38). Sociologists have classified attitudes into those involving personal, cultural, social and natural problems. Still others have attempted to differentiate attitudes into those that have a personal emotional meaning and those that involve social relationships (37).

Development of Attitudes

Attitudes grow and develop like other features of mental life; children are relatively devoid of social, political, and religious prejudices (14). Since the child is more closely attached to his parents than to any other adult, it is plausible that his attitudes would correlate highly with theirs. Studies by Newcomb and Svehla (37) indicate a substantial degree of agreement between the attitude scores for each parent and for each child. The authors believe that these similarities in attitudes are due partly to suggestion and partly to the fact that parents automatically bring the child into certain institutional groups. Some of the acceptance of the parental attitudes by children is due to deliberate instruction. Many prejudices apparently are communicated by parents and teachers through facial expression, tone of voice, and other

signs of hostility with open verbal statements of prejudice. Even more important for the development of certain attitudes is the emotional relationship of child and parent (38).

The kinds and frequencies of attitudes, however, are believed to be the result of the influence of not only the family environment but also the social organization of the community (3). In a complex environment, the individual is forced to meet and solve many more problems than he would face in a simpler environment.

A study by Alice E. Ingmire (17) conducted in 1949 on "Attitudes of Student Nurses at the University of California" investigated the attitudes that might influence the progress of each student in nursing. The areas of home and family relationships, personal relationships, nursing activities and future plans and aspirations were selected as being of particular importance in the student's progress.

The purpose was to: 1) discover how the students felt about the problems confronting them in their adjustment to the activities of a school of nursing, 2) determine what kind of attitudes they bring with them to their nursing experience, and 3) evaluate the possible effects of these attitudes on their experiences.

A structured interview technique was used to collect the data from 197 questions. A total of 126 students were interviewed. Attitudes were found to arrange themselves in patterns and differ between first, second, and third year classes.

It was concluded: 1) students enter a school with certain attitudes related to the nursing profession and to nursing activities which will

nursing educators that the groups of students who select different types of nursing education programs, associate degree, diploma, and baccalaureate, are basically different in their attitudes.

Each person in our society differs as a result of his association with a particular sub-group which comprises his immediate environmental setting. From this diversified background of family, home, school, and community, one develops a composite of attitudes, which changes the perception of new experiences. It is with this diversified background that each student comes to a particular educational setting.

The specific purpose of the study by Brooks was to demonstrate differences in freshman students in attitudes of authoritarianism, humanitarianism, and stereotypes at the time of entrance into the three different programs. A sample of 833 students, distributed among the three different programs, was selected and tested by these attitude measurements for assessing an individual's responses to a set of social objects or situations.

The results indicated that the students did not differ with respect to authoritarianism and stereotypes, only in humanitarianism did the samples differ. Here it was found that the associate degree samples were lowest and significantly different from the other two samples. It was concluded that all were able to do well in the general nursing curricula.

According to Sherman (37) the complexity of an environment determines the extent of information the individuals have and thus indirectly the formation of attitudes. There are numerous studies showing a relationship between specific information and attitudes, suggesting that people acquire most readily facts which are congruent with their views (20, 38).

The effect of specific information on attitudes has been demonstrated by Remmers in Studies in Attitudes (32) in which it is shown that

teaching materials taking up only about 15 minutes of classtime may produce significant changes in the student's attitudes toward various social problems and that these changes still persist after a period of a full year. The general observation is that such information produces a marked shift in the direction which would be expected by the nature of the information given and that this marked shift is followed by a tendency to regress to the previous attitude. There is frequently a period of wavering, but ultimately the attitude becomes stabilized at a point somewhat between the original attitude and the extreme shift. Worthy of consideration is the suggestion that such marked attitude change occurred because the students did not have well-integrated attitudes on the topics treated. Extremely well-organized attitudes, with strong emotions involved, are not modified by a veritable barrage of propaganda (14). Considerable inconsistency is noted in the attitudes of high-school students; in general, consistency increases with age. The effect of education, as reflected by comparing successive groups in high-school and college, is toward greater consistency and also toward greater liberalism (21).

The educational institutions are undoubtedly important determinants of attitudes in the American population, but there are limited data upon which to estimate the amount of influence exerted. Only a few investigators have reported that personal attitudes of teachers influence the attitudes of their pupils, but anyone who has observed the work of famous teachers realizes that they have important effect on their students in many respects (38). The attitudes of instructors are therefore important.

The general observation that people in the same field, as for example in nursing, alter each other's attitudes, feelings, purposes, and actions, is virtually a truism. It is almost impossible to be in a social field and be free of its effects (3). For example, the development and

building of attitudes of kindness, justice, and honesty can be significantly influenced by the nursing instructor's use of time in the learning situation (12). Hence, those factors which influence and determine attitudes have a very direct control on the affigy of the developing nursing student's ability to deal with others.

Helen Jahn (24) concluded from an investigation of 424 senior students that a pre-nursing college background alone would not assure that the objectives considered desirable were achieved in practice, but that the total school of nursing environment was also an important contributing factor.

The study was conducted in schools of nursing in Minnesota and reported on in Nursing Research in 1952. The educational objectives selected as a basis for the study were among those which nurses over a period of years have emphasized as important in the preparation of the professional nurse. These objectives included: 1) "the professional nurse is satisfied with nursing as a profession," 2) she is democratic rather than autocratic in her beliefs and practices, 3) she understands and is able to apply principles of mental hygiene in dealing with patients and others, 4) she is a well adjusted person, 5) she has a wide range of social, cultural and recreational interests and activities, and 6) she is interested in, and understands current social, political and economic problems and issues.

The instruments used to measure the extent to which these objectives were achieved included a nursing satisfaction scale, a questionnaire to obtain reactions of students to nursing school experiences, two standardized tests (for objectives 4 and 6), and two specially constructed tests for objectives 2 and 3).

The 424 senior students participating in the study were from 12 schools of nursing. Twenty seven percent were enrolled in degree programs and 73 percent in three-year programs. All were within a few months of completion of the nursing school program. In addition to a study of the

group as a whole, comparisons were made among the twelve groups, between degree and three-year groups in a university school, and between groups with a pre-nursing college background and those who had entered nursing directly from high-school.

Findings of the study showed that there were differences among the various groups in almost all areas studied. The degree group in a university school was the least satisfied with nursing, but was superior to all other groups in understanding of social, political, economic problems and issues, and in ability to understand and apply principles of democracy and of mental hygiene. However, the three-year group in the same school, the majority of whom had entered nursing directly from high-school, was also superior in the latter areas to students from most of the other schools of nursing.

There was also some indication in the study that high satisfaction scores were accompanied by too great a tendency to accept and conform; and low satisfaction scores, on the other hand, by too great a tendency to rebel against existing conditions. It was recommended that in order to change the total environment in schools of nursing, attention needs to be focused on better personnel policies for the students and better preparation of faculty members. This preparation should include the development of greater understanding of principles of democracy and of mental hygiene, and greater skill in applying these principles in day-by-day relations with students and others. It is suggested that such preparation would probably do much to improve the human relations in hospitals and schools of nursing.

Attitudes in Interpersonal Relationships

Interpersonal relationships are in a very fundamental sense based on attitudes. Research in recent years has served to emphasize attitudes as important determinants of the entire adjustment of the individual.

According to Remmers (32) attitudes are important because they affect the goals the student sets for herself, her fitness for various occupational aims, and her fitness for eventual effective and desirable participation in a democratic society - in short, in interpersonal relationships. Further, attitudes are not only thought to grow out of the give-and-take between the learner and her surroundings but also, when established, affect markedly the nature of her future development (14, 32, 36, 39).

The most important function of the nursing student is probably her interpersonal relationships with patients, other students and nurses, supervisors, instructors and administrators. Since the effectiveness of interpersonal relations is dependent upon the behavior of the people comprising the relationship, it is apparent that an understanding of human behavior is very essential to the student. This, of course, requires a great deal of self-awareness and conscious control of attitudes and feelings (5). It is therefore considered important in nursing that the student gain increased insight into the patterns of her own personality, motivations, and her behavior early in the learning process. She must understand herself before she can be expected to understand others. However, for the nurse, understanding her own personal behavior alone is not enough. She must also know how to deal with the behavior of others in order to use herself most effectively in interpersonal relationships, especially nurse-patient relationships (25).

Attitude Changes

Since learning of one kind or the other produces attitudes, it is clear that learning or unlearning of another sort will change them. As described earlier in a study on specific information by Remmers (32) some attitudes are held very lightly and may be modified within a relatively short period by presentation of appropriate information or by propaganda procedures. The important social attitudes, however, such as

nationalism, religious and racial prejudices, economic bias, and the like are formed in early childhood and they are likely to represent needed outlets for repressed aggression or to be substitute sources of ego-gratification. These attitudes tend to be firmly established and mere presentation of information is not likely to effect modifications (38). "In general, however, it seems that attitudes are retained only as long as they yield satisfaction" (14).

Those who have attempted a program of re-educating attitudes have confirmed that information about a subject does not necessarily change attitudes. A good example of the inefficiency of the ordinary educational process to change attitudes is seen in the attempts of various social organizations to influence people to discard their prejudices. These organizations generally believe that if a person is well-informed about the subjects or objects against which he has prejudices, he will discard his antagonistic attitude. That more information is not sufficient has been shown by several experimental studies which claim that attitudes are based upon an emotional core and knowledge alone is not sufficient to change the basic emotional tone (36, 37). On the other hand, numerous other investigations testify to the possibility of modifying even the most resistant attitudes by the application of appropriate stimuli. The greatest single factor for changing attitudes being, according to Hartman, propaganda of pressure groups in school, as well as out of school. This suggests that every educational worker possesses the possibility of using his position for the purpose of indoctrination, both by what he is and by what he does (14).

Peterson and Thurstone (29) found motion pictures to possess an amazing power to shape attitudes. In a number of experiments in which children were shown motion pictures they reported spectacular changes as

a result of a single visit to the cinema. Witnessing two movies, one favorable to the Chinese and the other unfavorable, showed that a change occurred in the expected direction each time. The changes were large and persisted for some time, but the original attitude tended to reappear eventually.

In a study by Ramseyer (31) in the Bureau of Educational Research at Ohio State University in 1937, the question was raised as to who would be more likely to be influenced by a motion picture on soil erosion. The group, involving 1500 individuals in experimental groups ranging from seventh grade to and including some adults, was classified into two categories: 1) those individuals who were originally antagonistic to a proposition involving soil erosion, and 2) those individuals who were already somewhat favorable. Documentary films dealing with the subject and the work provided the material for testing. Scaled attitude tests were used as measuring instruments. The results showed that attitude shifts were statistically significant and that there was a regular decrease in the amount of positive attitude change from those originally opposed to the proposition to those originally in favor of it. It was therefore concluded that people are affected differently by the same stimulus material.

In yet another study, by Canter and Schomaker (11) on "The Relationship between Authoritarian Attitudes and Attitudes toward Mental Patients," two groups of students were compared in terms of their attitudes toward mental patients.

Each group consisted of 15 subjects, one who received high scores and the other low scores on the Authoritarianism Personality F - scale. Prior to their didactic instruction and clinical experience with mental

patients both groups indicated their attitudes toward mental patients on a specially devised questionnaire, and also responded to the Rosenzweig Picture-Frustration test, first in the conventional manner and then as they thought a mental patient would respond. This later was repeated after six weeks of experience.

Results indicated that the high F - scale group had a more negative attitude toward mental patients as well as a general negative stereotype in connection with the mental patients, prior to training, which was seemingly independent of authoritarian attitude. This same group was also less susceptible to change of this stereotype, following instruction and contact with patients. It was suggested that one of the factors which may strongly influence the happiness and effectiveness of personnel working with hospitalized (mental) patients is the attitude which they maintain toward these patients.

Many of these types of investigations tend to imply the assumption that imparting facts or information as such does something beneficial to the associated attitudes. While this can happen in fortunate situations the likelihood of a change depends upon the strength of the emotional core of the attitude. An attitude that is strongly toned emotionally and that has persisted for a long time is likely to change only under the most unusual circumstances. This is because attitudes are more intimately identified with the center of personality than are most other resultants of the learning process. Attitudes are determined by the values of an individual has, and the reactions to these values may be either favorable or unfavorable (14, 36, 37).

In an analysis by Hartman (14) of the reasons why information often

fails to be attitudinally effective, the following five barriers to the free or efficient flow of ideas were distinguished:

1. A hard core of "know-nothings" exists - that is, something about the uninformed makes them hard to reach on any topic.
2. People who are already interested acquire the most information.
3. People seek information congenial to their existing attitudes.
4. People tend to interpret the same information differently.
5. Information does not necessarily change attitudes - that is, merely "increasing the flow" of information is not enough.

It is easy to observe that students with attitudes unfavorable to certain material learn it with greater difficulty than those whose attitudes are favorable. Lately it has been recognized that emotional blocks are important factors which may prevent the student from accepting educational material. Group work methods are presently being tried in some educational circles in an attempt to deal with these learning blocks (42).

Attitudes in Education

Although attitudes are still in many places considered as "by-products" of education, there has been a growing tendency to view them as equal or superior to the apparent primary objectives of any course of instruction (14).

The changes in behavior which teaching is expected to produce in students are the objectives of nursing education. Through careful study of the learners some of these changes in behavior, involving understanding, interpersonal relationship skills, and attitudes, can be identified (10, 34).

There is a number of studies on the attitudes dealing with nursing education, nursing students, nurses, and patients which have important implications for the behavior of the student nurse in the clinical setting where interpersonal relationships are pertinent.

In 1955 Leonard D. Eron (13) reported on a study of "The Effects of Nursing Education on Attitudes" in Nursing Research. The purpose of the investigation was to discover if certain specific attitudes which were felt to be important in the nurse's work and in the gratification she receives from it were subject to change during the nursing school period.

Five groups of nursing students at different stages of their education in two different schools of nursing participated. Several paper and pencil tests measuring authoritarian attitude, political-economic conservatism, cynicism, humanitarianism, and anxiety were administered.

The findings were: 1) the more advanced students received lower scores on the authoritarianism scale, the factor of age in accounting for this could not be ruled out, 2) there were no differences in scores on political-economic conservatism, and 3) the more advanced students secured significantly lower mean scores than the beginning students on cynicism and humanitarianism scales. It was indicated by a comparison with a parallel study of medical students that this result could not be attributed to increasing age.

It was concluded, although this cross-sectional approach to a study of the effects of education and experience on attitudes of nurses is, by its nature, superficial and crude, that because of the consistency of the

results obtained, evidence of some such effect had been provided. It was suggested that only by a longitudinal approach to this problem, in which an entire class of nurses was studied intensively over a period of education and beyond, would it be possible to delineate specifically the crucial aspects of the experience which accounted for the changes.

Beatrice P. Brooks (9) reported in Nursing World in 1960 on an objective approach to identifying changes that take place in student's attitudes during the basic nursing preparation. A representative sample of 883 students from associate arts, diploma and baccalaureate curricula was tested on several standard scales for the measurement of attitudes. Pre-tests, tests on completion of one academic year, and post-tests were utilized.

Her findings identified significant differences in authoritarian and stereotype attitudes, but not in humanitarianism. She concluded that experience in the program was the only factor that consistently influenced a change in attitude. It was also suggested that there appeared to be other factors, not considered, which might have been operating.

An experimental study on teaching nurse-patient relationships was conducted at the Denver Veterans Administration Hospital by Lewis Bernstein, et. al. (6) in 1953. The purpose of the study was to determine empirically whether or not nurse-patient relationships, using Roger's concept of "reflections", (33) could be successfully taught.

Two groups of nurse practitioners, 30 in an experimental group and 20 in a control group, took a battery of pre and post-tests. The three instruments used were the Nurse-Patient Situation test, the F - scale,

and the Memory test. Following the administration of the pre-tests, the experimental group participated in a course in nurse-patient relationships. The differences between the pre-test and post-test scores of the two groups were compared.

Results indicated that nurse-patient relationships making use of Rogerian concepts can be successfully taught, and that ideally such a course should be taught early in nurses' professional education and followed by appropriate ward supervision. Also concluded was that, attitudes and skills in interpersonal relationships in nursing cannot be assumed to result from general nursing experiences, but must be taught.

Other studies on attitude changes demonstrate similar findings. For example, Nancy Sitting Jordison (18) in a study designed to discover whether a nursing curriculum leads to desirable changes in attitudes of sensitivity in interpersonal relations and a positive approach to child-rearing practices found her original hypothesis, in general, confirmed. In a substudy conducted to test the hypothesis that greater changes in the measured attitudes occurs in the latter clinical portion of the nursing curriculum was confirmed.

4 Attitudes, therefore, as well as skills and techniques in interpersonal relationships are basic to many educational activities. The concepts to be learned are complex and if other than superficial knowledge is to be gained, the students must have certain selected and repeated learning experiences which provide her with opportunities to express positive and negative feelings, develop value judgements, appreciations and skills in human relations (15).

According to a series of investigations by Peters (28) the educational

effects can be more influential in this whole work of character formation, shaping and directing attitudes, if the development is through the use of systematic instruction rather than incidental program of procedures.

In Social Sciences in Nursing, Frances Cooke MacGregor (22) discusses a program on the application of social science in nursing education in her description of a three-year experiment done in a "five-year program" of nursing education at Cornell University - New York Hospital School of Nursing between 1954-1957.

The main purpose of the study was to present a step-by-step account of a 30 hour course in the "Psychological and Cultural Aspects of Nursing" "because of . . . manifest desire for specificity and a more pragmatic approach" to the subject.

The course was: 1) health and illness oriented and patient-centered, 2) begun at the beginning of clinical experience, five months after school entry, 3) on a par with those offered in master's degree programs of some colleges of education, and 4) had as its object to increase understanding of human behavior, develop insights into the student's own motivations, needs, limitations and strengths, and stimulate professional growth.

Data on application by the nurses of social sciences were obtained from "hundreds of reports" during the three years. They were examined for relevance to kinds of situations encountered daily by nurses. The data were then classified according to kinds of questions to which answers were wanted and asked by nurses, doctors, and social scientists. Some answers by students to such questions were also reported, as well as suggestions for integration of social sciences into the clinical services,

and the role of the physician in nursing education.

Unfortunately, the experiment did not seek to discover what concepts are useful, but only to select them and present them in some order, with reasons for the particular sequence. Since this study was merely a series of recommendations and suggestions for the organization of a course in social sciences in nursing no conclusions can be drawn as to its effectiveness in achieving the objective of improved interpersonal relations in general.

A study by Kathleen Black (7), Human Relations Content in the Basic Curriculum reported on in 1956 in Nursing Research, formulated purposes that were more specific and concrete than the ones reported in the above experiment. They were: 1) to collect information indicative of attitudes about how instruction designed to develop human relations skills should be distributed within the basic curriculum, 2) to find out whether there was agreement about the inclusion of certain psychological concepts in the teaching program, and 3) to encourage discussion and consequent awareness of these concepts among those responsible for various phases of the basic curriculum.

The measurement used was a questionnaire in the form of a checklist containing 97 items. More than 700 groups in schools of nursing throughout the country participated.

Findings indicated: 1) that there were agreements and disagreements about these concepts to the extent that some could be classified for inclusion throughout the curriculum, and others as predominantly the responsibility of the psychiatric nursing portions, and 2) that there was

a desire for some differentiation between what is expected as the outcome of different types of basic educational programs. There were also indications from comments that faculties are as eager to learn the unnamed skills of teaching appropriate to this content as they are to learn the concepts which should be taught.

On the whole, nursing schools endeavor to develop a nurse who is a responsible professional person as an individual and as a member of the health team, and who is capable of maintaining effective interpersonal, professional and interprofessional relationships (34). As a result any program of nursing education should have as one of its main objectives not only further development of understanding and knowledge of behavior, but also increasing insight into attitudes accompanying performance in interpersonal relationships. It is believed that these objectives can most effectively be achieved in the medium of an interpersonal relationship between teacher and student in the learning situation.

On general psychological grounds it seems clear that forbidding the discussion of controversial topics does more harm than good. Talking over a controversial issue in the calm atmosphere of the classroom, with the instructor pointing out faulty logic, usually helps students acquire a more rational viewpoint (38). This of course implies a freedom from prejudice on the part of the instructor which is not always met with in practice. Today many school systems are making an effort, through conferences, special study groups, and other methods, to improve this situation. Newcomb (27) has shown that a college having a generally liberal faculty and a climate of liberalism modifies the conservative attitudes of the freshmen rapidly and often painlessly.

Summary

The two terms "attitudes" and "interpersonal relationships" both have emotional and intellectual qualities and aspects. Attitudes are considered to be of fundamental importance in determining the nature and course of interpersonal relationships. Today the concept of attitudes is limited almost entirely to mean social attitudes, some being highly personal in character, others ultimately social in character. Attitudes can be distinguished according to four common conditions or processes from which they arise: 1) integration, 2) individuation, 3) trauma, and 4) adoption. The development of attitudes is believed to be the result of the influence of both the family environment and the social organization of the community. The total environment determines indirectly the formation of attitudes through the kind of suggestions and the extent of information given the individuals. Attitudes in turn are important determinants of the entire adjustment of the individual and hence in her relations with others. While some attitudes can readily be altered through the presentation of appropriate information, others are held very firmly and modified or changed only through prolonged application of appropriate stimuli. It is the basic emotional tone associated with an attitude that is the determinant factor in affecting change. Attitudinal blocks may prevent the student from accepting educational material. Attitudes, as well as skills and techniques in interpersonal relationships, are consequently considered basic to many educational activities and especially to nursing education.

CHAPTER III
CONDUCT OF THE STUDY

Purpose

As described in the introduction, the purpose of this study was to measure changes in the attitudes of student nurses resulting from newly developed specialized course in interpersonal relations offered at the University of Oregon School of Nursing.

Instruments of Measurement

Two tests were utilized to measure and evaluate changes in attitudes, the Nursing Personnel Relationships Test (40) and the F - Scale (7).

The Nursing Personnel Relationships Test was developed by Frederick J. Todd, of the Behavior Research Laboratory at the University of Colorado in 1960. It consists of eighteen excerpts from statements of fictitious nurses, nurse supervisors, nursing students, and others, describing difficulties in which they are involved to a director of nursing service, nurse supervisor, or educator. For each situation, five alternative responses representing five different attitudes are provided. The five attitudes are Evaluative, Hostile, Probing, Supportive, and Understanding. The definitions of the five responses are given below. All except those

for Hostile responses were modified from an earlier test developed by Porter (30).

E - Evaluative. A response which indicates the person replying has made a judgement of relative goodness, appropriateness, effectiveness, rightness. She has in some way implied what the person making the statement might do or ought to do, grossly or subtly.

H - Hostile. A response which indicates that it is the intent of the person responding to convey disapproval, censure, lack of sympathy. She has in some way implied wrongness, culpability.

P - Probing. A response which indicates the intent of the person replying is to seek further information, provoke further discussion along a certain line, to query. She has in some way implied that the person ought or might profitably develop or discuss a point further.

S - Supportive. A response which indicates the intent of the person replying is to reassure, to reduce the intensity of feeling, to pacify. She has in some way implied that the person need not feel as she does.

U - Understanding. A response which indicates the intent so to respond as in effect to ask the person whether the responder understands correctly what it is the person is "saying", how the person "feels" about it, how it "strikes" the person, how the person "sees" it.

The participant was required to choose from among the five alternatives presented with each item, the one she believed to be most appropriate in responding to the statements made in the excerpt. The alternative responses were not, of course, identified as to the attitudes they reflected nor were the participants informed that the alternatives were intended

to reflect attitudes. The Understanding (U) response was considered to be the response most consistent with those goals concerning attitudes toward others and with the performance goal "to improve the ability to communicate understanding." Each participant's score on this instrument was the number of U responses chosen. This method of scoring was used by Todd (40).

The items were selected for the Nursing Personnel Relationships Test by Todd (40) in the following manner: First, a pool of items and the five alternative responses for each item were made up, based on the general model provided by the items of an earlier test developed by Bernstein (6). Each item and its alternative responses were discussed with a group of experts who made recommendations for changes to improve clarity, minimize repetition in item content, and decrease ambiguity among the response alternatives. After the appropriate modifications were made, the items were presented to six clinical psychologists who were well acquainted with the "non-directive" philosophy embodied by the test. These psychologists were provided with the definitions of the five response attitudes and were asked to indicate for each item which of the five alternative responses accompanying that item reflected the Understanding response, and so on. Those items for which all six of the judges agreed were retained and comprised the final version of the test.

In the present thesis, it was considered desirable to analyze attitudes and attitude changes in all five categories. For the purposes of this thesis, increases in both Supportive and Understanding responses were considered positive changes in attitude, while increases in the

number of Evaluative, Hostile, or Probing responses were considered negative or undesirable changes in attitudes.

Todd validated his test on three groups of nurses drawn from different regions of the country (Rocky Mountain, Northwest and Southwest). The nurses were primarily in administrative, supervisory and teaching positions in college and university programs in nursing or schools of nursing developing collegiate programs, and were participating in an ongoing Continuation Education Program in nursing (40). The Nursing Personnel Relationships Test was administered four times to each group of nurses over a period of several years. For Todd's purposes, the Understanding response was most relevant so his analyses were conducted on total number of Understanding responses. There were significant differences in number of Understanding responses for nurses from the different regions (interestingly enough, the Northwest group had significantly higher Understanding scores than either the Southwest or Rocky Mountain groups). Further, there were significant overall increases in Understanding for all four test periods and for each group over all four test periods. These and other data lead Todd to conclude that the Nursing Personnel Relationships Test was sensitive, reliable, and at least potentially valid as an instrument for the measurement of attitudes and attitude changes among nurses.

Todd's Nursing Personnel Relationships Test is one of the few attitude tests devised specifically for measurement of attitudes among nurses in the context of nursing situations. It has the further advantage of having extensive reliability and validity data. Most attitude tests having the latter advantages, such as the F - scale, are not specific to

nursing. As will be shown in this thesis, Todd's test is extremely useful and sensitive. It is hoped that it will be utilized more extensively in nursing research in the future.

In 1950, Adorno, et. al. (1) published an extensive series of studies dealing with attempts to characterize and measure various aspects of the "authoritarian" personality. Initially they developed tests to measure specific attitudes toward minority groups, superpatriotism, etc. Thus an antisemitism scale (A-S) and an ethnocentrism scale (E) were devised and used (1). These tests involved examples where specific minority groups and organizations were named and characterized, the test subject being required to indicate extent of agreement or disagreement with each statement. It became desirable to attempt construction of a more general test that would measure prejudice without appearing to have this aim, and without mentioning the name of any minority group. In this way it might be possible to avoid the conventional attitudes people are expected to have regarding "race issues" and thus provide a more valid measure of prejudice or authoritarianism in more general terms.

With this background the Fascism, or F - scale was developed. The items comprising the scale were chosen on the basis of known characteristics of strongly "Fascist" individuals or groups. Thus many anti-Semitic individuals object to Jews on the ground that they violate conventional moral values. This may be interpreted to mean that the individual has particularly strong and rigid adherence to conventional values. This tendency was given the name authoritarianism, and the F - scale became an instrument to measure the extent of authoritarianism as a general variable in human

personality and attitude. Other related variables were similarly derived and incorporated into the F - scale. They are listed below (7).

1. Conventionalism. Rigid adherence to conventional, middle-class values.
2. Authoritarian submission. Submissive, uncritical attitude idealized moral authorities of the ingroup.
3. Authoritarian aggression. Tendency to be on the lookout for, and to condemn, reject, and punish people who violate conventional values.
4. Anti-intraception. Opposition to the subjective, the imaginative, the tender-minded.
5. Superstition and stereotypy. The belief in mystical determinants of the individual's fate; the disposition to think in rigid categories.
6. Power and "toughness". Preoccupation with the dominance-submission, strong-weak, leader-follower dimension; identification with power figures; overemphasis upon the conventionalized attributes of the ego; exaggerated assertion of strength and toughness.
7. Destructiveness and cynicism. Generalized hostility, vilification of the human.
8. Projectivity. The disposition to believe that wild and dangerous things go on in the world; the projection outwards of unconscious emotional impulses.
9. Sex. Exaggerated concern with sexual "goings-on." These variables

were thought of as going together to form a single syndrome, a more or less enduring structure in the person that renders him receptive to antidemocratic propaganda. In this sense the F - scale attempts to measure the potentially antidemocratic personality.

It is clear that the authoritarian or antidemocratic attitudes measured by the F - scale are in every sense antithetical to the practices and attitudes embodied in modern nursing and nursing education (25). The F - scale is scored such that the higher an individual's score, the more authoritarian he is supposed to be. In the context of the present thesis, where attitudes of student nurses indicative of interpersonal skills and sympathetic understanding are considered positive goals, and overly directive and moralizing attitudes considered undesirable, a decrease in F score will be considered an improvement in interpersonal attitudes and relations.

Reliability and validity of the F - scale was initially studied in three overall groups: University of Oregon students, University of California students, and Eugene, Oregon business men. The student group (all undergraduates) were further subdivided into men and women. In general, women tended to be less authoritarian than men, and the business men and male students were about the same. Validity of the F - scale was further analyzed using a few individuals studied intensely over a long period of time who tended to be at the extreme ends of the "authoritarian" scale by other criteria. In addition, the F - scale was correlated with the more specific earlier tests (A-S and E). Correlations were of the order of .50 for F vs. A-S and .70 for F vs. E. (1).

Subsequent to these initial studies, there has been extensive research in the general area of analysis of attitudes using the F - scale (41). It has become a "standard tool" in personality research. The form used in the present thesis, Form 40, is a shorter version of the original having 30 items. This form has a test-retest reliability coefficient of .90 and reasonably high correlations with the A-S and E scales. It is the form in common use today. Scoring of the F - scale was originally from -2 to +2 for statements rated from unauthoritarian to very authoritarian, respectively. More recently, a scale of 1 to 5 has been used because it better fits the requirements of modern test scale construction (41). In the present study, a scale of 1 to 5 is used.

Subjects

The two measurements just described were administered to two groups of students, an experimental and a control group. The initial experimental group consisted of 91 sophomore nursing students and the initial control group of 40 freshman pre-nursing students. The sophomore nursing students were all enrolled in the nursing program at the University of Oregon School of Nursing in Portland, Oregon. The freshman pre-nursing students were attending Portland State College, also in Portland, Oregon. All of the students participating in the study were young women of approximately the same age.

Procedures

The Nursing Personnel Relationships Test and the F - scale were administered to all students in each group. For the pre-testing the two

two groups took the tests at different times, but within the same month, in sessions lasting approximately 45 minutes.

Following this administration, the experimental group participated in a course in interpersonal relationships and communication skills. The course was taught in small groups of approximately 12 students each by a psychiatric nursing instructor employing the group seminar method. This was continued over a six month period with each group meeting for a one-hour session weekly. The classes were regularly scheduled group discussions during which the students analyzed specific subject matter relating to their present development and experience in nursing. They also could talk over or seek help in solving problems encountered in the clinical and school situations. The latter was forthcoming from the instructor as well as from the student group.

Upon completion of the course, both the experimental and control groups again took the two tests, the Nursing Personnel Relationships Test and the F - scale. The sophomore nursing students were again administered the test in one group session. However, for the freshmen pre-nursing students this was not possible as they were no longer together in one class as a group. Consequently, it was necessary to mail the two tests to each student by return mail. The response to this procedure was very satisfactory with almost a 100% return.

The students' responses on the two tests were assigned numerical values and the scores were compared as described in Chapter IV to determine significant changes in attitudes toward interpersonal relationships.

CHAPTER IV

PRESENTATION AND INTERPRETATION OF FINDINGS

The first and second administrations of the Nursing Personnel Relationships Test and the F - scale were separated by six months. The first testing was given to a total of 91 sophomores nursing students from the University of Oregon School of Nursing (experimental group) and 40 freshman pre-nursing students from Portland State College (control group). Successful second administrations of the Nursing Personnel Relationships Test were completed on 76 students of the experimental group and 21 students of the control group. For the F - scale, second administrations were completed on 72 students of the experimental group and 21 students of the control group. All incomplete data were discarded, and all results and analyses to be presented were based only on students who completed both the first and second testings.

q In the Nursing Personnel Relationships Test the maximum possible range of scores (i.e., items selected) for each category is 0 to 18. However, since the total number of items selected in all categories had to equal 18, most scores in each category were considerably less than 18. The frequency distribution of scores in each category were relatively skewed. Scores in the Understanding and Hostile categories were extremely skewed with most of the scores being very low; and scores in the Supportive,

Probing and Evaluative categories were moderately skewed. Because of these facts, the median is the most appropriate measure of central tendency. For the same reason, parametric significance tests could not be employed. Thus all group comparisons for the Nursing Personnel Relationships Test were made using non-parametric methods of analysis. For comparison of independent groups (i.e., experimentals vs. controls on the first testing.) the non-parametric median test, using Chi-square, was employed (23). For comparisons of correlated scores (i.e., experimental group of first vs. second testing) the non-parametric Sign test, also using Chi-square, was used (23).

The maximum possible range of scores on the F - scale is from 30 to 150. Frequency distributions of the scores for both experimental and control groups were normally distributed for both administrations of the F - scale. Consequently the most appropriate measures of group central tendency here is the mean. In like manner, the best method of comparison of group means is the Student t - test (23). For comparisons of independent groups the t - test for independent measures was used, and for comparisons of repeated measures on the same subjects the t - test for correlated scores was used.

The individual data for all groups and conditions of the experiment are given in Appendix C. Group medians or means and statistical analyses will be presented here. Tables I and II will compare first test performance of the experimental and control groups for each of the five categories of the Nursing Personnel Relationships Test, and for the F - scale. Tables III - VII will present comparisons of first test vs. second test

performance separately for the experimental and control groups on each of the five categories of the Nursing Personnel Relationships Test (Evaluative, Hostile, Probing, Supportive and Understanding), and Table VIII will give the same comparisons for the F - scale. Finally, Tables IX and X will compare second test performance of the experimental and control groups for each of the five categories of the Nursing Personnel Relationships Test, and for the F - scale.

The group first test administration performances for the experimental and control groups are shown in Table I for each category of the Nursing Personnel Relationships Test.

TABLE I
 MEDIAN SCORES AND STATISTICAL COMPARISONS OF FREQUENCY
 OF CHOICE ON EACH OF THE FIVE CATEGORIES OF THE
 NURSING PERSONNEL RELATIONSHIPS TEST BY THE
 EXPERIMENTAL AND CONTROL GROUPS ON THE FIRST TESTING

Categories chosen	Median scores		Comparison of control and experimental groups by Median test	
	Experimental groups	Control groups	Chi-square*	P
Evaluative	5.33	5.88	0.55	N.S.
Hostile	0.43	0.69	0.87	N.S.
Probing	5.75	3.40	8.94	.01
Supportive	3.74	4.88	4.12	.05
Understanding	0.48	1.40	1.66	N.S.

* Chi-square for 5% level = 3.84
 Chi-square for 1% level = 6.64

Medians are used as measures of group central tendency. Comparisons between groups are made by the non-parametric median test, using Chi-square. The median scores of both groups are essentially identical for the Evaluative category, and there is no significant difference between them. Note that this category had the highest median number of choices by the control group, and the second highest number of choices by the experimental group. The median number of choices in the Hostile category was less than one for both groups, and the difference between the group medians was not significant. For both groups, this category was chosen least often. The experimental group had a much higher median number of choices for the Probing category than did the control group, and this difference is significant at the 1% level. In contrast, the control group chose the Supportive category somewhat more often than did the experimental group. This difference is significant at the 5% level. Finally, both groups chose the Understanding category infrequently, and there was no significant differences between the group medians. In summary, the experimental and control groups did not differ significantly in frequency of choice of the Evaluative, Hostile and Understanding categories, but the experimental group chose the Probing category more often and the control group chose the Supportive category more frequently.

The results of the first test administration of the F - scale are given in Table II, using means as the measure of central tendency and the t - test for statistical comparisons.

TABLE II
 MEANS AND STATISTICAL COMPARISONS OF Y SCORES FOR THE
 EXPERIMENTAL AND CONTROL GROUPS ON THE FIRST TESTING

F score	Mean scores		Comparison of control and experimental groups by the t test	
	Experimental group	Control group	t*	F
F score	59.75	68.24	1.98	N.S.

*t for 5% level = 2.00

t for 1% level = 2.63

Although the mean score for the control group is about nine points higher than for the experimental group, the difference is not statistically significant. It may be viewed as representing a possible trend in the data, but is not sufficiently reliable to be significant.

Comparisons for each group of subjects on the first and second tests, together with median group performance, are shown in Table III for the Evaluative category of the Nursing Personnel Relationships Test.

TABLE III
 MEDIAN SCORES AND STATISTICAL COMPARISONS OF FREQUENCY
 OF CHANGE IN SCORE FROM THE FIRST TO THE SECOND TESTING
 FOR THE EXPERIMENTAL AND CONTROL GROUPS ON THE
 EVALUATIVE CATEGORY OF THE NURSING PERSONNEL
 RELATIONSHIPS TEST

	Experimental group	Control group
Median score on first test	5.33	5.88
Median score on second test	3.83	3.25
Number of subjects with increased scores from first to second test	21	4
Number of subjects with decreased scores from first to second test	41	15
Chi-squares*	6.45	6.37
P	.05	.05

*Chi-square for 5% level = 3.84
 Chi-square for 1% level = 6.64

The Sign test was used for statistical analysis. This test simply compares the number of subjects who gave an increased number of choices in the category against the number who gave a decreased number of choices. The Null Hypothesis would predict an equal number of subjects giving increased and decreased numbers of choices on the assumption that differences between first and second tests were due only to random factors. Thus for example, the Table shows that 21 subjects of the experimental group gave increased numbers of Evaluative choices and 41 gave decreased numbers of such choices. The Null Hypothesis would predict 31 subjects with increased choices and 31 with decreased choices. These values are used as the observed and expected values for calculating Chi-square. Both the experimental and control groups gave fewer median choices of the Evaluative category on the second testing than on the first testing. In both groups, more subjects chose the category fewer times than more times. Both differences are significant at the 5% level.

Table IV compares the first and second test results for each group on the Hostile category of the Nursing Personnel Relationships Test.

TABLE IV
 MEDIAN SCORES AND STATISTICAL COMPARISONS OF FREQUENCY
 OF CHANGE IN SCORE FROM THE FIRST TO THE SECOND TESTING
 FOR THE EXPERIMENTAL AND CONTROL GROUPS ON THE
 HOSTILE CATEGORY OF THE NURSING PERSONNEL
 RELATIONSHIPS TEST

	Experimental group	Control group
Median score on first test	0.43	0.69
Median score on second test	0.16	0.25
Number of subjects with increased scores from first to second test	11	12
Number of subjects with decreased scores from first to second test	33	8
Chi-squares*	11.00	3.60
P	.01	N.S.

*Chi-square for 5% level = 3.84

Chi-square for 1% level = 6.64

Although both groups exhibit a decrease in median number of choices from test one to test two, the difference was significant only for the experimental group. This decrease for the experimental group was significant at the 1% level. Although the decrease in median number of choices for the control group is not significant, the Chi-square is fairly close to significance. The lack of significance may be due in part to the relatively large number of control subjects (52%) who did not change their frequency of choice at all for the Hostile category.

Comparison of first and second test performances for each group on the Probing category of Nursing Personnel Relationships Test are given in Table V.

TABLE V
 MEDIAN SCORES AND STATISTICAL COMPARISONS OF FREQUENCY
 OF CHANGE IN SCORE FROM THE FIRST TO THE SECOND TESTING
 FOR THE EXPERIMENTAL AND CONTROL GROUPS ON THE
 PROBING CATEGORY OF THE NURSING PERSONNEL
 RELATIONSHIPS TEST

	Experimental group	Control group
Median score on first test	5.75	3.40
Median score on second test	6.40	1.75
Number of subjects with increased scores from first to second test	41	5
Number of subjects with decreased scores from first to second test	28	13
Chi-square*	2.44	3.56
P	N.S.	N.S.

*Chi-square for 5% level = 3.84

The changes from first to second testing are not significant for either group. It is interesting to note, however, that the median number of choices for the experimental group appeared to increase slightly, while the median number of choices for the control group appeared to decrease. This trend is particularly interesting in view of the first test results, where the experimental subjects chose the Probing category significantly more often than did the control subjects (see Table I).

Table VI presents comparisons of the two groups on first and second tests choices of the Supportive category.

TABLE VI
 MEDIAN SCORES AND STATISTICAL COMPARISONS OF FREQUENCY
 OF CHANGE IN SCORE FROM THE FIRST TO THE SECOND TESTING
 FOR THE EXPERIMENTAL AND CONTROL GROUPS ON THE
 SUPPORTIVE CATEGORY OF THE NURSING PERSONNEL
 RELATIONSHIP'S TEST

	Experimental group	Control group
Mean score on first test	3.74	4.88
Median score on second test	3.68	2.00
Number of subjects with increased scores from first to second test	29	6
Number of subjects with decreased scores from first to second test	31	13
Chi-square*	.07	2.58
P	N.S.	N.S.

*Chi-square for 5% level = 3.84

Here neither group exhibited any significant change in number of choices between the two testings. Nor the experimental group the number of subjects who increased and the number of subjects who decreased appear essentially identical. However, there is a decrease, although not statistically significant, in the median number of Supportive choices by the control group.

Changes in number of choices of the Understanding category between first and second testing for the two groups are shown in Table VII.

TABLE VII
 MEDIAN SCORES AND STATISTICAL COMPARISONS OF FREQUENCY
 OF CHANGES IN SCORE FROM THE FIRST TO THE SECOND TESTING
 FOR THE EXPERIMENTAL AND CONTROL GROUPS ON THE
 UNDERSTANDING CATEGORY OF THE NURSING PERSONNEL
 RELATIONSHIPS TEST

	Experimental group	Control group
Median score on first test	0.48	1.40
Median score on second test	1.22	3.00
Number of subjects with increased scores from first to second test	37	15
Number of subjects with decreased scores from first to second test	16	4
Chi-square*	8.30	6.37
P	.01	.05

*Chi-square for 5% level = 3.84
 Chi-square for 1% level = 6.64

Both the experimental and control groups exhibited significant increases in number of choices of the Understanding category, although in both cases the changes in median scores are not particularly large. The change in the experimental group is significant at the 1% level, and the change in the control group is significant at the 5% level.

Comparisons of mean scores for the first and second testings on the F - scale for each group are shown in Table VIII.

TABLE VIII
MEANS AND STATISTICAL COMPARISONS OF CHANGES IN MEAN
SCORES FROM THE FIRST TO THE SECOND TESTING FOR THE
EXPERIMENTAL AND CONTROL GROUPS ON THE F - SCALE

	Experimental group	Control
Mean scores on first test	59.75	68.24
Mean scores on second test	51.00	61.05
First test mean minus second test mean	8.75	7.19
t*	6.48*	2.42**
P	.01	.05

*t for 5% level = 1.98
t for 1% level = 2.61

**t for 5% level = 2.02
t for 1% level = 2.71

The means were compared for each group by the t - test for correlated measures. The mean decrease in F score for the experimental group is significant at the 1% level, and the decrease in mean F score for the control group is significant at the 5% level. The magnitude of change is comparable in both groups.

The experimental and control groups' median performances on the five categories of the Nursing Personnel Relationships Test are compared in Table IX for the second test scores.

TABLE IX
 MEDIAN SCORES AND STATISTICAL COMPARISONS OF FREQUENCY
 OF CHOICE IN EACH OF THE FIVE CATEGORIES OF THE
 NURSING PERSONNEL RELATIONSHIPS TEST BY THE
 EXPERIMENTAL AND CONTROL GROUPS ON THE SECOND TESTING

Categories chosen	Median scores		Comparison of control and experimental groups by Median test	
	Experimental group	Control group	Chi-square*	P
Evaluative	3.83	3.25	0.55	N.S.
Hostile	0.16	0.25	0.87	N.S.
Probing	6.40	1.75	8.94	.01
Supportive	3.68	2.00	4.12	.05
Understanding	1.22	3.00	1.66	N.S.

*Chi-square for 5% level = 3.84
 Chi-square for 1% level = 6.64

The two groups do not differ in terms of median numbers of choices in the Evaluative, Hostile and Understanding categories on the second testing. The experimental group gave significantly more choices of the Probing category than did the control group in the second testing, as was the case on the first testing (see Table I). The one striking change in relative performance of the two groups from the first to the second testing is seen in the number of choices of the Supportive category. On the second testing the experimental group gave significantly more choices in the Supportive category (see Table IX) whereas in the first testing, the control group gave significantly more choices of the Supportive category than did the experimental group (see Table I).

The final comparison to be made, that between the performances of the two groups on the F - scale in the second testing, is shown in Table X.

TABLE X
MEANS AND STATISTICAL COMPARISONS OF F SCORES FOR THE
EXPERIMENTAL AND CONTROL GROUPS OF THE SECOND TESTING

F score	Mean Scores		Comparison of control and experimental groups by the t test	
	Experimental group	Control group	t*	P
F score	51.00	60.05	2.35	.05

*t for 5% level = 2.00

t for 1% level = 2.63

The mean score for the experimental group is significantly lower than for the control group at the 5% level of confidence. This represents a significant change from first test performance, where the two groups did not differ significantly (see Table II). Thus the experimental group became significantly less "authoritarian" over the year than did the control group.

The findings of the study may be summarized as follows. For the Nursing Personnel Relationships Test, the experimental and control groups did not differ from each other on the first and second testings in the Evaluation category, but both groups gave significantly fewer choices on the second test than on the first test. For the Hostile category, the experimental and control groups both gave very few choices on the first and second tests, and did not differ from each other on either testing. However, the experimental group showed a significant decrease in number of Hostile choices but the control group did not. The experimental group gave significantly more Probing choices on both tests than did the control group, and neither group changed significantly from the first test to second test in number of Probing choices. In the Supportive category, while neither group changed on the first test vs. second test, the overall changes in number of choices were such that while the control group gave significantly more Supportive choices than the experimental group on the first testing, the experimental group gave significantly more Supportive choices than the control group on the second testing. Finally, although both groups gave significantly more choices in the Understanding category on the second test than on the first test, the two groups did not differ from each other on either testing.

A consistent overall pattern of change in attitude thus emerges from the results of the Nursing Personnel Relationships Test analyses. Both groups tended to be low on Hostile and Understanding responses initially. Hostility remains low but Understanding increases for both groups. Evaluative responses are high initially for both groups but decrease for the second testing. Neither group changed significantly from first to second testing on the number of Supportive responses. There are no changes in Probing responses for either group on the two testings, the experimental group giving more such responses than the control group on both testings. In terms of changes between the two groups, the number of Hostile choices decreased more for the experimental than the control group, and the two groups reversed in terms of the Supportive category, the control's giving more initially, but the experimental subjects giving more on the second testing.

In terms of absolute changes, both groups became less evaluative and more understanding, and the experimental group remained more probing than the control group. In terms of relative changes the experimental group became less hostile and more supportive than did the control group.

The overall changes in F - scale performance are consistent with the results of the Nursing Personnel Relationships Test. The two groups did not differ initially in amount of authoritarian attitudes; both groups decreased significantly in degree of authoritarianism, but the experimental group decreased significantly more than did the control group in amount of authoritarian attitude.

The absolute changes in attitude in both groups are significant and

of considerable interest. Most of the changes are in desirable directions in terms of the goals of nursing education. Both groups of students tend to evaluate less and understand more in their interpersonal relations, at least as reflected in the test score. They both become less authoritarian and more democratic in overall attitude. The relative changes between the experimental and control groups are also encouraging from the point of view of nursing education. The experimental group became less hostile and more supportive than did the controls, and have significantly greater decreases in degree of authoritarian attitudes. It should be recalled that the subjects of the experimental group are sophomore nursing students, only one year more advanced than the freshman pre-nursing students of the control group. The one difference between groups that remains consistent and may not be a desirable attitude in nursing is the greater amount of Probing choices in the experimental group. This may well reflect the insecurity of the second year nursing student, who is in a medical setting for the first time and is faced with the task of interviewing and dealing with patients. The simplest way out for an inexperienced interviewer is to ask very probing and directive questions, rather than eliciting information more effectively and subtly by being supportive and understanding, or in other words non-directive (33).

Caution must be exercised in considering the causal factors underlying the differences between the control and experimental groups in the present study. The specific aim of the study was to attempt evaluation of a new course on interpersonal relations developed for the second year students. The control and experimental groups actually differ completely

in total experience for the year. The subjects of the control group are first year students at one college setting. The subjects of the experimental group are second year students at the University of Oregon School of Nursing, in a medical center setting, with varying college backgrounds. It was initially hoped that a special control group could be used for evaluation of the new second year course. This would have been accomplished by dividing the second year students into two equal groups on a random basis and having only one group take the course. However, this was not possible. Consequently no specific evaluation of the effect of the new course, as such, can be made. The many significant findings of the present study must for now be attributed to the entirely different total situation experienced by the control and experimental groups. Although it may seem reasonable to attribute such changes as were seen to the specialized course, only further research, with more appropriate controls, can evaluate this possibility.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

This study was planned to measure attitudes and attitude changes of student nurses during their sophomore year in a school of nursing and to attempt evaluation of the effects on their attitudes of a new course on interpersonal relations developed for the sophomore students at the University of Oregon School of Nursing. It is felt that attitudes toward others, are of considerable importance in the developing interpersonal skills of the student nurse. Further, interpersonal skills are of primary significance in the effectiveness of the role fulfilled by the nurse in modern nursing practice.

The study was designed to obtain objective measures of attitudes and attitude changes relevant to the interpersonal relationships of nursing in the second year students both before and after they had taken the course in interpersonal relations. It was necessary to employ a control group to equate for the general effects of six months of nursing instruction. Freshman pre-nursing college students were chosen for the control group.

The measures of attitude used in this study were the Nursing Personnel Relationships Test (40) and the F - scale (1). The Nursing

Personnel Relationships Test consists of descriptions of eighteen interpersonal situations. The subject must choose one of the five possible responses, which are categorized for scoring as Evaluative, Hostile, Probing, supportive and Understanding. A subject's score is simply the number of items in each category chosen. The test has been shown to have good validity and reliability, and to be sensitive to attitude changes (40).

The F - scale is a standard instrument used in Psychology to measure the extent of "authoritarianism" or anti-democratic attitudes (1). It consists of 30 statements, each of which is rated from "agree strongly" (score of 5) to "disagree strongly" (score of 1) on a five point scale. It has very good reliability and validity (1).

Both tests were administered to sophomore nursing students at the University of Oregon School of Nursing (experimental group) and freshman pre-nursing students at Portland State College (control group) in Fall, 1961, and readministered in Spring, 1962, after the course for sophomores on interpersonal relations was completed. A total of 76 experimental and 21 control subjects completed both administrations of the Nursing Personnel Relationships Test, and 72 experimental and 21 control subjects completed both administrations of the F - scale.

On the Nursing Personnel Relationships Test, the experimental and control groups did not differ from each other on the first and second testings in the Evaluative category, but both groups gave significantly fewer choices on the second test than on the first test. For the Hostile category, both groups gave very few choices on either administration of the test, however the experimentals showed a decrease, while the controls did

not. There were no changes for either group between first and second tests on the Probing category, the experimental group being higher than the control group on both. The control group gave more Supportive choices on the first test than the experimental group but the experimental group gave more on the second test than did the controls. The two groups did not differ from each other on either the first or second testings in number of Understanding choices, and both increased the number of such choices from the first to the second testing. The two groups did not differ initially in F score, but the experimental group had significantly lower scores on the second testing than did the control group. Both groups decreased significantly from the first test to the second test.

Conclusions

From the results of this study the following conclusions have been drawn:

1. Both test instruments used, the Nursing Personnel Relationships Test and the F - scale, are sensitive and reliable measures of attitudes and attitude changes. Numerous significant and consistent changes in attitudes were found in both experimental and control groups.
2. Results of the Nursing Personnel Relationships Test indicated a consistent pattern of attitude change during the course of the study. Both the experimental and control groups tended to evaluate less and understand more in their interpersonal relations. The experimental group became less hostile and more supportive than

did the control group. Finally, the experimental group remained consistently more probing throughout the study than did the control group.

3. Results of the F - scale test are consistent with the other findings of the study. The experimental and control groups were not significantly different from each other initially in terms of degree of authoritarian or anti-democratic attitudes. Both experimental and control groups decreased significantly in degree of authoritarian attitudes during the course of the study. Finally, on the second testing, the experimental group demonstrated significantly less authoritarian attitude than did the control group.
4. The general hypothesis of the present study that student nurses' attitudes in interpersonal relationships can be modified to a significant degree by instruction and experience in the sophomore year was fully verified. The experimental group changed significantly on many of the measures relative to the control group. Specific hypotheses concerning the Nursing Personnel Relationships Test predicted that relative to the control group, the experimental group would show greater increases in Supportive and Understanding responses and greater decreases in Evaluative, Hostile and Probing responses. The experimental group did in fact decrease more than the control group in terms of Hostile responses, and increased more than the control group on Supportive responses. The specific hypotheses regarding Evaluative and

Understanding responses were not fully verified. Both groups decreased significantly and equivalently on Evaluative responses, and both groups increased significantly and equivalently on Understanding responses. Results for the Probing category were contradictory to the hypothesis. The experimental group was significantly higher on Probing initially, and remained higher. The specific hypothesis for the F - scale predicted that the experimental group would become more democratic (lower F scores) than the control group. This hypothesis was fully confirmed.

Recommendations for Further Study

1. Both the Nursing Personnel Relationships Test and the F - scale used as attitude tests in this study were found to be extremely sensitive indicators of attitude change. Both tests demonstrated such changes in the control group of 21 students, thus indicating their usefulness even with small samples or groups. In particular the Nursing Personnel Relationships Test is of great value in studying attitudes and attitude changes among nursing groups. It is recommended that this test be much more widely used in studies of attitude and interpersonal relations among nurses. A number of studies ought to be conducted to determine the performance of different categories of nurses, and nursing groups with various backgrounds, on the test. Such data would be valuable not only for the specific information about attitudes of nursing groups, but also in providing "baseline"

measures of attitudes toward interpersonal relations to serve as guidelines and standards for further study and experimentation.

2. The results of the present study indicated that in general the changes in interpersonal attitudes of the sophomore nursing students were in the desired directions consistent with the goals of nursing education. In particular the increases in supportive and understanding attitudes and the decrease in evaluative attitudes were encouraging. However the consistently high choice of probing responses of the sophomore nursing students suggests that further studies of this attitude be made. The hypothesis was offered that such probing attitudes are the result of inexperience and anxiety associated with the necessary interviewing of patients that will become an important part of the student nurse's activities. Specific instructions on techniques of interviewing could be offered the students, and the effects of such instructions tested much in the same manner as the present study. A variety of other studies could be planned in relation to this problem.
3. In terms of the specific goal of evaluating the effects of the new course offered the sophomore nursing students in interpersonal relations, a number of additional studies could be undertaken. In particular, it is necessary to utilize a more specialized control group that would permit differentiation between other experiences of the sophomore year students and the specific

effects of the course. As indicated in the discussion above, the only entirely specific control group would consist of half of the second year class not taking the course. In terms of fulfilling the educational goals of nursing education for every student, it might be possible to give the course to half the students in the sophomore year, and the remaining half in the junior year. Such an approach could have more general application in the study and evaluation of new courses or in fact any aspect of the nursing program that may merit analysis. This procedure of splitting the class and teaching in successive years of the program provides a built-in control for age, level of experience, and kinds of experience, variables whose effects could not be fully controlled in the present study.

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APPENDICES

APPENDIX A

NURSING PERSONNEL RELATIONSHIPS TEST

INSTRUCTIONS: Below, a series of excerpts from statements of nurses, nurse-supervisors, nursing students, etc., is presented. Each excerpt is an expression by the person speaking concerning an aspect of the situation she (or in one instance he) faces. Little or no information is given about the person speaking except her nursing position. This is indicated by the first title appearing opposite the item numbers. The person to whom she is speaking is identified by the second title. No further information is available. In many instances you will not even know where in the course of the nurse's experience, training or employment the expression takes place. In brief, you are presented with isolated expressions of various nursing personnel.

Following each statement is a series of five possible responses of the person to whom the statement is made. You are to select the one response which seems to you to be the most apt response you could make in reply to the person speaking. Where no response seems best, select the response which best approximates the response you would like to see.

You have been provided with an answer sheet on which to register your selection. In each item circle the letter on the answer sheet which corresponds to the response you have selected.

1. Nurse -- Nurse Supervisor

"I tell you I can't work with Dr. Smith. I dislike him! He barks orders at me like an army Colonel. He brushes off my observations with a grunt. He never asks me about anything, and he never comments on how I'm doing. He makes me feel as if what I'm doing is of no importance."

- a. Suppose you tell me more about your working relationship with him. It is important to get a clear picture of the situation.
- b. You're concerned that no notice seems to be made of what you are doing, and you're wondering if your work is really of any value.

- c. This is something you'll certainly want to get ironed out. It is important that nurses have a good relationship with the doctor. You'll get along better with him if you can bring yourself to respect him.
- d. New nurses frequently go through a period when they resent some of the doctors. It's not unusual. Once you get used to a doctor, however, you'll find that he isn't so bad after all, and things will go along smoothly.
- e. What you're saying doesn't sound like the remarks of a mature nurse. The doctor knows what he is doing. You're assuming a great deal to criticize when you've had so little experience.

2. Male Attendant -- Nurse Supervisor

"I'm fed up with this job! You're all the time finding something else for me to do before I've finished with what I'm doing. Then you criticize whatever I do. I can't seem to do anything right as far as you're concerned. It's bad enough taking orders from a woman, let alone being picked on all the time!"

- a. You're old enough to be a responsible person. It will be to your advantage to do a better job instead of complaining about how you think you're being treated.
- b. It is not at all unusual for a new attendant to feel rushed and picked on but after you get into the swing of things, you'll see that things are not so bad as they seem.
- c. It's pretty irritating to work under the direction of a woman, especially when you feel rushed and criticized.
- d. It may seem to you I'm picking on you but, I think you realize, we've got to do the best we can, and we've got to get along if we are to get our jobs done.
- e. I'd like to hear your side of the story fully. Would you tell me more specifically the situations to which you refer.

3. Nursing student -- Advisor

"I confess, I'm just not sure whether I want to become a nurse or not. I was quite enthusiastic when I started in nursing school. I have always wanted to be a nurse; but now, for some reason. I seem to have lost interest. I can't seem to get involved in my courses, and my grades have slipped. Yet I don't know of anything I'd like better than nursing -- maybe I'm just not cut out for it."

- a. This loss of interest has you concerned that maybe you're not really suited for nursing.
- b. At one time or another most people wonder if their chosen profession is what they really want. Don't be too concerned about it. For now, just concentrate on doing the best you can in your courses, and you'll find that old enthusiasm coming back.
- c. This requires careful consideration. When did you first start feeling this way?
- d. If you feel this way about nursing it is, perhaps, best that you do something else. The profession can't afford to have dissatisfied nursing in its ranks.
- e. This is a feeling you'll certainly want to overcome if you're going to be a nurse. Above all, it is important for a nurse to be interested in what she is doing.

4. Nurse -- Supervisor

"Well, to tell the truth, I feel pretty lonely. I've been here over a month, and I haven't really made any friends among the other nurses. I realize it's my fault -- they're nice enough; but I'm not very outgoing, and I hesitate to force myself on them. If I knew for sure they'd accept me it would make it a lot easier. You know them all -- what they're like and how they see things. I thought maybe you could help me."

- a. In order to make friends you've got to be friendly yourself. You can't get someone to do it for you; it just won't work that way.
- b. Before I could advise you, it would be necessary to know more about what sort of relationships you develop with people in general -- if you always feel shy and so forth.
- c. Well now, I wouldn't worry too much about that. I think we can take care of your problem all right. I'll mention to the other nurses how you feel, and I'm sure they'll be happy to include you.
- d. You really haven't extended yourself, you know. I don't wonder that you feel left out. It's about time you came out of your shell if you hope to have any friends at all.
- e. You hope I can tell you how the other nurses feel about you, is that it?

5. Supervisor -- Director of Nursing

"It's asking too much! My floor was understaffed even before you transferred Miss Jonas. Unless I get some replacements I just don't know how much longer we can go on. The nurses are beginning to complain, and I can't blame them -- they've been worked to death. You promised me replacements and I haven't got them. I'd like to know what you plan to do about it."

- a. I realize that you're short-handed now, but it's expected of a person in your position to make the best of such situations. Perhaps, if you adopt a positive attitude, and see what can be done to increase efficiency, things won't be so bad.
- b. Your situation is pretty rough now, I know, but let's hope it won't be for long. I'll see what I can do to get you help. In the meantime just do the best you can and don't worry too much about the girls' complaining.
- c. Well, one would think you were the only supervisor with this problem. If you can't handle the nurses' complaining perhaps we chose the wrong person for your job.
- d. If I'm correct, you feel that I'm at least partly responsible for the situation on your floor and you wonder if I can do anything about it.
- e. Perhaps you could tell me the exact nature of the nurses' complaints and how you have been dealing with them.

6. Student Nurse -- Supervisor

"I'm really burned up! (tearfully). I realize I made an error in the way I removed the traction, but I don't think Miss Smith was justified in bawling me out in front of the other student nurses. Everyone makes mistakes, and this one wasn't too serious. What right had she to - to ridicule me? I'm so mad, I don't care what happens."

- a. It was a very upsetting experience and you feel pretty angry at Miss Smith.
- b. Miss Smith is charged with the very important responsibility of teaching you students correct procedures. You learn a lot from her if you can use her criticisms constructively rather than become angry at her.
- c. A mistake in nursing can be a serious matter. So when you make a mistake in training you've really no right to expect sympathy.

Nursing carries a great deal of responsibility with it, and, as a student, you've got to learn to be responsible.

- d. Don't let Miss Smith's remarks get you down. I'm sure she didn't mean to upset you. When you become better acquainted with her, I know you'll get along with her all right.
- e. Maybe if you'll tell me how this came about, I could get a closer picture of the situation.

7. Head Nurse -- Supervisor

"I've been having difficulty with the new nurse. I think, basically, she could be a good nurse, but she resents my suggestions and takes offense at the slightest criticism. She makes it obvious that she dislikes taking orders from me, and she will not speak to me unless I ask her questions. I don't know what to do about it. I would appreciate any advice you could give me. How should I approach her? What should I do to let her know I want to be helpful? Perhaps you could talk to her and arrive at some ideas."

- a. This is really your problem, not mine. A person in your position must learn to deal with these situations.
- b. I'll need to know more about your problems with this nurse before I can arrive at any clear-cut solution.
- c. I know just how you feel, but I wouldn't worry about this nurse's attitude. You're really a very friendly person, yourself, and she's sure to feel friendly toward you as time goes on.
- d. I take it you don't feel you can handle this situation yourself.
- e. I believe that whatever solution is found to this problem should be yours. You're really the only one who can work things out with her.

8. Nurse -- Nurse Supervisor

"It's an awfully hard decision to make. I've got the opportunity to take the job at this other hospital. It's just the kind of nursing position I'd like. It pays a little better, too. But you've all been so wonderful to me, and I know how short of nurses you are. Besides, this other job is a real opportunity --- Oh dear, I just don't know what's the right thing to do."

- a. Well now, that shouldn't be too difficult. Let's just weigh your reasons for taking the other job against your reasons for staying

here and we should come out with a solution in short order.

- b. Indecisiveness is something you'll want to overcome. I think you'll find it much easier just to make up your mind what it is you want and then act accordingly.
- c. I gather you'd like to take this job but you're not sure you'd be doing the right thing by us.
- d. Well, that's something you'll have to decide for yourself. But remember, there are other things besides your own advancement to consider.
- e. Exactly what would be your duties at the new hospital?

9. Student Nurse -- Discipline Counselor

"Yes, I know why I'm here. It's about my staying out after hours last night and trying to sneak in. It was a foolish thing to do and I'm not going to make any excuses for myself. Although, I may not agree with all the rules at the school here, I realize that infractions cannot be tolerated. I know I have an obligation to the school and to myself to abide by the regulations as long as I am a student here. I just got the idea it might be exciting to try to sneak in. I got caught and I'm ready to accept the consequences."

- a. Well, you certainly pulled a silly stunt. I suspect you realize that you're in for it now. You can be sure you'll be hearing from the Dean.
- b. I take it you want to stand on your own two feet in this matter. I'll let you know what the Dean decides.
- c. I know you understand that the Dean is required to do something about this. We don't like it any more than you do. You'll be hearing from the Dean about it soon.
- d. Whatever was it that made you feel the need for excitement?
- e. That's the sort of attitude you ought to maintain. I don't like to get after you and I'm sure you don't like it either. I'll let you know the Dean's decision.

10. Nurse -- Supervisor

"I do.
"I don't know quite how to go about this, and I hope you won't think I'm criticizing, but I'd like to offer a suggestion about how things might be changed on our floor, if I may. Please don't get me wrong, I'm not trying to tell you how to do things, but I thought --

if it's all right, -- you might like to hear an idea I have."

- a. Suppose you tell me what it is that makes it so difficult for you to tell me what you have in mind.
- b. You know, you can't very well expect me to give my opinion unless you come to the point. I've got work to do and so have you.
- c. Well, now, don't be afraid of me. My bark is worse than my bite. Let's hear your proposition.
- d. I believe you'll find that when you have something to say, it's much better in the long run to come right out and say it.
- e. You're afraid that I may resent your making a suggestion, is that right?

11. Student Nurse -- Teacher

"I just can't seem to get over what happened yesterday. I feel so awful about it, even now! Everything was all right until I had to give a hypodermic to a live person -- then something happened -- I don't know -- my hands shook -- and well, I broke the needle and -- after that, I just couldn't go through with it. I know I shouldn't have run out, but I made such a mess of it. I couldn't stay. Now I can't concentrate on anything for thinking about it."

- a. Things like that happen sometimes. Don't take it too much to heart. I'm sure you'll do all right next time.
- b. I certainly understand why you're not proud of that performance. You'd better keep a better grip on yourself after this.
- c. It's not too constructive to dwell on something that's past. It's better to forget about the incident and determine to do better next time.
- d. What sort of feelings did you have when you attempted to give the hypodermic?
- e. You feel pretty bad about what happened and can't get it out of your mind.

12. Nurse -- Director of Nursing

"I'll come to the point. I'd like to know why Miss Wilson got the supervisor's job and I didn't. I've been here as long as she has and my work has been every bit as good as hers, if not better. In fact, I've worked harder than she has. I've noticed, too, that she's been

getting easier assignments than I have for some time now. To tell the truth, I'm wondering exactly on what basis she got the promotion over me."

- a. Even though you're disappointed, if you take the attitude that you're going to be cooperative and helpful to Miss Wilson, I'm sure you'll feel better about the whole thing.
- b. Maybe if you'll tell me exactly what questions you have about Miss Wilson's promotion, I can clarify the situation for you.
- c. You're not taking this very gracefully, I must say. You can be sure that there were good reasons for choosing Miss Wilson.
- d. I guess you feel we haven't been entirely fair to you and you're wondering if there might not have been some favoritism shown.
- e. Whenever there are two good persons in line for the same position, it's frequently a toss-up as to who will get the job. The next time there's an opening, I wouldn't be a bit surprised if you got it.

13. Nursing Student -- Advisor

"I've decided to drop out of nursing school. I've come to the conclusion that nursing isn't what I'd be happy doing. I enrolled again this year because I wasn't sure. But, I've thought it over this term and made up my mind. I'm not sure just what I want to go into -- teaching, maybe, or music. I'm pretty sure, though, that nursing is not for me."

- a. Just how carefully have you thought about this? What are the things you've considered?
- b. In other words, you're pretty sure nursing is not what you want.
- c. Perhaps you aren't sure yet exactly what you'll go into, but at least you've made the decision about nursing on your own, and I'm sure you'll be able to decide on another field you'll be happy in.
- d. I wonder if it wouldn't be a good idea to know what other field you'd like to go into before you toss away your nursing education.
- e. In other words, you're giving up. Some people flit from one thing to another, never finishing anything. You might consider whether you want that description to fit you.

14. Nurse -- Supervisor

"I don't know how much longer I can keep my temper! That patient in 302 is impossible! He refuses to wash for breakfast; he gripes about the food; he shouts at me! And he's always signaling for a nurse -- for every little thing. -- He refuses to cooperate in anything! I've tried all sorts of things. I've been friendly, I've asked him to cooperate, I've cajoled him -- tried to reason with him -- I even pleaded with him to be more considerate. Nothing works! I've taken about all I can. It wouldn't take much for me to tell him off, but good."

- a. Every once in a while we get a patient like that. Don't let him bother you. After all he's just hurting himself.
- b. I'm sure it's a difficult situation, but it's important that a nurse not let such things get the best of her.
- c. It's pretty exasperating, isn't it? You've taken a lot and now you feel that it's about time for him to be on the receiving end.
- d. A good nurse learns to handle all kinds of people. It's part of your job and something you'd better learn.
- e. Has the patient acted this way from the beginning? Perhaps if you could give me a little more detailed description of some of the incidents, I could get some idea of how you might handle him.

15. Nurse -- Supervisor

"As you know, this is my first nursing job, and I'm a little confused -- a little scared too, I guess. This is such a big hospital, and everybody is so busy. I can't remember all the things I was told this morning -- all the procedures and regulations, and where everything is, and all. I want to do a good job, but right now I feel a little bewildered."

- a. If you just keep in mind that you're a capable trained nurse you'll find you won't feel so bewildered.
- b. It all seems pretty overwhelming right now.
- c. You're right, this is a big hospital, and we're all busy here. So you're going to have to be on the ball.
- d. Why don't you tell me a little bit about the hospitals you trained in and the type of routines you're used to?
- e. It's only natural that you can't remember everything at the beginning. You'll eventually learn the ropes and feel right at home here.

16. Nurse Supervisor -- Director of Nursing

"Well, your position makes you an expert, so what's your advice? We both know morale is low on this floor: work isn't done well, -- the patients complain -- the doctors complain -- that much I'll admit. I know what you're probably thinking but you'll find that I've done all a person can be expected to do -- and more! Under considerable handicap, too, I might add -- without cooperation from any quarter! In fact, if anyone thinks she can do a better job short of getting better nurses, she's welcome to try."

- a. Yes, things certainly are a mess on your floor, but excuses aren't going to help the situation at all.
- b. It takes courage to admit that the situation is bad, but if you're going to improve things, it would be a good idea to take a positive "What can I do" approach -- don't you agree?
- c. If you could tell me what sort of things you've tried to improve the situation perhaps I could come up with some alternative suggestions.
- d. I gather you wonder, if, perhaps we might not be blaming you for the situation on your floor.
- e. You have had to deal with a difficult situation. But look at it this way -- there is just so much you can do with the nurses you have under you.

17. Nurse -- Supervisor

"I know you want us nurses to plan the meeting ourselves, but I think we could use some direction to get started right. We can't seem to get things organized. We don't know where to start, and -- well, you've had some experience in this sort of thing. It's not that we expect you to do it all; it's just that we could use some -- well, some direction."

- a. As I understand it, you're a little lost as to what to do, and you wonder if I will help you get started.
- b. I should think you'd welcome a chance to do something by yourselves. Now that you have the opportunity, you should make the most of it.
- c. Let me hear about the difficulties you are having. We should get a clear idea of what the trouble is.
- d. The planning of the meetings was turned over to your nurses. I suggest you get yourselves organized and start getting things done.

- e. Groups frequently have difficulty getting things organized at first, so don't be too concerned about that. I'm sure you'll come up with a good program before long.

18. Nurse -- Supervisor

"I guess you know what happened. I just -- well -- I just "blow my top!" And Gloria had it coming to her! She's been a pain ever since she came here. She's irresponsible and uncooperative. I've had to do a lot of her work, and more than once I've had to correct her mistakes. Then, that nasty attitude of hers -- I took it for a long time -- until today! Then, when she told me to mind my own business, in that nasty way of hers -- it was just too much! I don't mind admitting it -- I saw red! I'm not sorry -- she asked for it and she got it!"

- a. We all get angry at somebody at times, but after a while things usually straighten themselves out.
- b. Suppose you tell me a little more about how you've been getting along with Gloria so that I can get a better picture of the total situation.
- c. If you expect me to sympathize with your actions you're going to be disappointed! I have little patience with temper outbursts.
- d. You became pretty angry at Gloria and feel your telling her off was justified.
- e. Your reaction wasn't quite what one would expect of a trained nurse, was it? I think, in the long run you will find it is much better if you keep control of your temper no matter what the provocation.

Name _____

Nursing Personnel Relationships Test

ANSWER SHEET

- | | |
|---|--|
| 1. Nurse -- Nurse Supervisor
a b c d e | 10. Nurse -- Supervisor
a b c d e |
| 2. Male Attendant -- Nurse Supervisor
a b c d e | 11. Student Nurse -- Teacher
a b c d e |
| 3. Nursing Student -- Advisor
a b c d e | 12. Nurse -- Director of Nursing
a b c d e |
| 4. Nurse -- Supervisor
a b c d e | 13. Nursing Student -- Advisor
a b c d e |
| 5. Supervisor -- Director of Nursing
a b c d e | 14. Nurse -- Supervisor
a b c d e |
| 6. Student Nurse -- Supervisor
a b c d e | 15. Nurse -- Supervisor
a b c d e |
| 7. Head Nurse -- Supervisor
a b c d e | 15. Supervisor -- Director of Nursing
a b c d e |
| 8. Nurse -- Nurse Supervisor
a b c d e | 17. Nurse -- Supervisor
a b c d e |
| 9. Student Nurse -- Discipline Counselor
a b c d e | 18. Nurse -- Supervisor
a b c d e |

Name _____

F - Scale

This is an investigation of people's opinions about certain issues. There are no right or wrong answers. These are statements with which some people agree and others disagree. Please mark each one according to the amount of your agreement or disagreement by using the following scale:

- A. You slightly agree
- B. You moderately agree
- C. You strongly agree
- D. You slightly disagree
- E. You moderately disagree
- F. You strongly disagree

_____ Obedience and respect for authority are the most important virtues children could learn.

_____ A person who has bad manners, habits, and breeding can hardly expect to get along with decent people.

_____ If people would talk less and work more, everybody would be better off.

_____ The business man and the manufacturer are much more important to society than the artist and the professor.

_____ Science has its place, but there are many important things that can never possibly be understood by the human mind.

_____ Every person should have complete faith in some supernatural power whose decisions he obeys without question.

_____ Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.

_____ What this country needs most, more than laws and political programs, is a few courageous, tireless, devoted leaders in whom the people can put their faith.

_____ No sane, normal, decent person could ever think of hurting a close friend or relative.

- ____ Nobody ever learned anything really important except through suffering.
- ____ What the youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country.
- ____ An insult to our honor should always be punished.
- ____ Sex crimes, such as rape and attacks on children, deserve more than mere imprisonment; such criminals ought to be publicly whipped, or worse.
- ____ There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents.
- ____ Most of our social problems would be solved if we could somehow get rid of the immoral, crooked, and feeble-minded people.
- ____ Homosexuals are hardly better than criminals and ought to be severely punished.
- ____ When a person has a problem or worry, it is best for him not to think about it, but to keep busy with more cheerful things.
- ____ Nowadays more and more people are prying into matters that should remain personal and private.
- ____ Some people are born with an urge to jump from high places.
- ____ People can be divided into two distinct classes: the weak and the strong.
- ____ Someday it will probably be shown that astrology can explain a lot of things.
- ____ Wars and social troubles may someday be ended by an earthquake or flood that will destroy the whole world.
- ____ No weakness or difficulty can hold us back if we have enough will power.
- ____ It is best to use some prewar authorities in Germany to keep order and prevent chaos.
- ____ Most people don't realize how much our lives are controlled by plots hatched in secret places.
- ____ Human nature being what it is, there will always be war and conflict.

_____ Familiarity breeds contempt.

_____ Nowadays when so many different kinds of people move around and mix together so much, a person has to protect himself especially carefully against catching infection or disease from them.

_____ The wild sex life of the old Greeks and Romans was tame compared to some of the goings-on in this century, even in places where people might least expect it.

_____ The true American way of life is disappearing so fast that force may be necessary to preserve it.

APPENDIX B
LETTER ACCOMPANYING SECOND TESTING
OF CONTROL GROUP

1025 S. W. Gaines Road
Portland 1, Oregon
May 5, 1962

Dear

As you will recall, last fall you very kindly participated in a research project I am conducting on curriculum development at the University of Oregon Medical School, School of Nursing. The project requires that I obtain your cooperation again.

Enclosed are the same two questionnaires you completed last fall, together with a stamped return envelope. I would appreciate it greatly if you would fill them out again and return the two answer sheets at your earliest convenience, preferable not later than May 15, 1962.

Research in this area is extremely difficult, but very necessary. Your cooperation will be deeply appreciated. Your questionnaire will of course be treated as confidential --- no one aside from myself will see the individual results.

A copy of the completed study will be placed in the library of the University of Oregon Medical School for the use by those interested in the results of the study.

Thank you for your cooperation and valuable assistance.

Sincerely yours,

(Mrs.) Judith K. Thompson

APPENDIX C

INDIVIDUAL SCORES, FIRST AND SECOND TESTING

Experimental Group

Sub- jects	Nurse-Patient Relationships Test										F - Scale	
	Evaluative		Hostile		Prob- ing		Supper- tive		Under- standing		1st	2nd
	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd		
1	7	6	2	1	3	4	4	7	2	0	--	--
2	5	5	0	0	4	4	9	9	0	0	31	14
3	9	6	0	1	4	7	5	3	0	1	--	--
4	1	1	0	0	14	8	2	6	1	3	50	41
5	3	0	0	0	8	5	2	5	5	8	69	67
6	6	7	3	0	3	6	6	4	0	1	45	29
9	9	11	0	3	3	1	6	2	0	1	61	63
10	1	1	0	0	5	8	3	0	9	9	55	39
11	1	0	0	0	17	18	0	0	0	0	32	39
12	4	10	1	0	9	3	3	5	1	0	64	61
13	0	0	0	0	18	18	0	0	0	0	28	11
14	7	8	1	0	5	6	2	3	3	1	48	41
16	2	3	0	0	13	10	3	3	0	2	45	43
17	4	4	0	2	11	9	2	3	1	0	88	76
18	6	5	1	0	7	10	4	3	0	0	--	--
19	8	3	1	0	4	9	3	5	2	1	63	80
20	5	1	1	0	12	15	0	2	0	0	78	67
22	2	1	1	0	5	3	1	0	9	14	40	30
23	7	0	0	0	2	6	3	1	6	11	77	59

Sub- jects	Evaluative		Hostile		Prob- ing		Supportive		Under- standing		F - Scale	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd
24	0	0	1	0	10	3	2	2	5	13	22	17
25	3	0	1	0	11	17	1	1	2	0	80	66
26	3	4	0	1	11	7	4	6	0	0	53	46
27	8	0	0	1	9	13	0	1	1	3	84	79
28	8	11	0	1	3	3	6	3	1	0	85	60
29	10	6	0	0	0	1	7	8	1	3	32	24
30	3	3	0	0	11	9	4	3	0	3	61	55
31	4	4	0	0	5	5	7	8	2	1	79	75
34	7	4	1	0	4	6	6	8	0	0	86	86
35	10	9	1	0	2	5	8	0	0	75	56	
36	5	3	0	0	7	9	4	3	2	3	46	41
37	4	4	1	0	7	11	3	0	3	3	79	72
40	5	9	0	0	2	1	9	4	2	4	87	69
41	3	0	0	0	13	15	2	2	0	1	39	38
42	3	1	0	0	10	13	4	3	1	1	46	36
43	3	5	1	0	4	7	9	6	1	0	69	67
44	10	10	1	1	5	4	2	2	0	1	73	64
45	2	0	0	0	11	14	2	1	3	3	53	32
46	1	0	0	0	14	17	3	1	0	0	48	33
47	7	7	1	0	2	6	2	3	6	2	59	57
48	5	8	0	1	4	4	7	4	2	1	48	47
49	9	5	2	0	1	3	4	7	2	3	46	42
50	5	5	0	1	8	5	5	5	0	2	60	37
51	5	5	0	0	5	6	7	6	1	1	93	90

Sub- jects	Evaluative		Hostile		Prob- ing		Supper- tive		Under- standing		F - Scale	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd
52	10	7	1	0	5	4	2	7	0	0	61	56
53	8	4	0	1	4	6	4	4	2	3	55	67
54	4	3	0	1	6	5	4	3	4	6	28	31
55	7	8	0	0	3	1	3	5	5	4	--	--
56	5	2	1	0	8	10	4	4	0	2	80	85
57	3	6	1	0	11	13	3	5	0	0	68	54
58	4	5	0	0	9	8	5	4	0	1	58	31
60	6	7	0	0	7	1	3	9	1	1	73	48
61	9	3	1	0	4	8	4	6	0	1	83	79
63	6	3	1	0	6	10	4	3	1	2	54	33
64	13	11	0	0	1	3	4	4	0	0	--	--
65	6	4	1	0	9	6	2	6	0	2	60	51
66	6	2	1	0	9	10	2	2	0	4	40	32
67	2	0	0	0	8	9	8	2	0	7	81	62
68	7	1	1	0	4	11	6	6	0	0	90	43
69	7	11	0	0	7	3	3	4	0	0	30	34
71	1	3	0	0	15	11	2	4	0	0	58	27
73	9	5	1	4	2	3	6	5	0	1	95	66
74	6	5	4	3	1	2	7	7	0	1	53	44
75	6	6	0	0	4	4	7	6	1	2	49	51
76	5	1	0	0	6	17	2	0	5	0	77	58
77	5	7	2	1	6	1	5	8	0	1	82	82
79	8	10	2	0	4	3	4	5	0	0	64	37

Typed by
Dorothy L. Hopwood