THE EFFECT OF THE PSYCHIATRIC NURSING ROTATION ON THE STUDENT'S LEVEL OF ANXIETY AND ATTITUDES TOWARD THE MENTALLY ILL

by

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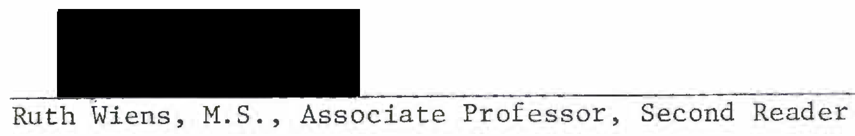

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CHAPTER I

INTRODUCTION

In the past two decades, attitudes of mental health workers toward mental illness have come under close examination as evidence has accumulated that these attitudes may influence the treatment, well-being, and behavior of psychiatric patients. The attitudes of nurses have been regarded as particularly important, in that nurses exert influence both directly through their close and frequent contact with patients, and indirectly through their supervision of aides and lower status personnel working with patients. Nurses' attitudes may in fact determine the therapeutic climate of an entire unit. It is crucial, then, that nurses be accepting of the mentally ill.

Recognizing that attitudes are learned, and that beginning nursing students may share the negative views of the mentally ill that prevail in the larger society, nursing educators have expended considerable effort in assessing attitudes of their students. They have also worked to develop programs that increase knowledge and understanding of mental illness, so that later the students as professionals may deliver optimally therapeutic nursing care. Frequently it has been the psychiatric rotation in the nursing curriculum that has been expected to accomplish these goals.

This research represents an attempt to determine whether the major components of a psychiatric rotation--contact with the psychiatric

patients, and didactic input--were indeed instrumental in decreasing students' anxieties and fears regarding the mentally ill, and in fostering favorable attitudes toward them. Additionally, an attempt was made to determine whether change in attitudes to mental illness was systematically related to change in anxiety in students enrolled in a diploma program of nursing.

Review of the Literature

In the review to follow, the attitudes of the general public, those of professionals in the mental health field, those of nurses in general, and of student nurses in particular will be considered. Secondly, the various dimensions of attitudes will be examined. Thirdly, the factors which help to shape these attitudes will be discussed. And lastly, the various methods of effecting attitude change will be explored.

Attitudes Towards the Mentally Ill

The study of attitudes toward mental illness was first begun in the late 1940s. Since then, a large body of research has emerged delineating the attitudes held by the public and by mental health workers. Nunnally (1961), Johannsen (1969), and Rabkin (1972, 1975) have given excellent and detailed accounts of these studies. Here, only a brief summary will be presented.

Two of the earliest measures used to study attitudes of lay persons were the Star vignettes and the Social Distance Scale. The former was employed in an effort to discover whether people identified various

kinds of behavior as manifestations of mental disturbance. The respondent was presented with six case history descriptions, and was asked whether they represented mental illness. Shirley Star found that only the most extremely disturbed behavior was so identified and that in general the public "strongly resisted calling anyone 'mentally ill' and did so only as a last resort" (Joint Commission on Mental Illness and Health, 1961:75 as quoted in Rabkin, 1975, p. 443).

In 1958 Whatley, interested in investigating the social consequences of mental illness, administered (to a sample of lay respondents) a social distance scale designed to study the extent to which social interactions were acceptable with (1) the formerly hospitalized, (2) persons with "mental problems," and (3) "people who see a psychiatrist". The scale consisted of eight statements which varied along a continuum of intimacy in social interaction. The respondent was asked to indicate for each item whether he would accept that level of interaction with a hypothetical person. For each category of respondent, answers were tabulated as percent willing to accept each level of interaction. By the use of this scale Whatley "successfully demonstrated that people tend to keep a distance between themselves and former patients, creating for the latter a type of social isolation which enhances their problem of social readjustment . . ." (Rabkin, 1975, p. 443). This then provided a measure of social intimacy versus distance in the analysis of public attitudes.

Both the Star vignettes and the social distance scale were attempts to assess social rejection versus social acceptance of the mentally ill. Neither method measured the amount of knowledge the respondent

held in regard to mental illness. In the early 50s, Nunnally (1961) conducted an extensive, 5-year survey of lay attitudes which was designed to learn both what the public "knows and thinks" about mental illness and their emotional reactions as well. Summarizing his findings, Nunnally concluded that the topic of mental illness aroused a great deal of anxiety in his respondents, and that the stigma associated with mental illness was very general across attitude indicators and across all social groups, with little relation to demographic variables.

By 1960, it was clear that the lay public held a rather negative view of the mentally ill, as indicated by a tendency to deny illness and to resist labeling any behavior as pathological. Furthermore, the public tended to shun and stigmatize those whom authorities had labeled as mentally ill, and to express discomfort and anxiety in relation to mentally ill persons.

Since 1960, other studies utilizing the techniques discussed above, have produced varying results, often depending, at least in part, on the underlying ideology of the researcher or on the particular research strategy. More optimistic conclusions were reached by researchers who conceptualized mental illness in the traditional psychiatric framework of a medical model. They reported that an increasing proportion of the public believed that mental illness was an illness like any other, and that the need to maintain social distance from ex-patients seemed to be declining. More pessimistic conclusions were reached by those investigators who subscribed to the psychosocial, or social deviance model of mental illness. The latter claimed that the public still is

fearful and ignorant of mental illness, and that a strong stigmatizing attitude remains.

In presenting a general overview of the status of public attitudes toward mental illness in the early 70s, Halpert (1969) asserted that people were distinctly better informed and disposed toward mental patients than in former years. However, a major portion of the population continued to be frightened and repelled by the concept of mental illness.

In contrast to members of the general public, mental health professionals are believed to be influenced by their professional reference groups as well as by the general culture in the formation of their attitudes. As the need to study these attitudes has become increasingly apparent, due to their significant influence on patients under treatment, more sophisticated measures have been constructed.

The two most widely used of these measures were the Custodial Mental Illness Ideology Scale (CMI) and the Opinions about Mental Illness Scale (OMI). The CMI, developed by Gilbert and Levinson and their associates (1957) was a scale designed to place the respondent along a single continuum of attitudes ranging from the ideological position of custodialism to that of humanism. Low scores on this bipolar scale indicate preference for the rigid institutional care of mental patients, whereas high scores indicate a preference for a more permissive mode of treatment. This dimension overlaps to some extent Factor A (Authoritarianism) of the OMI Scale, discussed below.

The CMI eventually came under attack due to its unidimensionality. In 1962, Cohen and Struening developed the OMI, a multidimensional

scale, which was subsequently adopted by most investigators in preference to the CMI. The OMI consisted of 51 Likert-type items designed to measure tendencies on five separate factors. These factors were Authoritarianism, Benevolence, Mental Hygiene Ideology, Social Restrictiveness, and Interpersonal Etiology. These will be described in detail later in this paper.

Most of the research using either the CMI or the OMI has suggested that attitudes differ considerably among different categories of mental health workers. Typically, "personnel with lower status are described as more authoritarian and restrictive in their attitudes toward mental patients than personnel with advanced professional training who show more awareness of the strengths patients possess, are more liberal and tolerant in their attitudes, and are more optimistic about their prospects for recovery" (Rabkin, 1975, pp. 457-458).

In addition to the CMI and the OMI as instruments for measuring attitudes, Baker and Schulberg's (1967) Community Mental Health Ideology Scale (CMHI) should be mentioned. It assesses the degree of the professional's adherence to a community treatment orientation, which emphasizes primary prevention, and which focuses on the needs of the total population, rather than on needs of individuals seeking treatment. The CMHI scale was developed in research on psychiatrists, psychologists, and occupational therapists. Baker and Schulberg found that professionals oriented to community mental health tended to spend more time in administration, teaching, and community consultation than in direct patient treatment. Such professionals also tended to be younger, and to have received their advanced training more recently than professionals

less oriented to community mental health.

At present, the most widely used instrument for the measurement of attitudes toward mental illness continues to be the OMI. It is considered to be the most comprehensive, reliable and valid (Rabkin, 1972, p. 157).

Research focusing specifically on the attitudes of nurses toward mental illness is scarce. However three studies are available. One, conducted by Morrison (1976), found psychiatric nurses to be more restrictive and conservative than student nurses in their attitudes about mental illness, as indicated by their scores on the Client Attitude Questionnaire (CAQ).

Similarly, Kahn (1976) found psychiatric nurses held significantly more socially restrictive opinions about mental illness and adhered less to current mental health ideology than did nursing students undergoing a psychiatric rotation. Kahn suggested that age may have been a confounding variable.

Finally, Cohen and Struening (1962, 1964, 1965) conducted "what is perhaps the most extensive series of studies concerning attitudes of mental health workers toward mental illness" (Rabkin, 1972, p. 160). As mentioned previously, they found striking differences in orientation towards the mentally ill among the various occupational groups, with nurses falling somewhere between the two extremes represented by the aides and the "professionals" (i.e. psychiatrists and psychologists).

Attitudes of nursing students toward mental patients, prior to their experiencing a psychiatric nursing course, have not been adequately studied (Meyer, 1973). It has been generally assumed that the psychiatric nursing course was the determining factor in creating those attitudes,

or in altering them in a direction of greater favorability. Researchers have therefore concerned themselves mainly with assessing the amount of change that takes place during this rotation. The results of such attempts however, have not been totally conclusive; changes have apparently been noted in negative as well as positive directions (Meyer, 1973).

Some of the more recent studies have reported significant positive change. For example, using the OMI scale to estimate change, Walsh (1971) found that students scored significantly lower in authoritarian and socially restrictive opinions following their psychiatric nursing rotation than they did prior to the course. In addition, as a group, they scored significantly higher on benevolent opinions, on opinions reflecting mental health ideology, and opinions reflecting concepts of interpersonal etiology of mental illness.

Lewis and Cleveland (1966), and Smith (1969) presented results similar to Walsh's. In addition, Hicks and Spaner (1962) reported profound attitudinal changes in students after twelve weeks of psychiatric nursing in a Veterans' Hospital. Wiens (1965) found similar positive changes, using a scale developed by Saslow and Mensh (1953) in four student groups affiliated with a large state hospital. Finally, Creech (1977), using a modified OMI which included some items from a scale developed by Ellsworth (1965), also obtained similar findings.

The general design of all these studies consisted of administering a standardized questionnaire, most commonly the OMI, before and after students' contact with patients in a psychiatric hospital. Frequently a control group was included of students who had no contact or instruction in psychiatric nursing.

On the assumption that results are favorable if scores on the factors of Authoritarianism and Social Restrictiveness are lowered and if scores on the other three factors are raised, the above studies have been remarkably consistent in reporting favorable outcomes for the group as a whole (Gelfand & Ullmen, 1961; Johannsen et al., 1964; Lewis & Cleveland, 1966; Smith, 1969; Walsh, 1971; Wiens, 1965).

Positive changes in factors other than the above have been described for students in psychiatric nursing courses. For example, Creech (1977) noted that students upon completing such courses scored higher on the nontraditionalism factor, which reflected an orientation of sensitivity, understanding, warmth and honesty toward patients (Ellsworth, 1965).

In addition to the research regarding attitudes of nursing students toward the mentally ill, a number of studies have been undertaken to ascertain possible psychological or personality changes. Thus, Walsh (1971) examined changes in levels of anxiety of students during a psychiatric rotation to see if these were related to changes in attitude. She found that the mean level of anxiety was reduced in only two out of five such groups, but that attitude changes occurred in all five groups, which were consistent with those mentioned in the previous studies.

Johannsen (1964) and Adams (1970) also investigated both personality and attitude changes in the student nurse. Johannsen's subjects demonstrated an increase in liberal attitudes, as reflected in the CMI, a decrease in authoritarianism, as revealed by scores on Factor A of the OMI, and thirdly an increase in the "achievement via independence" scale of the California Psychological Inventory (CPI). This latter scale correlates highly with Authoritarianism. Since Authoritarianism

is widely considered to be detrimental to the therapeutic aspects of care for mental patients, these would seem to constitute significant findings.

Adams (1970) was less successful than Johannsen in identifying students' personality changes with psychiatric nursing experiences. Adams noted very few differences between members of a psychiatric nursing group of students, and a control group, on either the IPAT 16 Personality Factor Questionnaire or on Edward's Personal Preference Schedule (EPPS). Adams (1970) thereupon questioned the sensitivity of the two personality instruments. He also questioned the wisdom of using students on a psychiatric affiliation as an experimental group, and their contemporaries on other rotations as a control group when attempting to measure changes in personality or in related areas such as interpersonal skills. He pointed out that the nature of learning experiences among the nursing students' various rotations may be more similar than is generally recognized. He concluded with the statement, "It seems possible that many or all rotations focus on interpersonal aspects of the nursing role sufficiently to have significant impact upon the students' general personality characteristics" (p. 16).

Attitude Dimensions and Components

Attitudes are complex and are often considered to have more than one component. For example, Nunnally (1961) has described both cognitive and affective dimensions of attitudes toward mental illness as expressed both by the general public, and by the "experts," i.e., psychologists and psychiatrists. By definition the cognitive dimension consists of

knowledge, information and opinion, while the affective dimension is the emotional state that accompanies these opinions. In the case of attitudes toward mental illness, the affective dimension is generally manifested in prejudice, social rejection, social distance and anxiety in the presence of mentally ill persons.

In explicating the interrelation of the cognitive and affective dimensions of attitudes in the mental health domain, Nunnally (1961) arrived at two conclusions. First, there is little difficulty in convincing people to accept new ideas (cognitive), but these new ideas will not, in and of themselves, bring about a change in emotional reactions. Secondly, mental health topics tend to influence the affective dimension of attitudes by generating anxiety. The reduction of that anxiety is a primary requisite for promoting favorable attitudes.

Gilbert and Levinson (1957) have postulated a single factor as underlying individuals' attitudes to mental illness, namely Humanism-Custodialism. Individuals may be placed on this continuum according to their beliefs. The extreme custodial point of view holds that mental patients "cannot ever really be cured, that they are potentially dangerous, and need external control" (Rabkin, 1972, p. 156). Its converse, Humanism, is related to a generally egalitarian orientation. The humanistic end of the continuum is generally considered to be indicative of a more favorable attitude.

Some years later, Cohen and Struening, building on Gilbert and Levinson's theoretical background, developed the Opinions About Mental Illness Scale (OMI). This scale included five different dimensions, labeled Authoritarianism, Social Restrictiveness, Benevolence, Mental

Hygiene Ideology, and Interpersonal Etiology. Subsequent research indicated that individuals who score high on Authoritarianism and Social Restrictiveness were viewed by patients as most rejecting. Persons scoring high on the other three dimensions, on the contrary, were judged to be most accepting (Cohen & Struening, 1964; Ellsworth, 1965).

Subsequently, Ellsworth (1965) employed the OMI scale in combination with the Staff Opinion Survey (SOS) of Berger (1962, unpublished; cited in Ellsworth). Through factor analysis he isolated three additional attitude dimensions which he named Restrictive Control, Protective Benevolence, and Nontraditionalism (Ellsworth, 1965, p. 194). The factors of Restrictive Control and Protective Benevolence were somewhat similar to Cohen and Struening's Social Restrictiveness and Benevolence. The former reflected a tendency on the part of staff to control and restrict patients, while the latter manifested itself in aloofness, distance, and reserve on the part of the staff, as evaluated by the patients. On the other hand, patients saw staff who endorsed Nontraditionalism as being interested and helpful. These findings also established a linkage between attitudes as verbally acknowledged by staff and their behavior, as perceived by patients.

Other attempts to relate attitude to behavior and attitude to treatment have been made by Cohen and Struening (1962, 1965), and Gilbert and Levinson (1957). The former found a relationship between prevailing attitudes of mental hospital personnel and the discharge timing of the mental patients with whom they worked. Patients in hospitals with a strong authoritarian and restrictive atmosphere spent fewer days in the community in the six months after date of admission

than did patients in other hospitals. Thus, some link between attitude and action was again established, though it is not sufficiently clear how the link is created. In her review, Rabkin (1975) questions whether patients remained longer in authoritarian-restrictive hospitals "because the staff maintained more rigorous criteria for discharge or because staff attitudes impeded patient rehabilitation" (p. 470).

The general consensus that emerges from these studies is that humanistic and non-authoritarian attitudes are more favorable and more therapeutic than custodial and authoritarian attitudes. However, a clear relationship between attitudes and outcomes has not yet been demonstrated; outcomes of treatment for patients are not necessarily more effective when cared for by non-authoritarian, humanistic staff. Rabkin (1975) again suggests that attitudes are usually less potent predictors than other variables such as the personal characteristics of the patients and staff being studied. Ellsworth (1965) and Creech (1976, 1977) further propose that the important issue regarding effectiveness may not be abstractly defined "better" attitudes, but rather one of congruence of attitudes among the various members of the mental health staff, and perhaps also among staff and the patients.

In summary, attitudes studied in relation to mental illness have been variously described as (1) consisting of both cognitive and affective aspects (Nunnally, 1961); (2) falling somewhere on a unidimensional scale of custodialism versus humanism (Gilbert & Levinson, 1957); or (3) consisting of at least five different dimensions (Cohen & Struening, 1964; Ellsworth, 1965). Finally attempts have been made to link attitudes with behavior (Ellsworth, 1965; Cohen & Struening,

1964; Gilbert & Levinson, 1957) though it is readily acknowledged that much more study is required in this area.

Influences in the Formation of Attitudes Regarding Mental Illness

As with attitudes in general, the social and demographic variables of status, education and age affect attitudes manifested toward the mentally ill. For instance, many studies of the attitudes held by mental health workers have considered employee sub-groups separately. Typically, these studies have reported that persons with lower status tend to be more authoritarian and restrictive in their attitudes, while those with advanced professional training tend to be more liberal, tolerant, optimistic, and aware of patient strengths (Rabkin, 1975). However, in many studies it is difficult to separate the effect of status from the simultaneous and confounding effect of education. In her review, Rabkin speaks of the influence of education in the following way: "unsympathetic attitudes toward mental illness are acquired during early socialization, and the psychiatric perspective is encountered only later as one moves through the formal education system. If the educational process is attenuated, as it is for lower-class members, there is little opportunity to become acquainted with 'enlightened' mental health ideology" (Rabkin, 1975, p. 460).

Another factor influencing attitudes is age. In her study of attitudes of residents of a selected county in Washington, Bates (1968) found a definite, inverse relationship between age and degree of expressed humanistic ideology. She raised the questions whether adherence to this ideology might be not a product of age per se but rather a product

of short life experience, and whether it might be expected to weaken with increasing age. Again, education might be a confounding factor in that younger persons tend to be better educated than older ones. Similarly, Kahn (1976) interpreted his finding that psychiatric nurses were significantly more authoritarian and restrictive in their opinions than student nurses, as possibly due to the substantial difference in their mean ages. Kahn also failed to control for education.

Disagreement on the relative influence of age and education has continued to the present. Thus Rabkin (1975) concluded from her review that "one of the most consistent findings throughout this research area is the strong relationship observed between the age and education of respondents, their degree of prejudice in general and rejection to the mentally ill in particular" (p. 459). Contrariwise, Nunnally (1961) quoted in Rabkin (1975, p. 443) produced evidence that kinds of information regarding mental illness differed markedly as a function of age and education, but "differences in attitudes were actually small . . . the stigma associated with mental illness was found to be very general, with little relation to age and education."

Some additional factors have been singled out for examination as significantly influencing the formation of attitudes of the public toward the mentally ill. They are: (1) existing laws regarding the care and rights of the mentally ill, (2) the influence of the reference group, (3) social status, and (4) anxiety. In regard to laws, Vander Zanden (1972) in his overview states that they are likely to be effective to the extent that they are enforced and understood by those affected (p. 480). Johannsen (1969) also stated that laws are considered by

some to be a significant factor in forming the opinions of society in general.

In regard to reference groups, Kahn (1976) concluded that not only were the opinions and attitudes of student nurses and psychiatric nurses formed within their reference groups, but that these opinions and attitudes changed with a change in reference group.

In regard to social class, the studies of Dohrenwend and Chin-shong (1967) and of Hollingshead and Redlich (1958) involving relatives of mental patients shed some illumination. Hollingshead and Redlich found that negative feelings were generally more pronounced among lower class groups and resulted in greater intolerance. Dohrenwend and Chin-Shong reported that the definition of mental illness was narrower in lower status than in higher status groups. The former overlooked disturbed behavior or defined it as bad, rather than as symptomatic of mental illness. This tendency to delimit the sphere of mental illness has misled some observers into the belief that lower class persons are more tolerant than middle class persons. However, the contrary case may be argued since, once lower class persons define an individual as mentally ill, they then reject him more clearly than do middle class persons.

Finally, anxiety has been identified as a significant factor in attitudes toward the mentally ill (Walsh, 1971; Robinson, 1952; Nunnally, 1961; Creech, 1977; Kabash, 1961; Johannsen et al., 1964 and 1969). In fact, Nunnally, has described anxiety evoked by the mentally ill as the very "cornerstone" of the unfavorable attitudes held by most individuals (1961, p. 553).

Ways of Changing Attitudes

Two major means have been suggested for implementing change in attitude towards mental illness, namely, didactic and clinical instruction, and personal contact with the mentally ill. The efficacy of these approaches has been summarized by Johannsen (1969). He states that not much is known about the relative effectiveness of any of the didactic (information-disseminating) approaches per se, be they lectures, group discussions, movies, or written communication. In general, however, it is agreed that interest will be aroused and information will be accepted only if (1) the information is presented with great certainty; (2) it tends to alleviate rather than increase anxiety; and (3) it provides solutions to problems raised (Nunnally, 1961). The public may indeed develop more favorable attitudes under such circumstances; otherwise the didactic approach may do more harm than good.

In regard to personal contact, Johannsen (1969) states both that opinions vary widely as to its effectiveness, and as to the precise conditions under which contact produces positive or negative attitudinal change. It does seem well established, however, that a positive attitude change occurs among those who work in a direct helping relationship with mental patients, such as hospital personnel or student nurses during their psychiatric rotation. The key to effectiveness of the personal contact approach, Johannsen believes, may very well be the "introduction of the mental patient into a role that can be perceived as representing 'normal' behavior" (1969, p. 224). Vander Zanden (1972), in his review of studies on prejudice, and Swain (1973), in her studies with student nurses, both seem to concur in this assessment.

In the education of student nurses, the view has been widely accepted that a combination of didactic input and actual extensive patient contact is the most effective approach to altering attitudes toward the mentally ill. Various studies have shown quite positive results in nursing school programs utilizing this approach (Altrocchi & Eisdorfer, 1961; Hicks & Spaner, 1962; Gelfand & Ullman, 1961; Johannsen et al., 1964; Morris, 1964; Wiens, 1965; Lewis & Cleveland, 1966; Walsh, 1971; Creech, 1977). However, both Swain (1973) and Rabkin (1974) have raised the question whether the findings are indeed indicative of true attitude changes or merely of "lip service" to the attitudes the student knows he/she should hold.

In addition to the two major approaches to attitude modification discussed above, Kahn (1976) and Siegel and Siegel (1957) speak to the influence of <u>reference groups</u> on attitudes. They feel that not only are opinions and attitudes formed within one's reference group, but frequently are changed when an individual moves from one group to another. An example of this occurs when the student nurse graduates and becomes a member of the staff of a mental hospital. Anxiety and environmental dissonance may in the individual's eyes necessitate the changes in attitude and the liberalizing opinions in regard to mental illness. The student may actually discard these views once he/she becomes a member of the staff.

Finally, <u>anxiety</u> plays an important role in attitude modification. Nunnally's extensive work to this effect among the general public in the 50s has been quoted. Others (Walsh, 1971; Robinson, 1961; Creech, 1977) also speak to the need to reduce fear and anxiety in student nurses

if the attempt at effecting more positive attitudes toward the mentally ill is to be successful.

In summary, though attempts to modify attitudes of the public have enjoyed only questionable success, change has appeared somewhat more possible among several, more specific populations, such as student nurses, hospital aides and other selected professional groups. In short, the critical ingredient in such endeavors would appear to be "some sort of interaction between personal confrontation with the mental hospital and mental patient, and a supplementary educational program" (Rabkin, 1975, p. 166). The influence of the individual's reference group is another factor considered, as is the level of anxiety in regard to mental illness, which must be reduced if attitude change is to result.

Purpose of the Study

The purpose of this investigation was to examine the relations among three variables, namely (1) enrollment in a psychiatric nursing course vs. other nursing course, (2) level of anxiety, and (3) attitudes toward the mentally ill. The specific hypotheses tested were:

(1) The psychiatric nursing rotation effects favorable changes in the students' attitudes toward the mentally ill.

(2) The psychiatric nursing rotation decreases anxiety levels in students.

(3) In the psychiatric nursing rotation, the favorability of students' attitudes toward the mentally ill is inversely related to the degree of their anxiety.

CHAPTER II

METHODOLOGY

General Design

This investigation was an amplification and modification of the longitudinal study conducted by Creech, in which he compared the attitudes of student nurses to mental illness before and after a psychiatric nursing rotation. In the present study, a control group was added, and changes in levels of anxiety were examined as well as changes in attitudes. The "non-equivalent control group design" was employed, which Campbell and Stanley (1963) have described as useful in experimental research involving "naturally assembled collectives" such as classrooms. In such a design, subjects are not randomly assigned to the control and experimental groups, which therefore lack pre-experimental sampling equivalence. In this particular case, assignment of the students to the two groups was to some degree dependent on their expressed preferences.

Subjects and Setting

The subjects were students beginning their third year of study in a 3-year diploma nursing program. The two intact groups under study consisted of students enrolled in Psychiatric Nursing and in an Applied Advanced Nursing (Nursing IX) course. The 36 psychiatric students constituted the experimental group in this study, and the 26 students in

Nursing IX, the control group. The groups were reasonably homogeneous with respect to intelligence, age, sex, and the amount of previous education. Many of the students in both groups had one or more years of college in addition to the high school education required for entrance. Furthermore, all students had met the prerequisites for the psychiatric nursing rotation. On these counts, the two groups appeared to be quite similar.

Possible dissimilarities may however have arisen due to the fact of self-selection; therefore the possibility of differences between the groups must be recognized. Students were not randomly assigned to the two rotations, but within the exigencies of class size, received their preferences for that quarter. However, it should be noted that the only choice was one of the timing of rotations, since all students were required to complete both the psychiatric _and_ the applied advanced nursing rotations within the senior year. Hence, it was unlikely that such choice of timing introduced much systematic bias into this study.

The Psychiatric Nursing Program

The psychiatric nursing program emphasized teaching a psychosocial model of behavior, which maintains that mental illness can best be understood as an exaggeration of particular behaviors common to all men. Inherent in this approach is a stress on primary prevention and early treatment in the community.

The students spent one full day each week in the classroom where, by means of lectures, discussions, role playing and viewing of films, the subject matter and ways of applying this knowledge outside of the

classroom were taught. In addition, students spent approximately 16 hours a week in various clinical areas.

For clinical experience, the 12-week psychiatric rotation was divided into two segments. One segment consisted of eight weeks of affiliation with a state psychiatric hospital. This experience might come first, last, or be divided up into two 4-week blocks. The remaining four weeks of the rotation were spent working in a community agency for 17 hours per week. During this period the student additionally served four hours a week as a discussion group leader in a nursing home.

For the "community" section of the rotation, students were assigned to placements (1) in an alcohol recovery center; (2) with a police sergeant of the Department of Public Safety checking out Child Abuse cases; (3) as counselor in a private counseling center; or (4) as nursing student in one of several private psychiatric centers or clinics.

The experience in the nursing home consisted of planning and co-leading discussion groups twice a week with a fellow student, and of practicing a technique called "remotivation therapy" to stimulate the group process among the elderly residents.

The Applied Advanced Nursing Program (Nursing IX)

Nursing IX is a program which involves two types of experience for the student. First, five to six weeks are spent in an intensive care setting such as coronary care or renal dialysis, with emphasis being placed on the application of advanced nursing skills. Second, five to six weeks are spent in a specialty area of the student's choice. Emphasis for the latter experience is on self-directed behavior; it is

up to the student to make contact with the chosen agency or area, to write his/her own objectives and to be in charge of the learning experience, with instructor guidance. Again the student may choose to spend this time in an intensive care setting, or select another area of interest to him/her such as nursing education, office nursing, IV therapy, surgery, rehabilitation, etc. Formal learning during this rotation takes place through lectures and small-group discussion.

Data and Instrumentation

Attitudes Toward Mental Illness

The instrument used in this study to measure these attitudes was the same instrument used by Creech (1977). It consists of 64 items. Of these, 51 were derived from the Opinions of Mental Illness Scale of Cohen and Struening (1962). The other 13 items were from Berger's Staff Opinion Survey (1962, unpublished). These latter were identified by Ellsworth (1965) as of particular value for predicting behavior of health professionals in treatment settings when used in combination with Cohen and Struening's OMI.

The 64 items represent eight factors. Five of these (Authoritarianism, Benevolence, Mental Hygiene Ideology, Social Restrictiveness, and Interpersonal Etiology) were specified by Cohen and Struening. Three additional factors (Restrictive Control, Protective Benevolence and Nontraditionalism) were isolated by Ellsworth. Each of these factors is described below. In regard to scoring, some of the items have a positive, others a negative value, the latter being reverse-scored in essence.

Description of the eight factors isolated for this instrument.

1) Authoritarianism reflects an attitude that regards mentally ill persons as an inferior class requiring coercive handling. Example: "No matter how you look at it, patients with severe mental illness are no longer human." Eleven items constitute this factor: #1, 6, 9, 11, 16, 19, 21, 39, 43, 46, and 48. Scores may vary from 1 to 56, with higher scores indicating stronger authoritarian attitudes. (See Appendix B for a copy of the instrument).

2) Benevolence is a humanitarian orientation with its foundation in religious beliefs rather than science. Example: "Even though patients in mental hospitals behave in funny ways, it is wrong to laugh at them." Fourteen items constitute this factor: #2, 12, 17, 18, 22, 26, 27, 32, 34, 36, 37, 40, 47, and 49. Scores for this factor may vary from -4 to +66, higher scores again indicating more benevolent attitudes.

3) Mental Hygiene Ideology is an attitude subscribing to the "medical model" of mental illness and to a firm belief that society has a responsibility in providing adequate treatment. Example: "Mental illness is an illness like any other." Nine items constitute this factor: #3, 13, 23, 28, 31, 33, 38, 44, and 50. Scores on this factor may vary from 1 to 46, higher scores indicating stronger endorsement of the Mental Hygiene Ideology.

4) Social Restrictiveness is an orientation which reflects a view of the mentally ill as dangerous and requiring restriction. Example: "The best way to handle patients in mental hospitals is to keep them behind locked doors." Ten items constitute this factor: #4, 7, 8, 14, 24, 29, 41, 42, 45, and 51. Scores on this factor may vary from

1 to 51, higher scores indicating higher degrees of social restrictiveness.

5) Interpersonal Etiology reflects the belief that mental illness arises from interpersonal experiences, especially deprivation of parental love in childhood. Example: "If parents loved their children more, there would be less mental illness." Seven items constitute this factor: #5, 10, 15, 20, 25, 30, and 35. Scores on this factor may vary from 1 to 36, higher scores indicating stronger endorsement of this belief.

6) Restrictive Control reflects an endorsement of restriction, control, segregation and possible punishment in the handling of mental patients. Example: "Although patients discharged from mental hospitals may seem alright, they should not be allowed to marry." Behaviorally, staff members who endorsed this attitude were perceived by patient to be inconsiderate, impatient, rigid, domineering, skeptical, and unable to trust, understand or relate to patients. Fifteen items constitute this factor: #4, 6, 14, 16, 21, 24, 29, 34, 37, 51, 52, 55, 57, 59, and 61. Scores may vary from 15 to 90, higher scores indicating greater degrees of restrictive control.

7) Protective Benevolence suggests an attitude of kindliness toward the mentally ill ("make friends with patients," etc.), yet persons scoring high on this factor were actually seen by patients as behaving in aloof, distant, and non-interacting manner. Ellsworth found that those staff members who endorse this attitude "basically wish to establish a comfortable but aloof relationship, and rationalize their behavior as an act of kindness" (1965, p. 197). Example: "Nursing attendants should try to make friends with their patients." Ten items constitute this factor: #13, 38, 47, 53, 56, 58, 60, 62, 63, and 64. Scores may vary

from 10 to 60, the higher score indicating a great degree of protective benevolence.

8) Nontraditionalism is an attitude negatively related to both Restrictive Control and Protective Benevolence. The nontraditional staff person believes that the patient is not the passive victim of circumstances beyond his control, that he is able to change, and that interaction pays off. He tends to be seen by the patients as being "sensitive and understanding," "dependable and reliable," "open and honest," "gives advice freely," and "is honest and straight-forward." Fourteen items constitute this factor: #1, 5, 7, 9, 11, 15, 20, 36, 39, 42, 45, 46, 48, and 54. Scores on this item may vary from 14 to 84, high scores indicating a great degree of nontraditionalism.

Response mode, scoring procedure, reliability and validity. The 64 items of this instrument are presented in Likert format and require the respondent to check extent of agreement along a 6-point scale ranging from "strongly disagree" to "strongly agree." As mentioned, some of the items were reverse-scored. Each factor was scored separately, according to the directions in Appendix B.

With regard to reliability and validity, Shaw and Wright (1967) have indicated the OMI is generally satisfactory. Additionally, Ellsworth has demonstrated that the factors of Restrictive Control, Protective Benevolence, and Nontraditionalism make a difference in one's behavior towards patients, pointing to some validity.

Level of Anxiety

Students' anxiety, both at the beginning and at the end of the

rotation was assessed by the A-State scale of Spielberger's (1968) State-Trait Anxiety Inventory Form (STAI). Feelings of tension, worry, apprehension, and nervousness at a given time are evaluated by the scale. The measure contains 20 statements of mood. The respondent is asked how descriptive each statement is of his feelings at that particular moment in time, along a four-point scale ranging from (1) "not at all" to (4) "very much so". The lowest obtainable score is 20, the highest, 80. Low scores (20 - 39) indicate states of calmness, intermediate scores (40 - 59) reflect moderate levels of tension and apprehension, and high scores (60 - 80) indicate states of intense apprehensiveness that approach panic. (See Appendix C for a copy of the A-State and the scoring key).

The A-State Scale has been shown to possess both concurrent and construct validity (Spielberger et al., 1970). Scores on the scale have been reported to increase or decrease in response to an increase or decrease in various kinds of stress. The scale has a high degree of internal consistency as shown by high item remainder correlation coefficients and alpha reliability coefficients.

Additional Data

During each testing period additional items of information were requested from all subjects. As part of the first session, the student was questioned regarding (1) age, sex, marital status, level of education, and social class background; (2) student's perceived level of anxiety; and (3) past contact with mentally ill persons. During the final testing period, questions regarding the student's level of anxiety were repeated. Finally, students were asked to rank several components of the

course, such as one-to-one contact or Classroom Theory for example, in order of the degree of influence they believed each had in effecting a change in their level of anxiety as well as a change in their attitudes towards the mentally ill.

Procedure

Permission to conduct the study was obtained from the Director of the School of Nursing. Assistance and cooperation were then requested from the Psychiatric and Nursing IX Instructors, and arrangements made for the administration of the questionnaires. At the time of testing, the willingness of the students to participate was verbally enlisted.

The investigator administered the questionnaires comprising the 64-question Opinions About Mental Illness questionnaire, the State-Trait Anxiety Inventory, and the general information sheet to all students during the first week of the rotation, before students had any clinical experience or didactic content. Two testing periods were necessary--one session for the experimental group, and one for the control group. One hour was allowed. An effort was made to test separately any students who were absent from the scheduled testing periods.

Before administering the instruments, the examiner stressed that there were no right or wrong answers, and that the issues were matters of opinion about which professional staff might differ. Code numbers were assigned to the respondents in order to preserve anonymity and encourage a more open reporting of the subjects' attitudes.

All subjects were retested by the same examiner during the final week in their respective rotations. Again they were provided an hour

to answer all of the questions.

Analysis of Data

The scores of the experimental and the control groups on each of the eight factors were compared. The significance of differences between the two groups in the attitude changes during the term was determined by t-tests for each factor.

State-anxiety scores and attitude scores were correlated for both the pretest and the posttest periods. Following this, it was determined whether changes in individuals' levels of anxiety correlated with changes in favorableness of students' attitudes toward the mentally ill.

Additional data describing the sample were examined to discover: (1) whether acquaintance and contact with mentally ill persons were related to the degree of favorability in the respondent's attitude toward the mentally ill, (2) whether the respondent's perceived level of situational anxiety corresponded to the level indicated by the Spielberger test, and (3) which component of the nursing program was believed by the respondent to have had the most influence in effecting a change in attitude in a favorable (or unfavorable) direction, and in decreasing (or increasing) anxiety.

CHAPTER III

RESULTS AND DISCUSSION

Description of the Sample

The sample consisted of 62 student nurses in a 3-year diploma school of nursing. All respondents were in the first quarter of their third year of schooling with 36 enrolled in the Psychiatric Nursing rotation and 26 in an Applied Advanced Nursing course.

Characteristics of the two groups are presented in Table 1. It may be noted that the experimental (Psychiatric Nursing) group included 4 male and 32 female students, with a mean age of 23.3. The control (Applied Advanced Nursing) group included 1 male and 25 female students with a mean age of 22.7 years. The psychiatric nursing students had an average of 1.1 years of college education before entering nursing school, while the control group's average was 1.4 years.

Social rank of the subjects was determined by use of the Duncan-Reiss Socioeconomic Index Scale (Reiss et al., 1961). For the single, divorced, or separated student, the father's occupation was ranked, and for the married student, the husband's occupation was considered. Scores on this Index ranged from 14 to 96. The mean score for students in both groups approximated 50, representing an essentially lower middle class status.

The two groups did not differ greatly in previous contact with mentally ill persons (43% of the experimental vs. 50% of the control

Table 1

Characteristics of Nursing Students in the Psychiatric Nursing Rotation (Experimental Group) and the Applied Advanced Nursing Rotation (Control Group)

Characteristic	Experimental Group (N=36)	Control Group (N=26)
Age		
Mean	23.3	22.7
Range	20-37	20-30
Prior Years in College (mean)	1.1	1.4
Sex		
Male	4	1
Female	32	25
Socioeconomic Status		
Mean Score	47.2	50.6
Range	14-96	14-92
Marital Status		
Married	12	6
Single	24	20
Contact with the Mentally Ill		
Yes	15[a]	13
No	20	13
Anxiety About Working with the Mentally Ill (Mean Score)[b]	3.1	3.0

[a]1 student failed to respond

[b]Anxiety was scored from 1-5 (1=none at all; 5=very much)

group had such experience). Neither did the two groups differ in their responses to the question, "How anxious are you about working as a nurse with the mentally ill?" Mean scores were almost identical (3.1 and 3.0).

The above data indicate a great similarity between the two groups, and support the view that no systematic bias was introduced into the study by the students' choice of the sequencing of their psychiatric and applied advanced nursing rotation.

Changes in Attitudes Toward the Mentally Ill of Students in the Psychiatric Nursing Rotation

From Table 2 it may be noted that attitudes of student nurses changed significantly from the beginning to the end of the psychiatric rotation in only two Factors, C and E. In short, students subscribed more to a Mental Health Ideology and to an Interpersonal Etiology of mental illness at the end of the term.

These results agree with those reported most frequently in previous research. With regard to Mental Health Ideology, 11 out of 16 groups tested in four separate studies showed a significant increase (Holmes, 1975; Johannsen, 1964; Lewis & Cleveland, 1966; Walsh, 1971). With regard to Interpersonal Etiology, three authors reported significant increases for all groups involved (Holmes, 1975; Lewis & Cleveland, 1966; Meyer, 1973), and a fourth author found significant changes for 2 out of 6 groups (Walsh, 1971). All but Walsh (1971) and Meyer (1973) utilized students from diploma schools of nursing.

With respect to the remaining three OMI factors (Authoritarianism, Benevolence, and Social Restrictiveness), Table 2 shows that no significant changes occurred. Except for Authoritarianism, these findings

Table 2

Shifts in Attitudes Toward Mental Illness of Nursing Students During the Psychiatric Nursing Rotation; Comparison of the Results of the Present Study with those of Creech

Attitudinal Factor	Good (N = 62) Mean Scores Pretest	Posttest	*t*	Creech (N = 95) Mean Scores Pretest	Posttest	*F*	*t*[a]
A - Authoritarianism	17.97	16.61	1.86	19.24	15.63	54.33	7.37*
B - Benevolence	45.97	44.39	1.53	48.97	49.81	2.71	1.65
C - Mental Health Ideology	27.67	30.31	2.59*	30.66	31.78	7.15	2.67*
D - Social Restrictiveness	19.69	18.39	1.42	19.02	17.06	15.66	3.96*
E - Interpersonal Etiology	15.92	20.33	5.33*	18.44	19.65	7.91	2.81*
Protective Benevolence	29.42	32.11	1.13	29.84	29.69	0.01	.10
Restrictive Control	64.72	65.50	.87	25.54	22.80	18.94	4.35*
Nontraditionalism	59.11	58.58	.39	57.92	60.90	25.49	5.05*

* $p < .05$

[a]Creech (1977) presented *F* values only. To convert them to *t* ratios, the square root of the *F* value was taken.

are similar to those of most other studies. For Benevolence, most authors have found no significant changes in students during the psychiatric rotation (Creech, 1977; Gelfand & Ullman, 1961; Johannsen et al., 1964; Meyer, 1973; Morris, 1964; Smith, 1969). However Lewis and Cleveland (1966) reported a significant decrease in score in 1 out of 3 groups tested, as did Holmes (1964). Walsh (1971) reported a significant increase for only one of six groups studied.

Similarly, most investigators have failed to find significant changes in Social Restrictiveness. Although both Creech (1977), and Gelfand and Ullman (1961) documented significant decreases for their groups, Holmes (1964) and Walsh (1971) showed decreases for only one-third of their groups, and 5 investigations reported no significant changes had taken place (Morris, 1964; Lewis & Cleveland, 1966; Meyer, 1973; Johannsen et al., 1964; Smith, 1969).

The present finding concerning Authoritarianism is in disagreement with the bulk of the reported research. In general, the most consistent change found in student groups after completing a psychiatric nursing rotation is a significant drop in Authoritarianism, indicating an increase in permissiveness and tolerance toward the mentally ill (Creech, 1977; Gelfand & Ullman, 1961; Johannsen et al., 1964; Lewis & Cleveland, 1966; Morris, 1964). The only negative results were reported by Holmes (1975) who failed to find a decrease in 2 of 3 groups tested, and by Walsh (1971) in 2 out of 6. Two other researchers found no significant decrease in any of the groups studied (Smith, 1969; Meyer, 1973), though downward trends were noted in all.

In summary to this point, the results of the present study appear

to be in harmony with those of other studies, in noting that students during a psychiatric nursing rotation come to subscribe increasingly to a Mental Health Ideology and Interpersonal Etiology of Mental Illness, and tend to remain constant with regard to Benevolence and Social Restrictiveness. Unlike other students, the present group did not become less Authoritarian.

With regard to the factors of Protective Benevolence, Restrictive Control and Nontraditionalism, the present sample can be compared only with Creech's since he alone of all previous investigators had identified and measured those attitudes in his subjects.

Again, in examining Table 2 it becomes apparent that in neither study did the students change in their attitudes of Protective Benevolence toward the mentally ill. However, the results of the two studies differed on two counts. First, Creech found a decrease in Restrictive Control, while the present investigation found an increase. Secondly, Creech found an increase in Nontraditionalism while in the present study no change was noted on this factor.

It may also be noted in Table 2 that absolute values differ greatly for the factor of Restrictive Control between the two studies. It is difficult to explain such a great disparity among students in diploma schools of nursing even though they came from widely separated areas of the country (Oregon and North Carolina). Possibly an error in the scoring code led to reversed scoring by one of the two investigators.

In summary then, Creech found significant shifts on Factors C and E as did the present investigator. In contrast to the present subjects, his students showed significant favorable changes on 4 other factors,

Authoritarianism, Social Restrictiveness, Restrictive Control and Nontraditionalism.

While the above data indicate the degree of change students underwent during their psychiatric rotation, they do not indicate whether these changes were due to the psychiatric experience, or to some other event. Creech found differences, which indicated favorable changes in the attitude of students, yet the question may be asked: were these changes due to the psychiatric experience, or could other events have caused them? Creech's design (one group pretest-posttest design) was limited in that it did not take into account the variables of history, maturation, and the effects of testing (Campbell & Stanley, 1963).

In this study an experimental pretest-posttest, control group design was utilized. This design takes into account the effects of the alternative explanatory variables of history, maturation, and testing, and enables a clearer test of the effects of the psychiatric nursing rotation on students' attitudes.

Testing of Hypotheses

Hypothesis 1: The psychiatric nursing rotation effects favorable changes in students' attitudes toward the mentally ill.

The first question that should be asked is whether the experimental group was essentially equivalent to the control group at time of assignment of students to the two rotations. Although the two groups were found to be quite similar in demographic characteristics, it was necessary also to determine similarity or dissimilarity in their attitudes.

In Table 3 the mean scores at pretest for the two groups are

presented. By t-test, the groups were found to be essentially alike on three attitudinal factors--Interpersonal Etiology, Restrictive Control, and Nontraditionalism. They did, however, differ significantly on the remaining attitudinal factors. As can be seen the experimental group was significantly more authoritarian, less benevolent, more socially restrictive, adhered less to Mental Health Ideology and more to Protective Benevolence. It becomes apparent then that the two groups were, in fact, not alike with respect to 5 of the 8 factors.

The question remains: Were the shifts of the psychiatric nursing group significantly greater in a favorable direction than were the shifts of the students who were not exposed to psychiatric training?

According to Campbell and Stanley (1963) the most widely used and acceptable way to answer this question is "to compute for each group pretest posttest gain scores and to compute a _t_ between experimental and control groups on these gain scores" (p. 23). This t-test of the significance of the differences is employed in this analysis. This method in part compensates for the lack of total equivalence of the two groups at pretest.

The t-tests presented in Table 4 indicate that the two groups did differ significantly in their changes on three factors, namely, Authoritarianism, Interpersonal Etiology and Protective Benevolence. In examining the changes in the experimental group (see Table 2) it was noted that authoritarian scores decreased only minimally. However, the control group in contrast demonstrated a significant _increase_. At the same time, while Mental Hygiene Ideology increased for the psychiatric group, this change was no greater than the change seen in the control group,

Table 3

Comparison of Attitudes Toward Mental Illness of Nursing Students in the Experimental and Control Groups at Pretest

	Experimental Group (N=36)		Control Group (N=26)		
Attitudinal Factor	Mean Score	S.D.	Mean Score	S.D.	*t*
Authoritarianism	17.97	4.69	15.27	4.96	2.13*
Benevolence	45.97	5.39	48.58	3.78	2.21*
Mental Health Ideology	27.67	3.88	31.15	4.24	3.25*
Social Restrictiveness	19.69	5.33	15.62	3.80	3.45*
Interpersonal Etiology	16.08	4.32	16.27	4.48	.16 n.s.
Protective Benevolence	29.97	5.11	27.42	3.91	2.19*
Restrictive Control	64.75	7.49	63.00	6.85	.94 n.s.
Nontraditionalism	59.11	6.38	61.96	5.79	1.80 n.s.

* $p < .05$

Table 4

Shifts in Attitudes of Nursing Students Toward Mental Illness:
A Comparison of Students in the Experimental Group
and Students in the Control Group

	Scores						
	Experimental Group (N = 36)			Control Group (N = 26)			
Attitudinal Factor	Pretest Mean	Posttest Mean	Mean Difference	Pretest Mean	Posttest Mean	Mean Difference	t-test of Differences of Mean Differences
Authoritarianism	17.97	16.61	-1.36	15.27	17.73	2.46	-3.51*
Benevolence	45.97	44.36	-1.61	48.58	48.27	-.30	- .97
Mental Health Ideology	27.67	30.31	2.64	31.15	32.65	1.50	.93
Social Restrictiveness	19.69	18.39	-1.31	15.62	15.46	.23	-1.53
Interpersonal Etiology	16.08	20.33	4.42	16.27	15.77	-.27	4.49*
Protective Benevolence	29.97	32.11	2.69	27.42	27.77	.46	2.24*
Restrictive Control	64.75	65.50	0.78	63.00	68.69	-.73	1.17
Nontraditionalism	59.11	58.58	-0.42	61.96	60.08	-1.88	.92

* $p < .05$

resulting in a lack of significant findings on comparison. For Interpersonal Etiology and Protective Benevolence the results differ again. While the psychiatric group alone showed a significant favorable increase in Interpersonal Etiology, the control group remained essentially unchanged. Scores in Protective Benevolence also increased (though not to a significant degree), while the scores for the control group remained essentially unchanged.

The changes in Authoritarianism are particularly interesting. In absolute terms, nursing students in their last year of schooling are usually found not to be highly authoritarian (Gelfand & Ullman, 1961). Yet, as reported, in almost all studies dealing with nursing students' attitudes toward the mentally ill, a significant drop in scores is found on this factor among students who had experienced an intervening psychiatric nursing rotation. That the experimental group in this study dropped only slightly in their scores and the control group increased so significantly, leads one to question what factors in the other rotation might in fact have increased authoritarianism. All of the students in the Applied Advanced Nursing rotation worked in an intensive care setting (such as the Intensive Care Unit or the Coronary Care Unit) for at least five to six weeks, some for the entire 12-week period. Perhaps it was the "life and death" concerns associated with these settings which raised students' anxiety and increased their authoritarianism.

In comparing the results shown in Table 4 with those obtained when only pretest-posttest change scores were given, it is evident that one may come to quite different conclusions regarding the effectiveness of instruction in psychiatric nursing in changing attitudes. Just as the

significance of changes in Mental Health Ideology disappeared in this instance, perhaps the changes noted by Creech would also have proved nonsignificant had he used a control group in his design.

Finally it is of interest to note that the students in the two groups differed significantly in their perception of the change in their attitudes that had taken place during the rotation (see Item 4, Appendix D). In response to the item, "In comparison to the start of the school-year, I feel my attitude toward the mentally ill is . . .", all but one student in the experimental group saw themselves as "much more favorable" or "somewhat more favorable." In contrast, only 9 out of 26 students in the control group perceived their attitudes toward the mentally ill as having improved (See Table 5).

In conclusion, the first hypothesis is supported. Favorable changes in attitude in the experimental group did occur and may be attributed to their psychiatric experience. The positive change in Interpersonal Etiology is most clear, reflecting an increased adherence to the belief that mental illness arises from interpersonal experiences and that abnormal behavior is motivated. The negative finding for the factor of Protective Benevolence is somewhat puzzling, since it would indicate an increased desire on the part of the student to establish comfortable, but aloof, relationships with patients.

The scores on Authoritarianism decreased only slightly, but at least did not increase significantly as they did for the control group. All in all, for the experimental group the changes in attitude were not large. On the other hand, there was only one significant "negative"

Table 5

Student Perceptions of Changes in Attitudes Toward Mentally Ill: Comparison of Experimental and Control Groups at Posttest

Change in Attitude[a]	Experimental Group (N=36)	Control Group (N=26)
Much more favorable	20	1
Somewhat more favorable	15	8
The same	1	17
Somewhat less favorable	0	0
Much less favorable	0	0

[a]Question #3 of Additional Information Questionnaire (see Appendix D): "In comparison to the start of the school-year, I feel my attitude toward the mentally ill is _____"

change among all eight factors--that of an increased score in Protective Benevolence.

Hypothesis 2: The psychiatric nursing rotation decreases anxiety levels in students.

Since both an experimental and a control group were utilized to test this hypothesis, again the first question to be asked is whether the two groups were essentially equivalent at time of pretesting. Table 6 presents mean anxiety scores (STAI scores) of students in the two nursing rotations. It is clear that no significant differences in anxiety levels existed between the two groups at the time ($t = 1.60$, n.s.). Additional support for this conclusion may be derived from the students' responses to the question: "How anxious are you about working as a nurse with the mentally ill?" Responses were possible, ranging from "not at all" (scored 1) to "very much" (scored 5). The modal student of each group admitted to being "somewhat" anxious. Mean scores were practically identical, 3.11 for the psychiatric nursing students, and 3.04 for the other students.

Second, these data also indicate that the subjects on the whole were not unusually anxious. The mean STAI scores of 38.28 and 34.62 are very similar to the norm (35.12) established by Spielberger for female undergraduate students. This finding casts some doubt on the common assumption that students experience unusual anxiety when commencing psychiatric nursing (Muller, 1962; Robinson, 1952; Tobiason, 1972; Walsh, 1971). Yet, generally, this assumption has not been validated either by formal measurement of anxiety, nor by comparison with students

Table 6

Mean Scores on Spielberger's State Anxiety (STAI) Measure, at Pretest and Posttest for Nursing Students in Experimental and Control Groups

Group	Pretest Mean Score	S.D.	Posttest Mean Score	S.D.	Change in Score Mean	S.D.
Experimental	38.28	7.80	35.36	9.07	-2.92	9.88
Control	34.62	9.32	42.46	13.47	+7.80	14.03
t between the 2 groups	1.60 n.s.		2.29*		3.30*	

*$p < .05$

in other rotations.

One very similar study by Walsh (1971) yielded essentially the same results as did the present study. Walsh tested five groups of students about to enter a psychiatric rotation and one group of students enrolled in another rotation. Again, she found no significant differences in anxiety levels among the groups at time of pretesting.

Thirdly, the data also indicated that although the two groups were essentially equivalent in anxiety levels at pretest, they diverged markedly over the 12-week period. By posttest, the mean anxiety score of the psychiatric nursing students had diminished by 2.92 points ($t = 1.86$, significant at the .05 level). In comparison, the mean anxiety score of the control group rose 7.84 points, a highly significant change ($t = 2.85$, significant at the .01 level). Additional evidence of changes in anxiety was provided by responses to the statement: "In comparison to the start of the school year, I feel my anxiety level in regard to the mentally ill is . . .". Possible responses to this item ranged from "much less" (scored 1) to "much greater" (scored 5). Scores for the experimental group averaged 1.19 indicating that they felt "much less" anxiety; scores for the control group averaged 2.88, with most respondents indicating that their anxiety level had remained essentially "the same" (see Table 6). Though changes in anxiety levels as indicated by this latter measure differed greatly from those indicated by scores on the Spielberger instrument, still the differences between pre- and posttest scores again point out the degree of divergence between the two groups over the 12-week period.

The mild decrease in anxiety of psychiatric nursing students is

again in accord with the literature. Walsh (1971) found that anxiety levels decreased in 4 out of 5 experimental groups of students studied. Neylan (1962) and Meyer (1973) speak of a decrease of anxiety as students come to feel more secure in their new roles.

Fourth, changes occurring in anxiety levels of students over the 12-week period differed significantly between the two groups ($t = 3.30$) and appeared due to the differences in rotation. It should be stressed here that the rise in anxiety of students in the "other" rotation had not been anticipated. Perhaps, then, the differences in anxiety were due, not so much to the quieting effect of the psychiatric nursing experience as to the disturbing effect of the "other" rotation.

Inasmuch as the Nursing IX program put much emphasis on self-directed behavior and the use of advanced nursing skills in new and highly specialized areas (such as the Critical Care Unit), it is conceivable that the experience was as anxiety producing, if not more so, than the psychiatric rotation. Yet the expected decrease in anxiety level did not take place as the students became accustomed to their new role (Neylan, 1962). It should be noted, perhaps, that the the posttest was taken by these students just before they were to learn of their final grades for the quarter. This circumstance, however, would not seem to be sufficient reason to account for the great disparity in anxiety scores obtained.

On the basis of the above data, Hypothesis 2 is accepted: the psychiatric rotation did decrease anxiety levels in students.

Hypothesis 3: In the psychiatric nursing rotation the favorability of students' attitudes toward the mentally ill is inversely related to the degree of their anxiety.

To test this hypothesis, first the anxiety scores of the students were correlated with their attitudinal scores. Table 7 indicates that anxiety apparently had little effect on students' attitudes at pretest, and even less effect at posttest. In her test of this same hypothesis, Walsh (1971) also concluded that anxiety was not an important determinant of attitudes (see Table 7).

In a final test of the relationship between anxiety and attitudes, changes in anxiety were correlated with changes in attitudes. Results are presented in Table 8. From that table it would appear that only the change in authoritarianism is related to anxiety. For psychiatric nursing students, to the extent anxiety is alleviated, authoritarianism may decrease; and to the extent anxiety is raised, authoritarianism may rise. However, the reverse seemed to hold for the control subjects: those who became more anxious tended to become less authoritarian. One is led to the conclusion that shifts in level of anxiety did not relate in any systematic way to shifts in attitudes. No support, then, is claimed for the third hypothesis.

Table 7

Correlations of Anxiety Scores With Scores on Attitudinal Factors for Students in a Psychiatric Rotation: Present Results Compared with Those of Walsh

	Pearsonian Correlation Coefficients			
	Good (N = 36)		Walsh[a] (N = 156)	
Attitudinal Factor	Pretest	Posttest	Pretest	Posttest
A - Authoritarianism	.04	.06	.16	.08
B - Benevolence	-.29*	.14	-.03	-.20*
C - Mental Hygiene Ideology	-.08	-.25	.07	-.05
D - Social Restrictiveness	.31*	-.02	.08	.25**
E - Interpersonal Etiology	.21	.00	.12	.09
Protective Benevolence	.32*	-.04		
Restrictive Control	-.43*	.14		
Nontraditionalism	-.02	.05		

* $p < .05$

[a]Walsh used IPAT Anxiety Scale; Good used Spielberger's State Anxiety Inventory

Table 8

Changes in Anxiety Correlated with Changes in Nursing Students' Attitudes Toward Mental Illness

Attitudinal Factor	Pearsonian Correlation Coefficient	
	Experimental Group (N=36)	Control Group (N-26)
A - Authoritarianism	.30*	-.47*
B - Benevolence	.02	.36
C - Mental Health Ideology	-.04	-.04
D - Social Restrictiveness	.02	-.11
E - Interpersonal Etiology	.28	-.02
Protective Benevolence	.25	-.26
Restrictive Control	-.43*	.17
Nontraditionalism	-.13	-.05

* $p < .05$

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to determine whether the major components of a psychiatric rotation--contact with the psychiatric patients, and didactic input--were instrumental in decreasing students' anxieties and fears regarding the mentally ill, and in fostering favorable attitudes toward them. Additionally, an attempt was made to determine whether changes in attitudes toward mental illness were systematically related to changes in anxiety levels of students enrolled in a diploma program of nursing.

The sample consisted of 62 student nurses in a 3-year diploma school of nursing. All respondents were in the first quarter of their third year of schooling, with 36 enrolled in the psychiatric nursing rotation and 26 in an "applied advanced nursing" course.

An experimental pretest-posttest, control group design was utilized in this study; all data gathering was done by the experimenter at two separate sessions for each group--one at the beginning of the rotation and one during the final week of the rotation.

Anxiety was measured by the Spielberger (1970) State Anxiety Inventory, and attitudes were measured with the amplified OMI used by Creech (1977). Demographic and other data were obtained by means of a questionnaire constructed by the experimenter.

Three hypotheses were tested which posited relationships between

the experience of the psychiatric rotation and a change in attitude toward the mentally ill. They were:

1. The psychiatric nursing rotation effects favorable changes in students' attitudes toward the mentally ill.

2. The psychiatric nursing rotation decreases anxiety levels in students.

3. In the psychiatric nursing rotation, the favorability of students' attitudes toward the mentally ill is inversely related to the degree of their anxiety.

Some support was found for the first hypothesis in that favorable changes did indeed occur in the experimental group during their psychiatric experience, the clearest positive change being in the belief regarding the interpersonal etiology of mental illness. Scores for the factor of Authoritarianism also decreased, resulting in significant findings upon comparison with the control group. No change was noted in relation to the remaining factors with the exception of Protective Benevolence, for which scores showed a significant increase. This was the only change in an unfavorable direction.

Hypothesis 2 was more clearly confirmed. In neither group were the subjects found to be unusually anxious at the beginning of the rotation. While the anxiety levels of the two groups were essentially equivalent at pretest, they diverged markedly over the 12-week period. By posttest the mean anxiety score of the experimental group showed a significant decrease, while the mean score for the control group showed a highly significant change in the opposite direction. The differences in anxiety scores on posttesting appeared to be clearly due to the differences in

the specific rotations.

No support was found for Hypothesis 3. Anxiety apparently was not an important determinant of attitudes, and shifts in levels of anxiety were not related in any systematic way to shifts in attitudes.

In summary, then, it may be concluded that the psychiatric rotation does effect some favorable changes in the students' attitudes toward the mentally ill, and also tends to decrease their level of anxiety. No clear relationship appears to exist between the specific attitudinal changes noted and individual changes in levels of anxiety.

The findings of this study raise a number of questions and suggest directions for future research. First, do the attitudes of nursing students toward the mentally ill change gradually throughout their three-year educational period, as contact with patients in the clinical areas is progressively increased and as mental health concepts are introduced into the curriculum? Longitudinal studies are needed to answer this question.

Second, do certain rotations produce greater tendencies toward authoritarianism and generate more anxiety than other rotations? Perhaps longitudinal studies would show that psychiatric nursing does not stand alone in this.

Third, do nurses in the mental health field develop less favorable views of the mentally ill over time? Is the extent of this change related systematically to characteristics of the clinical settings in which they are employed? For example, are nurses working in more authoritarian organizations or settings more authoritarian in their relations to patients? Again, longitudinal studies alone can plot shifts in nurses'

attitudes as they move from the student role to that of nurse in the mental health field.

Finally, the relation of anxiety to authoritarianism needs further explication. Although this study with nursing students demonstrated only a weak relationship between the two factors, it may be that a stronger relationship prevails for other groups such as LPNs or nursing aides.

These, then, are some of the directions that future studies might take. It would seem that adequate research has already been conducted on the effect of the psychiatric rotation on students' attitudes toward mental illness. It is now time to proceed to the investigation of other questions such as the above.

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APPENDICES

APPENDIX A

Questionnaires submitted to students in the Psychiatric Nursing rotation and in the Applied Advanced Nursing rotation at time of pretesting:

1. Background Data Sheet.

2. Opinions About Mental Illness Questionnaire as modified by Creech (1977).

3. Spielberger's (1970) State Anxiety Questionnaire: STAI Form X-1.

BACKGROUND DATA SHEET

1. Date of birth __________ 2. Sex: Male ___ Female ___

3. Years of schooling completed after high school (other than Nursing School)
(please circle) 1 2 3 4 5

4. Marital Status: (please circle) Single Widowed Separated
Married Divorced Living with companion

5. If married and living with husband/wife, what is your husband/wife's occupation? ____

6. If not married, (a) What is your father's occupation? ________________

(b) Please circle years of education father has had:

1 2 3 4 5 6 7 8

9 10 11 12 13 14

15 16 17 18 19 20

7. Have you ever known anyone well who has been labeled mentally ill? _____

8. If your answer to the above question was "yes," how much contact have you had with that person during his/her illness? (Please check)

(a) ___none at all, (b) ___very little, (c) ___a moderate amount,

(d) ___a considerable amount, (e) ___very much.

9. How anxious are you about working as a nurse with the mentally ill?

(a) ___not at all, (b) ___very little, (c) ___somewhat,

(d) ___moderately, (e) ___very much.

OPINIONS ABOUT MENTAL ILLNESS

THE STATEMENTS THAT FOLLOW ARE OPINIONS OR IDEAS ABOUT MENTAL ILLNESS AND MENTAL PATIENTS. THERE ARE MANY DIFFERENCES OF OPINIONS ABOUT THIS SUBJECT. IN OTHER WORDS, MANY PEOPLE AGREE WITH EACH OF THE FOLLOWING STATEMENTS WHILE MANY PEOPLE DISAGREE WITH EACH OF THESE STATEMENTS. WE WOULD LIKE TO KNOW WHAT YOU THINK ABOUT THESE STATEMENTS. EACH STATEMENT IS FOLLOWED BY SIX CHOICES:

Strongly___ Agree	Agree___	Not Sure____ But Probably Agree	Not Sure____ But Probably DISAGREE	Disagree___	Strongly___ Disagree

PLEASE CHECK (✓) IN THE SPACE PROVIDED ON THE ANSWER SHEET THAT CHOICE WHICH COMES CLOSEST TO SAYING HOW YOU FEEL ABOUT EACH STATEMENT. YOU CAN BE SURE THAT MANY PEOPLE, INCLUDING DOCTORS, WILL AGREE WITH YOUR CHOICE. THERE ARE NO RIGHT OR WRONG ANSWERS: WE ARE INTERESTED ONLY IN YOUR OPINION. IT IS VERY IMPORTANT THAT YOU ANSWER EVERY ITEM.

Please answer each question on the Answer Sheet.

1. Nervous Breakdowns usually result when people work too hard.
2. Mental Illness is an illness like any other.
3. Most patients in mental hospitals are not dangerous.
4. Although patients discharged from mental hospitals may seem all right, they should not be allowed to marry.
5. If parents loved their children more, there would be less mental illness.
6. It is easy to recognize someone who once had a serious mental illness.
7. People who are mentally ill let their emotions control them; normal people think things out.
8. People who were once patients in mental hospitals are no more dangerous than the average citizen.
9. When a person has a problem or a worry, it is best not to think about it, but keep busy with more pleasant things.
10. Although they usually aren't aware of it, many people become mentally ill to avoid the difficult problems of everyday life.
11. There is something about mental patients that makes it easy to tell them from normal people.
12. Even though patients in mental hospitals behave in funny ways, it is wrong to laugh about them.
13. Most mental patients are willing to work.
14. The small children of patients in mental hospitals should not be allowed to visit them.
15. People who are successful in their work seldom become mentally ill.
16. People would not become mentally ill if they avoided bad thoughts.
17. Patients in mental hospitals are in many ways like children.
18. More tax money should be spent in the care and treatment of people with severe mental illness.
19. A heart patient has just one thing wrong with him, while a mentally ill person is completely different from other patients.

20. Mental patients come from homes where the parents took little interest in their children.

21. People with mental illness should never be treated in the same hospital as people with physical illness.

22. Anyone who tries hard to better himself deserves the respect of others.

23. If our hospitals had enough well trained doctors, nurses, and aides, many of the patients would get well enough to live outside the hospital.

24. A woman would be foolish to marry a man who has had a severe mental illness, even though he seems fully recovered.

25. If the children of mentally ill parents were raised by normal parents, they would probably not become mentally ill.

26. People who have been patients in a mental hospital will never be their old selves again.

27. Many mental patients are capable of skilled labor, even though in some ways they are very disturbed mentally.

28. Our mental hospitals seem more like prisons than like places where mentally ill people can be cared for.

29. Anyone who is in a hospital for a mental illness should not be allowed to vote.

30. The mental illness of many people is caused by the separation or divorce of their parents during childhood.

31. The best way to handle patients in mental hospitals is to keep them behind locked doors.

32. To become a patient in a mental hospital is to become a failure in life.

33. The patients of mental hospitals should be allowed more privacy.

34. If a patient in a mental hospital attacks someone, he should be punished so he doesn't do it again.

35. If the children of normal parents were raised by mentally ill parents, they would probably become mentally ill.

36. Every mental hospital should be surrounded by a high fence and guards.

37. The law should allow a woman to divorce her husband as soon as he has been confined in a mental hospital with a severe mental illness.

38. People (both Veterans and non-Veterans) who are unable to work because of mental illness should receive money for living expenses.

39. Mental illness is usually caused by some disease of the nervous system.

40. Regardless of how you look at it, patients with severe mental illness are no longer really human.

41. Most women who were once patients in a mental hospital could be trusted as baby sitters.

42. Most patients in mental hospitals don't care how they look.

43. College professors are more likely to become mentally ill than are businessmen.

44. Many people who have never been patients in a mental hospital are more mentally ill than many hospitalized mental patients.

45. Although some mental patients seem all right, it is dangerous to forget for a moment that they are mentally ill.

46. Sometimes mental illness is punishment for bad deeds.

47. Our mental hospitals should be organized in a way that makes the patient feel as much as possible like he is living at home.

48. One of the main causes of mental illness is a lack of moral strength or will power.

49. There is little that can be done for patients in a mental hospital except to see that they are comfortable and well fed.

50. Many mental patients would remain in the hospital until they were well, even if the doors were unlocked.

51. All patients in mental hospitals should be prevented from having children by a painless operation.

52. If a mental patient is allowed to keep his watch and jewelry, it creates more trouble than it is worth.

53. Patients should never be locked up alone in an isolation room.

54. More mental patients should be committed by the courts so that the hospital is really in charge.

55. Mental patients come to the nursing staff with too many unimportant problems.

56. The staff should be as friendly with patients as they are with one another.

57. It is not a good idea for the mental patient to stay on one ward as long as he is in the hospital.

58. Patients should be paid for any work they do in the hospital.

59. Most patients returning from a leave should be searched for forbidden items.

60. A patient should be placed on a ward where most other patients are like him in age, education, and type of illness.

61. Mixing of men and women patients should be discouraged.

62. If a mental patient does not like his work assignment, he should be allowed to change it.

63. Mental patients who cause the least trouble in the hospital are likely to get along well after discharge.

64. Nursing attendants should try to make friends with their patients.

SELF-EVALUATION QUESTIONNAIRE

Developed by C. D. Spielberger, R. L. Gorsuch and R. Lushene

STAI FORM X-1

NAME ______________________________ DATE ______________

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you *feel* right now, that is, *at this moment*. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

	NOT AT ALL	SOMEWHAT	MODERATELY SO	VERY MUCH SO
1. I feel calm	①	②	③	④
2. I feel secure	①	②	③	④
3. I am tense	①	②	③	④
4. I am regretful	①	②	③	④
5. I feel at ease	①	②	③	④
6. I feel upset	①	②	③	④
7. I am presently worrying over possible misfortunes	①	②	③	④
8. I feel rested	①	②	③	④
9. I feel anxious	①	②	③	④
10. I feel comfortable	①	②	③	④
11. I feel self-confident	①	②	③	④
12. I feel nervous	①	②	③	④
13. I am jittery	①	②	③	④
14. I feel "high strung"	①	②	③	④
15. I am relaxed	①	②	③	④
16. I feel content	①	②	③	④
17. I am worried	①	②	③	④
18. I feel over-excited and "rattled"	①	②	③	④
19. I feel joyful	①	②	③	④
20. I feel pleasant	①	②	③	④

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APPENDIX B

Opinions About Mental Illness (OMI):

Factors and Scoring Keys

Factor A--Authoritarianism

Item	Description
1.	Nervous Breakdowns usually result when people work too hard.
6.	It is easy to recognize someone who once had a serious mental illness.
9.	When a person has a problem or a worry, it is best not to think about it, but keep busy with more pleasant things.
11.	There is something about mental patients that makes it easy to tell them from normal people.
16.	People would not become mentally ill if they avoided bad thoughts.
19.	A heart patient has just one thing wrong with him, while a mentally ill person is completely different from other patients.
21.	People with mental illness should never be treated in the same hospital as people with physical illness.
39.	Mental illness is usually caused by some disease of the nervous system.
43.	College professors are more likely to become mentally ill than are businessmen.
46.	Sometimes mental illness is punishment for bad deeds.
48.	One of the main causes of mental illness is a lack of moral strength or will power.

Scoring Key: A = 67 - Sum of values on all questions

Possible Range: 1 to 56

Factor B--Benevolence

Item	Description
2.	Mental Illness is an illness like any other.
12.	Even though patients in mental hospitals behave in funny ways, it is wrong to laugh about them.
17.	Patients in mental hospitals are in many ways like children.
18.	More tax money should be spent in the care and treatment of people with severe mental illness.
22.	Anyone who tries hard to better himself deserves the respect of others.
26.	People who have been patients in a mental hospital will never be their old selves again.
27.	Many mental patients are capable of skilled labor, even though in some ways they are very disturbed mentally.
32.	To become a patient in a mental hospital is to become a failure in life.
34.	If a patient in a mental hospital attacks someone, he should be punished so he doesn't do it again.
36.	Every mental hospital should be surrounded by a high fence and guards.
37.	The law should allow a woman to divorce her husband as soon as he has been confined in a mental hospital with a severe mental illness.
40.	Regardless of how you look at it, patients with severe mental illness are no longer really human.
47.	Our mental hospitals should be organized in a way that makes the patient feel as much as possible like he is living at home.
49.	There is little that can be done for patients in a mental hospital except to see that they are comfortable and well fed.

Scoring Key: B = 31 + Sum of values on #26, 32, 34, 36, 37, 40, 49
- Sum of values on # 2, 12, 17, 18, 22, 27, 47

Possible Range: (-4) to (+66)

Factor C--Mental Health Ideology

Item	Description
3.	Most patients in mental hospitals are not dangerous.
13.	Most mental patients are willing to work.
23.	If our hospitals had enough well trained doctors, nurses, and aides, many of the patients would get well enough to live outside the hospital.
28.	Our mental hospitals seem more like prisons than like places where mentally ill people can be cared for.
31.	The best way to handle patients in mental hospitals is to keep them behind locked doors.
33.	The patients of mental hospitals should be allowed more privacy.
38.	People (both Veterans and non-Veterans) who are unable to work because of mental illness should receive money for living expenses.
44.	Many people who have never been patients in a mental hospital are more mentally ill than many hospitalized mental patients.
50.	Many mental patients would remain in the hospital until they were well, even though the doors were unlocked.

Scoring Key: C = 48 + the value for #31 - the sum of values on #3, 13, 23, 28, 33, 38, 44, 50

Possible Range: 1 to 46

Factor D--Social Restrictiveness

Item	Description
4.	Although patients discharged from mental hospitals may seem all right, they should not be allowed to marry.
7.	People who are mentally ill let their emotions control them; normal people think things out.
8.	People who were once patients in mental hospitals are no more dangerous than the average citizen.
14.	The small children of patients in mental hospitals should not be allowed to visit them.
24.	A woman would be foolish to marry a man who has had a severe mental illness, even though he seems fully recovered.
29.	Anyone who is in a hospital for a mental illness should not be allowed to vote.
41.	Most women who were once patients in a mental hospital could be trusted as baby sitters.
42.	Most patients in mental hospitals don't care how they look.
45.	Although some mental patients seem all right, it is dangerous to forget for a moment that they are mentally ill.
51.	All patients in mental hospitals should be prevented from having children by a painless operation.

Scoring Key: D = 47 + the sum of values on # 8 and 41
- the sum of values on # 4, 7, 14, 24, 29, 42, 45, 51

Possible Range: 1 to 51

Factor E--Interpersonal Etiology

Item	Description
5.	If parents loved their children more, there would be less mental illness.
10.	Although they usually aren't aware of it, many people become mentally ill to avoid the difficult problems of everyday life.
15.	People who are successful in their work seldom become mentally ill.
20.	Mental patients come from homes where the parents took little interest in their children.
25.	If the children of mentally ill parents were raised by normal parents, they would probably not become mentally ill.
30.	The mental illness of many people is caused by the separation or divorce of their parents during childhood.
35.	If the children of normal parents were raised by mentally ill parents, they would probably become mentally ill.

Scoring Key: E = 43 - the sum of values on # 5, 10, 15, 20, 25, 30, 35

Possible Range: 1 to 36

Protective Benevolence

Item	Description
13.	Most mental patients are willing to work.
38.	People (both Veterans and non-Veterans) who are unable to work because of mental illness should receive money for living expenses.
47.	Our mental hospitals should be organized in a way that makes the patient feel as much as possible like he is living at home.
53.	Patients should never be locked up alone in an isolation room.
56.	The staff should be as friendly with patients as they are with one another.
58.	Patients should be paid for any work they do in the hospital.
60.	A patient should be placed on a ward where most other patients are like him in age, education, and type of illness.
62.	If a mental patient does not like his work assignment, he should be allowed to change it.
63.	Mental patients who cause the least trouble in the hospital are likely to get along well after discharge.
64.	Nursing attendants should try to make friends with their patients.

Scoring Key: P.B. = the sum of values on # 13, 38, 47, 53, 56, 58, 60, 62, 63, 64

Possible Range: 10 to 60

Restrictive Control

Item	Description
4.	Although patients discharged from mental hospitals may seem all right, they should not be allowed to marry.
6.	It is easy to recognize someone who once had a serious mental illness.
14.	The small children of patients in mental hospitals should not be allowed to visit them.
16.	People would not become mentally ill if they avoided bad thoughts.
21.	People with mental illness should never be treated in the same hospital as people with physical illness.
24.	A woman would be foolish to marry a man who has had a severe mental illness, even though he seems fully recovered.
29.	Anyone who is in a hospital for a mental illness should not be allowed to vote.
34.	If a patient in a mental hospital attacks someone, he should be punished so he doesn't do it again.
37.	The law should allow a woman to divorce her husband as soon as he has been confined in a mental hospital with a severe mental illness.
51.	All patients in mental hospitals should be prevented from having children by a painless operation.
52.	If a mental patient is allowed to keep his watch and jewelry, it creates more trouble than it is worth.
55.	Mental patients come to the nursing staff with too many unimportant problems.
57.	It is not a good idea for the mental patient to stay on one ward as long as he is in the hospital.
59.	Most patients returning from a leave should be searched for forbidden items.
61.	Mixing of men and women patients should be discouraged.

Scoring Key: R.C. = the sum values on #4, 6, 14, 16, 21, 24, 29, 34, 37, 51, 52, 55, 57, 59, 61

Possible Range: 15 to 90

Nontraditionalism

Item	Description
1.	Nervous Breakdowns usually result when people work too hard.
5.	If parents loved their children more, there would be less mental illness.
7.	People who are mentally ill let their emotions control them; normal people think things out.
9.	When a person has a problem or a worry, it is best not to think about it, but keep busy with more pleasant things.
11.	There is something about mental patients that makes it easy to tell them from normal people.
15.	People who are successful in their work seldom become mentally ill.
20.	Mental patients come from homes where the parents took little interest in their children.
36.	Every mental hospital should be surrounded by a high fence and guards.
39.	Mental illness is usually caused by some disease of the nervous system.
42.	Most patients in mental hospitals don't care how they look.
45.	Although some mental patients seem all right, it is dangerous to forget for a moment that they are mentally ill.
46.	Sometimes mental illness is punishment for bad deeds.
48.	One of the main causes of mental illness is a lack of moral strength or will power.
54.	More mental patients should be committed by the courts so that the hospital is really in charge.

Scoring Key: Nontraditionalism = the sum of values on all items

Possible Range: 14 to 84

Scoring Key to Spielberger's
State Anxiety Questionnaire (STAI)

The range of possible scores for Form X-1 of the STAI varies from a minimum score of 20 (low anxiety) to a maximum score of 80 (high anxiety). Subjects respond to each item by rating themselves on a four-point scale.

To reduce the potential influence of an acquiescence set on STAI responses some of the items are scored directly--a rating of 4 indicating a high level of anxiety (e.g.,"I am tense"), others are worded so that a high score indicates low anxiety (e.g., "I feel pleasant"). There are 10 directly scored items (3, 4, 6, 7, 9, 12, 13, 14, 17, and 18) and 10 reverse-scored items (1, 2, 5, 8, 10, 11, 15, 16, 19 and 20).

APPENDIX D

Additional Information Questionnaires
Administered at End of Rotation

I. Additional Information Questionnaire administered to Psychiatric Nursing Group

II. Additional Information Questionnaire administered to Applied Advanced Nursing Group

(I. Answered by Psychiatric Nursing students only)

ADDITIONAL INFORMATION QUESTIONNAIRE

Please answer the following questions as indicated:

1. In comparison to the start of the school year, I feel my anxiety level in regard to the mentally ill is:

   a. much greater___, b. somewhat greater___, c. the same___,

   d. somewhat less___, e. much less___.

2. If your anxiety level has changed, please rank the following components of the psychiatric rotation in the order of the degree of influence each has had in effecting that change: (1 = most influence; 4 = least influence).

   Contact with the mentally ill:

   a. 1:1 work with patients____.

   b. group, social activities with patients (parties, games, picnics etc.)____.

   Theoretical Instruction:

   c. classroom instruction (lectures, role plays etc.)____.

   d. instruction in clinical area (conferences)____.

3. Estimate the extent your self-awareness has increased during this rotation:

   a. not at all___, b. some___, c. considerably___, d. a great deal___.

4. In comparison to the start of the school year, I feel my attitude toward the mentally ill is:

   a. much more favorable___, b. somewhat more favorable___,

   c. the same___, d. somewhat less favorable___, e. much less favorable___.

5. If your attitude toward the mentally ill has changed, please rank the following components of the psychiatric rotation in the order of the degree of influence each has had in effecting that change: (1 = most influence; 4 = least influence)

Contact with the mentally ill:

a. 1:1 work with patients___,

b. group, social activities with patients (parties, games, picnics, etc.)___.

Theoretical Instruction:

a. classroom instruction (lectures, role plays, etc.)___,

b. instruction in clinical area (conferences)___.

COMMENTS:

(II. Answered by Applied Advanced Nursing students only)

ADDITIONAL INFORMATION QUESTIONNAIRE

Please answer the following questions as indicated:

1. In comparison to the start of the school year, I feel my anxiety level in regard to the mentally ill is:

   a. much greater___, b. somewhat greater___, c. the same___,

   d. somewhat less___, e. much less___.

2. Estimate the extent your self-awareness has increased during this rotation:

   a. not at all___, b. some___, c. considerably___,

   d. a great deal___.

3. In comparison to the start of the school year, I feel my attitude toward the mentally ill is:

   a. much more favorable___, b. somewhat more favorable___,

   c. the same___, d. somewhat less favorable___,

   e. much less favorable___.

COMMENTS:

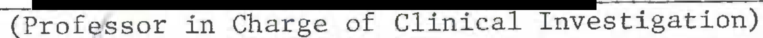
AN ABSTRACT OF THE CLINICAL INVESTIGATION OF

TRUDY NADINE GOOD

for the Master of Nursing

Date of receiving this degree: June 8, 1979

Title: THE EFFECT OF THE PSYCHIATRIC NURSING ROTATION ON THE STUDENT'S LEVEL OF ANXIETY AND ATTITUDES TOWARD THE MENTALLY ILL

Approved: 
(Professor in Charge of Clinical Investigation)

The purpose of this study was to determine whether the major components of a psychiatric rotation, contact with psychiatric patients and didactic input, were instrumental in decreasing students' anxieties and fears regarding the mentally ill, and in fostering favorable attitudes toward them. Additionally, an attempt was made to determine whether changes in attitudes toward mental illness were systematically related to changes in anxiety levels of students enrolled in a diploma program of nursing.

The sample consisted of 62 student nurses in a 3-year diploma school of nursing. All respondents were in the first quarter of their third year of schooling with 36 enrolled in the psychiatric nursing rotation and 26 in an "applied advanced nursing" course. An experimental pretest-posttest, control group design was utilized.

Instruments employed were: the Spielberger (1970) State Anxiety Inventory to measure anxiety, the amplified OMI used previously by Creech (1977) to measure attitudes, and a questionnaire constructed by the experimenter to obtain demographic and other data.

Three hypotheses were tested which posited relationships between the experience of the psychiatric rotation and a change in attitude toward the mentally ill. They were:

1. The psychiatric nursing rotation effects favorable changes in students' attitudes toward the mentally ill.
2. The psychiatric nursing rotation decreases anxiety levels in students.
3. In the psychiatric nursing rotation, the favorability of the students' attitudes toward the mentally ill is inversely related to the degree of their anxiety.

Some support was found for the first hypothesis in that favorable changes did occur in the experimental group during their psychiatric experience, with the clearest positive change being expressed in the belief regarding the interpersonal etiology of mental illness.

Hypothesis 2 was more clearly confirmed. Though at pretesting neither groups had been found to be unusually anxious, they diverged markedly over the 12-week period, with the psychiatric group being far less anxious at posttest than the control group. This difference appeared to result from the difference in rotation.

No support was found for Hypothesis 3--anxiety apparently was not an important determinant of attitudes, and shifts in levels of anxiety were not related in any systematic way to shifts in attitude.

It was concluded on the basis of this study that the psychiatric rotation does effect some favorable changes in the students' attitudes toward the mentally ill, and also tends to decrease their level of anxiety. However no clear relationship appeared to exist between the specific attitudinal changes noted and individual changes in levels of anxiety.