

CHANGE IN ATTITUDES TOWARD MENTAL HOSPITAL WARD AIDES  
AND BELIEFS ABOUT MENTAL ILLNESS OVER TIME OF HOSPITALIZED MENTAL PATIENTS

by

James Timothy McDonald  
B.S., Washington State University, 1967

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF

Master of Arts

in the Department  
of  
Psychology

We accept this thesis as conforming to the  
required standard

THE UNIVERSITY OF BRITISH COLUMBIA

September, 1969

In presenting this thesis in partial fulfilment of the requirements for an advanced degree at the University of British Columbia, I agree that the Library shall make it freely available for reference and Study.

I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by the Head of my Department or by his representatives. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Department of Psychology

The University of British Columbia  
Vancouver 8, Canada

Date 9/25/69

## ABSTRACT

In recent years there have been several studies concerning themselves with such topics as mental patients' attitudes toward hospital personnel and mental patients' beliefs about mental illness. However, these studies are not without fault. They have been strictly empirical in approach, with no theoretical framework from which to predict and/or explain the results they have obtained. These studies also have failed to control for potentially important variables such as whether a patient has had previous admissions to a mental hospital.

The present study attempted to surmount these shortcomings. Drawing upon Heider's (1946) balance theory, it was predicted that if the patients' attitudes toward the staff changed in a positive direction (as a study by Reznikoff, et al. [1960] suggests is the case), those beliefs about mental illness held by the patients which were dissimilar to the staff's beliefs would converge toward those beliefs held by the staff. This study also controlled for the no prior admissions---prior admissions variable, a variable Wolfensberger's (1956) study suggests may be important.

The Semantic Differential was used to measure the patients' attitudes toward the staff while the Information Questionnaire (Nunnally, 1957, 1961) was used to measure their beliefs about mental illness. These two questionnaires were administered twice: the first time being no longer than four days after admission to the hospital; the second time being approximately three weeks after the first administration.

The results of this study indicated that patients' attitudes toward the staff (aides in this particular study) do increase in a favorable direction, but this had no influence on the patients' beliefs about mental illness as had been predicted. The patients' beliefs about mental illness did not change

toward the staffs' (aides) beliefs but rather remained the same over the two testings.

Possible reasons for the failure of this study to support the prediction were discussed. Also, the validity of the Information Questionnaire was seriously questioned.

## TABLE OF CONTENTS

	<u>Page</u>
Abstract . . . . .	i
Table of Contents . . . . .	iii
Table of Tables . . . . .	iv
Table of Figures . . . . .	v
Chapter One - Background of the Problem . . . . .	1
Chapter Two - Review and Critique of Earlier Research . . . . .	3
Theory and Rationale for the Present Study . . . . .	8
Chapter Three - Method . . . . .	14
Subjects . . . . .	14
Materials . . . . .	15
Procedure . . . . .	17
Chapter Four - Results . . . . .	21
Patients' Attitudes Toward Aides . . . . .	21
Patients' Beliefs about Mental Illness . . . . .	23
Relationship Between Patients' Attitudes Toward Aides and Beliefs About Mental Illness . . . . .	25
Chapter Five - Discussion . . . . .	28
Chapter Six - Summary and Future Directions . . . . .	33
Footnotes . . . . .	37
References . . . . .	39
Appendix A - Mean Scores for each Scale of the Semantic Differential . . . . .	41
Appendix B - Mean Scores for each Item of the Information Questionnaire for both Administrations . . . . .	43
Appendix C - D-Scores for each Factor for both the No Prior and Prior Admissions Groups . . . . .	48
Appendix D - Questionnaires Used in Present Research . . . . .	50

## TABLE OF TABLES

	<u>Page</u>
Table 1. Summary of Procedure Used in this Experiment	20
Table 2. Means and Correlated <u>ts</u> for the Evaluative Factor of the Semantic Differential	21
Table 3. Means and Correlated <u>ts</u> for the Potency Factor of the Semantic Differential	22
Table 4. Two-Way Analysis of Variance Comparing No Prior Admissions and Prior Admissions Groups	24

## TABLE OF FIGURES

	<u>Page</u>
Figure 1. States of patients' beliefs about mental illness as contrasted to those of the staff upon entering the hospital and after the patients have spent a period of time in the hospital (given positive change in attitude of patients toward staff).	9
Figure 2. States of patients' beliefs about mental illness as contrasted to those of the staff upon entering the hospital and after the patients have spent a period of time in the hospital (given negative change in attitude of patients toward staff).	11
Figure 3. Patient-staff discrepancies in belief as a function of time of hospitalization (repeated measurements).	26

## CHAPTER ONE

### BACKGROUND OF THE PROBLEM

The effects of hospitalization upon the mentally disturbed patient have been the concern of mental health professionals for several years. Goffman (1961) devotes a substantial part of a book to this topic. He severely criticizes the mental hospital and its personnel for what he considers to be their adverse effects on the patients' behaviors and attitudes. He mentions, for instance, the "depersonalization" that a patient experiences when his clothes and other personal effects are taken away from him. Following depersonalization, it is easier for the staff of the hospital to "remake" the patient into a conforming hospital patient.

Ullmann and Krasner (1969) spend several pages throughout their book discussing the effects of hospitalization upon the mental patient. Like Goffman (1961), they are highly critical of hospitalization, emphasizing the seemingly adverse effects hospitalization has upon patients. They mention, for example, a study by Mahrer and Mason (1965) which suggests that, compared to patients tested immediately prior to admission, patients who had been hospitalized for even a brief period of time reported more symptoms. As Ullmann and Krasner (1969) state, it is hard to tell whether this effect is due to the "degradation ceremonies" (Goffman, 1961) or to modeling of those behaviors that cause concern and lead to staff attention.

While these mental health professionals and others (e.g., Szasz, 1961) are highly critical of the effects of hospitalization upon patients, others are not. For example, Cumming and Cumming (1962) mention what they believe are beneficial effects of hospitalization upon the patient, especially if the hospital orientates itself toward milieu therapy. One beneficial effect,



they feel, is that within the protective milieu of the hospital, a patient can more easily establish interpersonal relationships than he could on the outside. Furthermore, it has been the experience of this writer that, when asked, many professional and nonprofessional personnel of large mental hospitals mention what they believe are the beneficial rather than the harmful effects of hospitalization.

The major point to notice in both the proponents and the opponents of hospitalization is that they tend to have their arguments on rational grounds, case histories, and/or anecdotal stories. They present little, if any, research evidence, possibly because little evidence of this type exists.

Although research is sparse, there has been some research along the lines of patients' attitudes toward the hospital, treatment, and staff as well as patients' beliefs about mental illness. Some of these studies have also been concerned with how these attitudes and beliefs might change as length of hospitalization increases. This research is reviewed in the next chapter.

As the reader will discover, while a start, this research is neither too plentiful nor without serious faults of method. With substantial portions of books (e.g., Goffman, 1961; Cumming and Cumming, 1962) being written on the advantages and disadvantages of hospitalization for mentally disturbed persons, it was felt by this researcher that more, and better, research into the effects of hospitalization (if any) should be undertaken. It was with this aim in mind that the research reported below was conducted.

## CHAPTER TWO

### REVIEW AND CRITIQUE OF EARLIER RESEARCH

In recent years several lines of research have yielded information concerning mental patients' attitudes toward such topics as psychiatric hospitals, mentally disturbed persons, and mental hospital personnel. Souelem (1955) was the first investigator to construct a scale suitable for the quantitative measurement of these attitudes. This scale is an equal-appearing interval scale and was constructed following the procedures outlined by Thurstone and Chave (1929). It deals specifically with attitudes toward the mental hospital.

Souelem administered her scale to two samples of patients: 95 men from four wards at a Veteran's Administration hospital, and 103 men from four wards at a state hospital. Results indicated that the majority of patients in both institutions expressed favorable attitudes toward the hospital. The analysis also revealed no significant correlation between attitudes toward mental hospitals and diagnostic categories, length of hospitalization, and age of patient. However, more favorable attitudes were found among patients on admission wards and more active convalescent wards than among those of the chronic and semiconvalescent wards.

Several other researchers have used Souelem's scale to measure attitudes of patients toward the mental hospital. Klopfer, Hillson, and Wylie (1962) administered this scale to six different groups, including members of a service organization (Rotary Club), clerical and administrative employees of a hospital, aides on the intensive treatment service, and a mixed group of 33 chronic and acute inpatients. Somewhat contrary to Souelem's (1955) findings, the data showed that patients have generally unfavorable attitudes toward the hospital, especially in comparison to the other groups. The patients considered mental

hospitals frightening and anxiety provoking as well as restrictive.

Imre and Wolf (1962) administered the Souelem questionnaire to four groups: 1) 55 professional and nonprofessional employees of a state mental hospital; 2) 53 hospitalized alcoholics; 3) 61 student nurses; and 4) 72 nonalcoholic state mental hospital patients. The results showed that alcoholic patients expressed significantly more favorable attitudes toward the mental hospital than nonalcoholic patients. Also, hospital employees were more favorable toward the hospital than the nonalcoholic patients, a finding similar to that of Klopfer, Hillson, and Wylie (1962). Imre and Wolf suggest that these results may be due to the fact that the employees and most alcoholic patients are at the hospital voluntarily and therefore may be expected to be rather uniformly favorably disposed in their attitudes toward such an institution. However, committed psychiatric patients, many of whom are on locked wards, could be expected to be more unfavorably disposed toward the mental hospital. In another study, Imre (1962) included female volunteer hospital workers and found that these volunteers also expressed more favorable attitudes toward the hospital than did the inpatients.

Wolfensberger (1956) administered the Souelem questionnaire to 95 newly admitted patients at a state hospital. The patients represented a wide range of diagnostic classification, age, and social, economic, and educational background. Thirty-six of these patients were alcoholics. The patients were divided into groups according to the kind of previous hospitalization they had experienced: Type I had had no previous psychiatric inpatient care; Type II had received psychiatric care at a general hospital; and Type III had been confined at a mental hospital.

The results revealed that neither age nor education for either alcoholic

or nonalcoholic patients made any difference as far as attitudes toward the mental hospital were concerned (the age finding replicating Souelem's [1955] results). The data also indicated, as Imre and Wolfe (1962) had found, that alcoholic patients were significantly more favorably disposed toward the hospital than were nonalcoholic patients. Finally, the nonalcoholic patients who had experienced prior hospitalizations in a mental hospital showed a significantly less critical attitude than those who were first admissions. This suggests that previous hospitalization experiences have an effect upon the attitudes of mental patients.

Kahn, Jones, MacDonald, Connors, and Burchard (1963) conducted a factorial study of patient attitudes. They used a questionnaire containing one hundred items presumed relevant to attitudes of patients about psychiatrists, psychiatric illness, and hospitalization. The scale was administered on two consecutive days to the entire patient population (N=64) of a university psychiatric hospital. Seventeen factors emerged, one of the most prominent being Negative Hospital Orientation. This factor appears to measure the tendency of patients to view the hospital as restrictive and punitive. This finding agrees with several of the studies mentioned above that had used the Souelem scale.

All of the above studies may be criticized for one or more of the following reasons. First, the samples used in these studies were very heterogeneous (both intra- and inter-study) concerning such potentially important variables as length of stay in the hospital and whether the patients had previous admissions to a mental hospital. Wolfensberger's (1956) results indicate that this latter variable is important and, in fact, may explain the contradictory findings of Souelem (1955) on the one hand, and Klopfer, Hillson

and Wylie (1962), Imre and Wolf (1962), Wolfensberger (1956), and Kahn, Jones, MacDonald, Connors, and Burchard (1963) on the other. If Souelem's sample contained many prior admissions, then from Wolfensberger's (1956) results one would expect Souelem's sample to view the hospital in a favorable light and the other investigators' samples to view the mental hospital in a more negative light. Second, none of the studies measured the change in attitudes which may occur over time after a patient enters the hospital. Again, the differences in attitude that Wolfensberger (1956) found between patients who had prior admissions as compared to those who had no prior admissions to a mental hospital suggest that some change may occur. Third, all of these studies were strictly empirical, with no theoretical structure with which to organize and/or explain the results.

Other studies have eliminated one or more of these shortcomings. Reznikoff, Brady, and Zeller (1959) developed and then used (Reznikoff, Brady, Zeller, and Toomey, 1960) the Psychiatric Attitudes Battery. This Battery consists of a Picture Attitudes Test (modeled after the Thematic Apperception Test), a Sentence Completion Attitudes Test, a Multiple Choice Attitudes Test, and the Souelem Attitude Scale. It measures patients' attitudes toward the hospital, psychiatrists, treatment, and therapeutic outcome.

Reznikoff, et al. (1960) administered their Psychiatric Attitudes Battery over a six month period to an unselected group of 142 patients from one to two weeks after their admission to a hospital. Of the pool of patients still in the hospital at the end of six months, the Battery was readministered to three groups of ten. For the first of these groups, the interval between attitude assessments was two months, for the second four months, and for the third, six months. The results indicated that general attitudes became more

favorable during the course of hospitalization. This was true for attitudes toward psychiatrists, treatment, and therapeutic outcome, but not true for attitudes toward psychiatric hospitals. The changes seemed to be more conspicuous in the less obvious measuring devices (e.g., Picture Attitude Test). Also, when changes in the three groups were contrasted, it appeared that the most significant differences occurred between the two and sixth month groups with progressively more positive attitudes associated with greater length of hospitalization.

Manis, Houts, and Blake (1963) assessed beliefs about mental illness among psychiatric inpatients at a Veteran's Administration hospital, the mental health staff responsible for their treatment, and a group of medical and surgical control patients. The major mental patient sample consisted of 45 inpatient male psychiatric patients, 13 from a closed ward and 32 from an open ward. These patients were tested either individually or in small groups of two or three. They were tested twice: at admission and one month later. A subgroup of 9 open ward patients was tested for a third time, just prior to discharge.

The questionnaire used in this study was largely based upon Nunnally's (1957, 1961) work; it consists of ten belief clusters, each composed of four items.

The results showed that: (1) Psychiatric and nonpsychiatric patients generally hold similar opinions regarding mental illness. Severely disturbed psychiatric patients, however, view mental illness in more moralistic terms than do "normals." (2) Psychiatric hospitalization is generally accompanied by a change in patients' beliefs concerning mental illness, this change being in the same direction as the beliefs already held by the staff (in this case,

staff members in psychiatry, psychology, and psychiatric social work).

(3) Unlike the change Reznikoff, Brady, Zeller, and Toomey (1960) observed in patients' attitudes toward psychiatrists and treatment (which was that the greatest amount of change occurred between two and six months of hospitalization), the change in beliefs occurred within one month after hospitalization, with no further systematic change occurring after this.

Although these latter two studies have overcome some of the criticisms previously mentioned (e.g., they have tested for change in attitudes in patients as a function of time spent in the hospital), they still have not surmounted other criticisms. For example, these studies did not consider the no prior admission--prior admission variable Wolfensberger (1956) found important concerning patients' attitudes (in Wolfensberger's case, attitudes toward mental hospitals). Nor did these studies overcome the shortcoming concerning theoretical structure. They are still strictly empirical studies and do not answer questions such as: "Why are there changes over time in attitudes and beliefs of hospitalized patients?" Heider's balance theory (Heider, 1946) may offer an explanation.

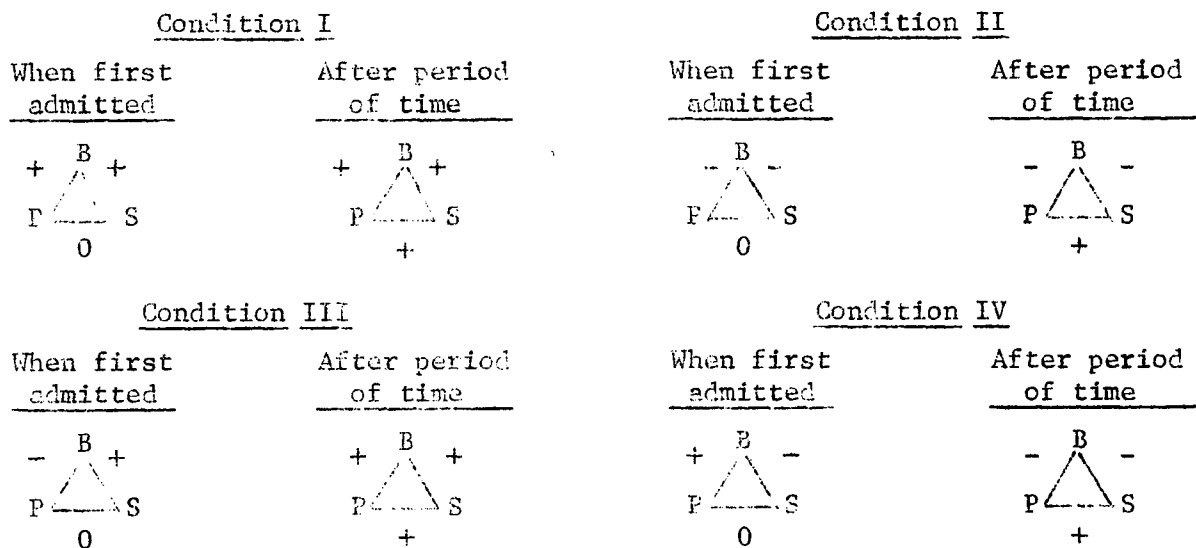
#### Theory and Rationale for the Present Study:

When patients first enter a mental hospital, their attitudes toward the staff may be fairly neutral relative to the patients' attitudes after they have been in the hospital for a while. As time passes, through interacting with the staff, the patients may come to like the staff.<sup>1</sup> If they do, their attitudes toward the staff will shift in a positive direction. Given this shift, the patients are in an unbalanced state with respect to those beliefs about mental illness they hold that are different from those they know are held by the hospital personnel. According to balance theory, pressure will tend to bring

the unbalanced cognitions into balance. One way this may happen is for the patients to change their beliefs toward the beliefs held by the staff. Of course, those beliefs held by the patients that were similar to the staffs' to begin with will remain unchanged. The diagrams below will help clarify this.

There are four states that may exist concerning patients' beliefs toward mental illness as contrasted to those of the staff when the patients first enter the hospital. These states, and the change (or non-change) of these states as time in the hospital increases are represented in Figure 1.

FIGURE 1. States of patients' beliefs about mental illness as contrasted to those of the staff upon entering the hospital and after the patients have spent a period of time in the hospital (given positive change in attitude of patients toward staff).



KEY

P = Patient  
S = Staff  
B = Belief

0 = neutral attitude  
+ = positive attitude or agreement with a belief  
- = negative attitude or disagreement with a belief



In Conditions I and II, the patients have entered the hospital with neutral attitudes toward the staff and beliefs about mental illness similar to the staff's beliefs (albeit in Condition I both patients and staff agree with the beliefs and in Condition II both disagree with the beliefs). In both Conditions, the patients' attitudes toward the staff change in a positive direction after being in the hospital for a period of time. Their beliefs about mental illness do not change (i.e., remain similar to the staff's beliefs) however, since the change in attitude does not produce any unbalanced cognitions.

Condition III is a different state of affairs from either Condition I or II. When first admitted to the hospital, the patients in Condition III have neutral attitudes toward the staff and they hold certain beliefs about mental illness. However, the staff disagree with these beliefs. As in Conditions I and II, after a period of time in the hospital, the patients' attitudes toward the staff change in a favorable direction. This change in attitude toward the staff leaves the patients in an unbalanced cognitive state, since their beliefs about mental illness are divergent from the staff's beliefs. In order to resolve this unbalanced situation, the patients change their beliefs to be more consonant with those of the staff. That is, the patients change toward agreement with the staff's beliefs about mental illness.

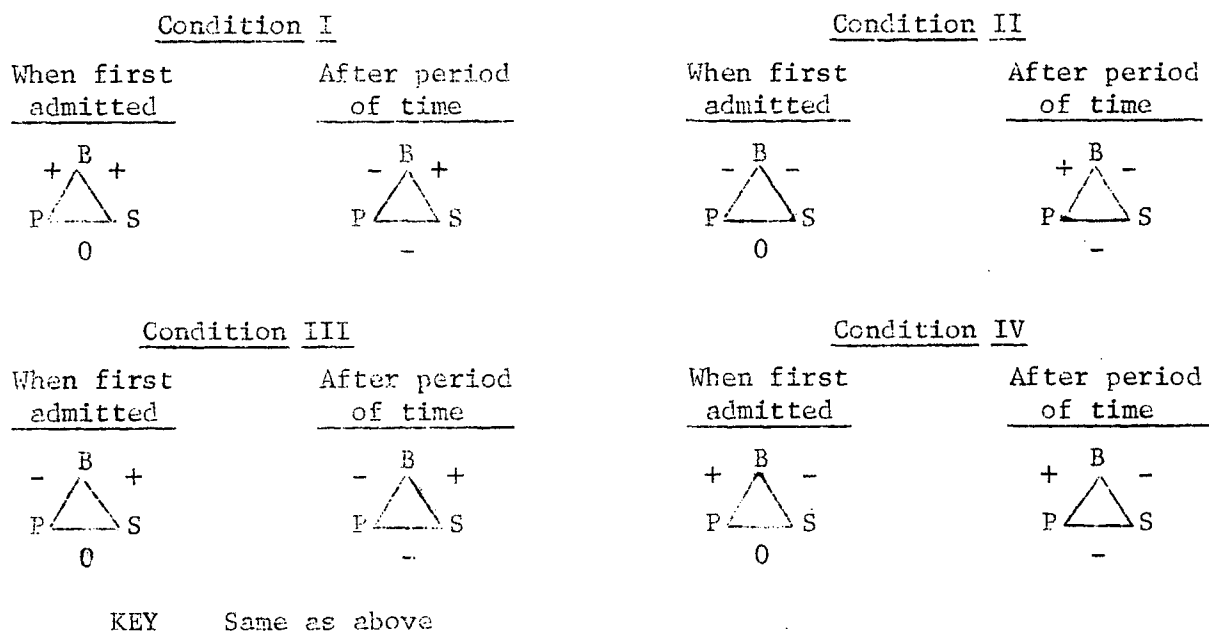
Of course, for the above analysis to be accurate, it is necessary that the staff communicate to the patients, in one form or another, its beliefs about mental illness.

This analysis would explain the change in patients' attitudes toward psychiatrists that Reznikoff, Brady, Zeller, and Toomey (1960) found and the change in beliefs about mental illness that Manis, Houts, and Blake (1963) found. However, at best these studies only offer indirect evidence for this

analysis as Reznikoff, et al. (1960) did not measure the patients' beliefs about mental illness and Manis, et al. (1963) did not measure the attitudes of patients toward the personnel.

There is a possibility that as the patients interact with the staff, they will come to dislike (rather than like) the staff.<sup>2</sup> Given this, one would predict from balance theory the changes in patients' beliefs about mental illness shown in Figure 2.

FIGURE 2. States of patients' beliefs about mental illness as contrasted to those of the staff upon entering the hospital and after the patients have spent a period of time in the hospital (given negative change in attitude of patients toward staff).



The same type of analysis, only in reverse order, can be applied to these four conditions as was applied to those four conditions for which the patients' attitudes toward the aides changed in a positive direction. The reader is referred to the first analysis for the description of these four

conditions, remembering to just reverse the order for the present four conditions.

The results of Reznikoff, Brady, Zeller, and Toomey (1960) and Manis, Houts, and Blake (1963) are more in line with the former analysis than the latter, and consequently this investigator feels that the first analysis is the more applicable one. The purpose of the present study is to test whether this is the case or not. The specific hypotheses tested are as follows:

1. When patients' attitudes toward mental hospital ward aides<sup>3</sup> are measured upon their (the patients) entering the hospital, these attitudes will be different (more neutral) than when they are measured later on in their (the patients') hospitalization. The change in attitude will be in a positive direction.
2. Upon entering the hospital some of the patients' beliefs about mental illness (as measured by the Information Questionnaire) will be divergent from the aides' beliefs. However, in order to solve the unbalanced situation created by the patients becoming more favorably disposed toward the aides, the patients will change their divergent beliefs to correspond more closely to those of the aides.

Of course, as mentioned previously, it could be that the patients' attitudes will change in a negative direction, although this is not expected. If this does occur, the following is predicted concerning changes in the patients' beliefs about mental illness.

1. If the beliefs about mental illness held by patients when they first enter the hospital are similar to the aides' beliefs, they will diverge significantly from the aides' beliefs as time passes.
2. If the beliefs are divergent from the aides' at the beginning, they will remain divergent as time passes.

The research reported here, then, is an improvement over prior research in that it offers a theoretical framework from which predictions can be made. Also, this research takes into account the variable of prior admissions to a

mental hospital; a variable which may be important and which has been overlooked for the most part in prior research.

## CHAPTER THREE

### METHOD

Subjects:<sup>4</sup> The subjects were 40 newly admitted patients from two acute treatment wards of a provincial mental hospital. Both wards were open wards, one strictly female and the second both male and female. The subjects represented all admissions to these two wards during a period of two months, excepting those patients who were entirely uncommunicative or not sufficiently in contact to be able to understand the questionnaires (17 patients) or who were discharged prior to the second administration of the questionnaires (17 patients). The patients represented a wide range of diagnostic classifications; however, there were no chronic brain syndromes or alcoholics among them. The length of stay at the hospital varied, but many were released within one to two months after admission.

For the total group of 40 subjects the median age was 32.5 years. The range was 18-58. There were 28 females and 12 males. Twenty subjects were single and 17 subjects were married. The mean education was 9.6 years, ranging from five years to a university degree. There was a wide range of occupational backgrounds.

The median age of those subjects with no previous history of admission to a psychiatric ward or mental hospital (N=20) was 29 years. There were 12 females and 8 males in the group. There was a preponderance of single subjects (12) as compared to married subjects (6). The mean education was 11 years.

Those subjects with prior admissions (N=20) were approximately the same in demographic characteristics as those with no prior admissions except for age (median, 36 years) and marital status (a preponderance of married subjects

[13] as opposed to single [6]).

The aides on the two wards also served as subjects. There was a total of nine aides on the two wards. Six completed the questionnaires.<sup>5</sup>

Materials: Two measuring instruments were used: The Semantic Differential (Osgood, Suci, and Tannenbaum, 1957) and the Information Questionnaire (Nunnally, 1957, 1961).

The Semantic Differential used consisted of two concepts: Lawyer (for practice and/or demonstration) and Mental Hospital Aide. Ten scales (five belonging to the Evaluative Factor and five to the Potency Factor) were presented with the two concepts. These scales were:

<u>Evaluative</u>	<u>Potency</u>
1. Foolish---Wise	6. Severe---Lenient
2. Insincere---Sincere	7. Weak---Strong
3. Useful---Useless	8. Prohibitive---Permissive
4. Kind---Cruel	9. Serious---Humorous
5. Worthless---Valuable	10. Masculine---Feminine

The scales were randomly placed on the sheet following each concept.

Each scale had seven divisions. For example:

Good:    \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ : Bad.

The concept "Lawyer" was always presented first to give the subject practice in completing this questionnaire.

The second questionnaire used was the Information Questionnaire. This questionnaire was developed by Nunnally (1957, 1961) and was used by Manis, Houts, and Blake (1963). The questionnaire was developed by factor analysis and consisted of ten belief clusters, each composed of four items. Following Nunnally, each cluster is named and described below:

I. Look and Act Different (Subhuman).

The mentally ill are recognizably different in manner and appearance from normal persons. They have glassy eyes and small brains, laugh more than normal

people, and pay little attention to their personal appearance.

II. Will Power.

Will power is the basis of personal adjustment. Once adjustment is lost, the psychiatrist exercises his own will power to bolster the patients failing will. Persons who remain mentally ill do not "try" to get better. Most of the people who seek treatment do not need it, and those who do are not very worthwhile people.

III. Sex Distinction.

Women are more prone to mental disorder than men are. Women worry more than men and more often have "nervous breakdowns."

IV. Avoidance of Morbid Thoughts.

Preoccupation with pleasant thoughts is the basis of mental health. Mental disturbances can be avoided by keeping busy reading books on "peace of mind," and not discussing troublesome topics. Psychiatrists must have a good sense of humor. The psychiatrist recommends hobbies and other ways for patients to occupy themselves.

V. Guidance and Support.

Mental health can be maintained by depending on strong persons in the environment. The therapist explains to the patient the origin of his troubles and tells the patient where his ideas are incorrect. The mentally ill are those who lacked affection in childhood.

VI. Hopelessness.

There is little that can be done to cure a mental disorder. Few of the inmates of mental hospitals return to work in society. Psychiatrists cannot tell whether a condition is curable.

VII. Immediate External Environment versus Personality Dynamics.

The individual's state of mental health is dependent on the pressures of his immediate environment. Mental troubles are caused by physical exhaustion, financial and social problems. A cure can be effected by a vacation or change of scenery.

VIII. Nonseriousness.

Emotional problems are relatively unimportant problems that cause little damage to the individual.

IX. Age Function.

Persons become more susceptible to emotional disorder

as they grow older--an apparent analogy with the increased susceptibility of "physical" disorders. Children are less affected by frightening experiences.

#### X. Organic Causes.

Mental disorders are brought on by organic factors like poor diet and diseases of the nervous system. They are associated with physical disorders such as brain damage and can be cured by "physical" means. (Nunnally, 1961, pp. 17-18.)

All items on this questionnaire were in declarative form. The respondents indicated their agreement with each statement on a four point Likert-type scale, ranging from STRONGLY DISAGREE (1) to STRONGLY AGREE (4). The items within each of Nunnally's clusters were reworded where necessary to facilitate comprehension.

A sample item is shown below:

	DISAGREE		AGREE	
	1	2	3	4
Women have more emotional problems than men do.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Procedure: The two questionnaires were administered to the patients on an individual basis. Each patient came to the Psychology Department of the hospital. The experimenter explained that this was a research project, that it had nothing to do with the patient's hospital evaluation, and that the patient could feel free to refuse to fill out the questionnaires. The experimenter also explained to the patient that in order for him to use his (the patient's) questionnaire in the research all statements would have to be answered. If, however, while completing them, the patient felt that he did not want to answer a statement, he should inform the experimenter. The experimenter would then terminate the experimental session and return the patient to the ward.



When the patient acknowledged that he understood these instructions, he was asked to read the directions for the first questionnaire. Half the patients received the Semantic Differential first; the other half the Information Questionnaire first.

A copy of both the Semantic Differential and Information Questionnaire with complete instructions for each can be found in Appendix D. Briefly, concerning the Semantic Differential, for each pair of adjectives, the subject was asked to make one check mark at the interval along a seven-point continuum which he thought best described the hospital aides. For the Information Questionnaire, the subject was asked to place one check mark for each statement along a 4 point continuum ranging from STRONGLY DISAGREE (1) to STRONGLY AGREE (4).

If the patient understood the directions, he was asked to fill out the questionnaire. If not, the experimenter went over the directions with him answering any questions that the patient had about completing the questionnaire. If the patient understood the second time, the experimenter left the room and the patient filled out the questionnaire.

If the subject could understand English but had difficulty reading, the experimenter read the statements aloud and the patient marked his answers on a different sheet. This occurred with 10 subjects. At no time would the experimenter look at the patient's answers while the latter was marking them.

Essentially the same procedures were carried out on the second administration. The mean number of days between administrations was 19.7. The same questionnaires were used except that the order of the scales on the Semantic Differential and of the statements on the Information Questionnaire were changed in order to have a plausible reason for asking the patients to fill the

questionnaires out for the second time. On the second administration, the patients were told that the research involved the possible effect of placement of items on questionnaires.

The experimenter obtained responses from the aides after approaching each one individually (which was not done at first and was the cause of much concern on the part of the aides). He told each aide that he was conducting research on the possible effects of staff upon patients' attitudes toward staff and beliefs about mental illness. It was explained that their answers would be kept completely confidential. They were then given the questionnaires and asked to return them as soon as possible in a sealed envelope with only a number of their own choice on it. Half the aides completed the Semantic Differential first, and the other half the Information Questionnaire first. These instruments were identical to those filled out by the patients.

Three weeks later, the aides completed the questionnaires for the second time. The experimenter received five returns on this administration. The aides were told before the first administration that they would be asked to fill out the questionnaires a second time.

All semantic differential scales were scored so that the most "unfavorable" reaction was scored one (1) while the most "favorable" reaction was scored seven (7). For example, Bad: \_\_\_ : \_\_\_ : ✓ : \_\_\_ : \_\_\_ : \_\_\_ ; \_\_\_ : Good was scored as three (3) while Bad: \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ : ✓ : \_\_\_ : Good was scored as six (6).

Scoring for the Information Questionnaire was more complicated. To offset the possible response set tendency of either largely agreeing or disagreeing with questionnaire items regardless of their content, certain items on the questionnaire were presented in a reversed direction. For example,

the item "A vacation will help a nervous breakdown" could be reversed to "A vacation will not help a nervous breakdown." Thus each of the four items composing any one of the ten factors was scored such that a score of one (1) was assigned to STRONGLY DISAGREE with the Factor and a score of four (4) was assigned to STRONGLY AGREE with the Factor.

The procedure is summarized in Table 1.

Table 1. Summary of Procedure Used in this Experiment.

Group	No. of Subjects	Measures Used	First Admin.	Second Admin.
No Prior Admissions	20	1. Semantic Differential. 10 scales: Five Evaluative factor; five Potency factor 2. Information Questionnaire	Semantic Differential administered first to half the patients; Information Questionnaire administered to other half first. No more than 4 days elapsed between admission and administration of questionnaires. Both questionnaires administered in same session.	Same two questionnaires administered a mean of 19.75 days after first administration. Information questionnaire administered to half the subjects first; Semantic Differential to other half first.
Ward East 3	10			
Ward East 4	10			
Prior Admissions	20	Same as for No Prior Admissions Group	Same as for No Prior Admissions Group	Same as for No Prior Admissions Group
Ward East 3	7			
Ward East 4	13			
	Total 40			

## CHAPTER FOUR

### RESULTS

#### Patients' Attitudes Toward Aides

The first hypothesis of this study was supported by the data. The patients changed their attitudes toward the aides after 3 weeks of hospitalization, and this change was in a favorable direction.

Table 2. Means and Correlated ts for the Evaluative factor of the Semantic Differential.

Ward	Group	Mean First Administration	Mean Second Administration	t	P
E <sub>3</sub> + E <sub>4</sub> <sup>1</sup>	No P + P <sup>2</sup>	5.72	6.14	2.24	<.05
E <sub>3</sub> + E <sub>4</sub>	No P	5.60	6.10	1.81	NS
E <sub>3</sub> + E <sub>4</sub>	P	5.83	6.18	2.38	<.05
E <sub>3</sub>	No P	5.60	6.38	2.51	<.05
E <sub>4</sub>	No P	5.56	5.82	0.53	NS
E <sub>3</sub>	P	6.38	6.56	0.88	NS
E <sub>4</sub>	P	5.45	5.93	2.26	<.05

<sup>1</sup>E = East

<sup>2</sup>No P = No prior admissions  
P = Prior admissions

Table 2 presents the means and correlated ts for the Evaluative Factor of the Semantic Differential for the total patient sample, the No Prior Admissions Group, the Prior Admissions Group, and the different wards. With all patients considered together (N=40), the mean score for the Evaluative Factor was 5.72 for the first administration. The mean score

for the second administration was 6.14. While this was a small increase in absolute terms, it was statistically significant ( $P < .05$ ).

For the Prior Admissions Group only ( $N=20$ ), the mean for the Evaluative Factor, first administration, was 5.83, while for the second administration the mean was 6.18. Again, this was a small absolute increase that was statistically significant ( $P < .05$ ). The mean for the Evaluative Factor, first administration, No Prior Admissions Group ( $N=20$ ), was 5.60 and the mean for the second administration was 6.10. While this increase was not statistically significant, a definite trend was shown ( $t = 1.81$ ,  $P < .10$ ).

Since there were two wards involved, correlated  $t$ s were computed to determine if there were any consistent differences between wards. Table 2 indicates that no such differences existed. That is, no pattern was discernible such that, for example, the patients of  $E_3$  changed their attitudes toward the aides in a favorable direction and the patients of  $E_4$  did not.

Table 3: Means and Correlated  $t$ s for the Potency Factor of the Semantic Differential.

Ward	Group	Mean First Administration	Mean Second Administration	$t$	$P$
$E_3 + E_4$ <sup>1</sup>	No P + P <sup>2</sup>	4.04	3.99	0.49	NS
$E_3 + E_4$	No P	4.10	4.19	0.65	NS
$E_3 + E_4$	P	3.97	3.79	0.77	NS
$E_3$	No P	4.34	4.33	0.14	NS
$E_4$	No P	3.86	4.06	0.87	NS
$E_3$	P	3.80	3.80	0.00	NS
$E_4$	P	4.16	3.78	1.92	NS

<sup>1</sup> E = East

<sup>2</sup> No P = No prior admissions  
P = Prior admissions

The means and correlated ts for the Potency Factor of the Semantic Differential for the total patient sample, the No Prior and Prior Admissions Groups, and the different wards for the two administrations are presented in Table 3. A review of this Table indicates that the patient sample, whether considered as a whole or in its subgroupings, changed its Potency ratings of the hospital ward aides very little between the first and second administrations of the Semantic Differential. With all patients combined, the mean Potency score for the first administration was 4.04, while for the second administration it was 3.99. This was a small change which was not statistically significant.

The reader is referred to Appendix A for the mean score for each scale and each administration of the Semantic Differential. In reviewing this Appendix, the reader will note the rather consistent changes that occurred with the Evaluative scales between the first and second administrations and the relative lack of change or consistency that occurred with the Potency scales.

Thus, as predicted, the patients changed their attitudes toward the aides, and this change was in a positive direction. However, this change was limited to the Evaluative Factor of the Semantic Differential. There was no statistically significant change in the Potency Factor.

#### Patients' Beliefs about Mental Illness

Unlike the patients' attitudes toward the aides, their beliefs about mental illness did not change after three weeks of hospitalization. Collapsing over all factors, the mean belief score for the total patient sample, first administration was 2.37; for the second administration, the mean belief score was 2.32. Dichotomizing the patients into those with or without prior admissions, the mean belief score for the No Prior Admission Group, first administration, was 2.33 and for the second administration, the mean

score was 2.24. For the Prior Admissions Group, there was no difference in mean belief score for the two administrations, both being 2.41.

A two-way analysis of variance (Meyer, 1966) was computed to determine if there were any differences between the beliefs about mental illness of the No Prior and Prior Admissions Groups and whether the current hospitalization had any effect upon the patients' beliefs. This analysis is summarized in Table 4.

Table 4. Two-Way Analysis of Variance Comparing No Prior Admissions and Prior Admissions Groups.

	<u>df</u>	<u>MS</u>	<u>F</u>	<u>Prob.</u>
Between				
Group	1	485.113	3.204	NS
Error	38	151.401		
Within				
Hospitalization	1	66.613	1.206	NS
Group X Hospitalization	1	74.112	1.342	NS
Error	38	55.204		

As shown by this analysis, there was no significant difference between the two groups ( $F = 3.20$ ,  $P < .10$ ), nor did the current hospitalization seem to have any effect upon the patients' beliefs about mental illness (i.e., no Hospitalization main effect;  $F = 1.21$ , n.s.). This analysis also indicated that there was no interaction effect between group and current hospitalization ( $F = 1.34$ , n.s.).

The means for each item on both administrations of the Information Questionnaire for the total patient sample, the No Prior and Prior Admissions Groups, and the aides are presented in Appendix B. An overview of this Appendix reveals extreme inconsistencies. For example, on no Factor did the patients either increase (agree more) or decrease (disagree more) their scores

on the mean of all four items composing the Factor when the first and second administrations were compared. Similarly, there was no particular item(s) which seemed to change appreciably from first to second administration or to distinguish between the No Prior and Prior Admissions Groups.

#### Relationship Between Patients' Attitudes Toward Aides and Beliefs About Mental Illness

In order to determine whether the second hypothesis of this study was supported by the data, the overall belief profiles of the No Prior Admissions and Prior Admissions Groups were compared in terms of their respective discrepancies from the beliefs of the aides. This comparison was done by calculating the D-statistic<sup>6</sup> (Cronbach and Gleser, 1953) between each patient's beliefs and the beliefs of the average staff member.

Figure 3 shows the average discrepancy between the patients' views and those of the staff, as a function of length of hospitalization. Results are plotted separately for the No Prior Admissions Group and the Prior Admissions Group. The mean discrepancy in beliefs about mental illness between those patients with no previous admissions and the staff decreased between the first and second administrations of the Information Questionnaire (9.975 to 8.724). For those patients with previous admissions, the mean discrepancy from the staff increased between the first and second administrations (10.225 to 10.475).

Neither the decrease for the No Prior Admissions Group nor the increase for the Prior Admissions Group was statistically significant, however, since the two-way analysis of variance computed on the Information Questionnaire showed no significant treatment (hospitalization) effect or interaction (group x hospitalization). Thus, the second hypothesis of this study was not supported. There was no significant change in the patients' beliefs about



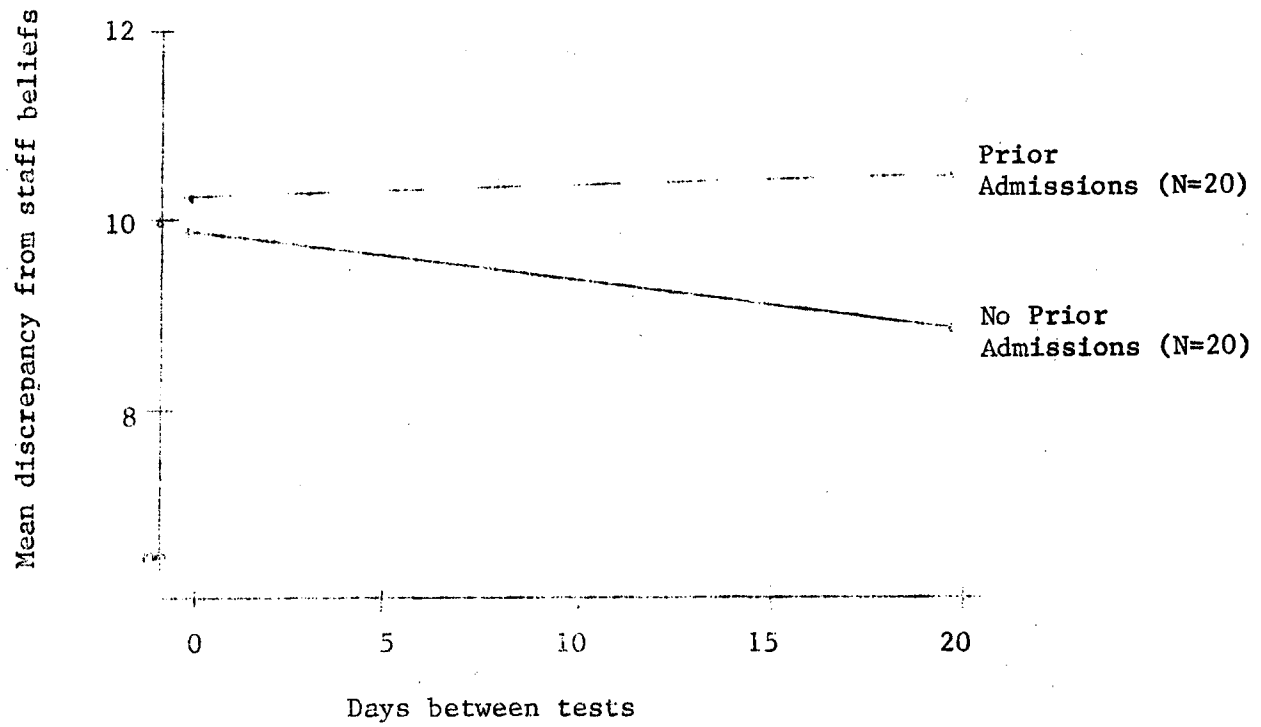


Figure 3. Patient-staff discrepancies in belief as a function of time of hospitalization (repeated measurements).

mental illness in the direction of those held by the aides even though the patients' attitudes toward the aides increased in a favorable direction.

## CHAPTER FIVE

### DISCUSSION

The first hypothesis of this study was supported by the data. The patients did significantly change their expressed attitude<sup>7</sup> toward the aides (as measured by the Semantic Differential) after three weeks of hospitalization, and this change was in a favorable direction. This change by the patients in expressed attitude toward the aides occurred both in the Prior Admissions Group and the No Prior Admissions Group. This finding is in line with that of Reznikoff, Brady, Zeller, and Toomey (1960) who found that patients' attitudes toward psychiatrists, treatment and therapeutic outcome changed in a favorable direction as length of hospitalization increased.

One difference between the Reznikoff, et al. (1960) study and the present one is that in the former study, the period of time between the two attitude measurements ranged up to six months for some patients, while in the present study this period of time was approximately three weeks. Furthermore, the Reznikoff, et al. (1960) results indicated that the most significant change in attitudes of the patients occurred between two and six months, with progressively more positive attitudes associated with greater length of hospitalization. This finding suggests that if the patients' attitudes toward the aides in the present study had been measured beyond the three weeks used, even more change in a positive direction may have been observed, though, in practical terms, the expressed attitudes, both at the outset of hospitalization and three weeks later, were already highly positive.

It is interesting to note that not only is there a significant favorable change in the patients' expressed attitudes toward the aides within the first three weeks of hospitalization, but also that their initial rating of the

aides (no more than four days after entering the hospital) was quite high. In fact, the patients' mean initial ratings on the Evaluative Scales (for both the No Prior and Prior Admissions Groups) were approximately the same as those found by Nunnally (1961) for the general population with approximately the same educational background as the patients. It may be conjectured from these data that upon entering a mental hospital, a patient has approximately the same expressed favorable attitude toward mental hospital aides as the general population with the same educational background. This expressed attitude changes to an even more favorable position as the patient remains in the hospital, possibly as a result of interaction with the aides.

The second hypothesis was not supported by the data. The subjects' expressed beliefs about mental illness as measured by the Information Questionnaire did not significantly converge toward the aides' expressed beliefs. In fact, Figure 3 and Appendix C indicate that the Prior Admissions Group, who significantly changed their expressed attitudes toward the aides in a favorable direction, moved slightly (but nonsignificantly) away from the aides' expressed beliefs about mental illness after three weeks of hospitalization. Furthermore, even though the No Prior Admission Group showed some movement toward the aides' expressed beliefs about mental illness, this change was not statistically significant. Thus, from these data it appears that rather than there being a relationship between increased expressed likability of the aides by patients and a convergence of patients' beliefs about mental illness toward those of the aides', these two variables are independent of each other.

Why did this study find no change in patients' beliefs about mental illness toward those of the staffs' while the Manis, Houts, and Blake (1963) study did find such a change? One explanation for this discrepancy may be that

there was too short a time span between the first and second administrations of the questionnaires in the present study to pick up any significant changes in the patients' beliefs about mental illness. Significant changes may have been observed if the questionnaires had been readministered five or six weeks after the first administration rather than the three week interval that was used. This explanation is a plausible one. On the other hand, the data of Manis, et al. (1963) argue against it. Their data showed that the patients' change in beliefs about mental illness occurred within one month (four weeks) after hospitalization, with no further systematic change occurring after this. With the data of the present experiment showing so little change in patients' beliefs about mental illness after three weeks of hospitalization, it is doubtful that one more week would have made any difference. In addition, according to Manis, et al. (1963), there is no systematic change in patients' beliefs about mental illness after the fourth week of hospitalization.

Another explanation for the discrepancy may be that it is not increased likability of a person which causes the mental patient to change his beliefs about mental illness toward the person's own beliefs, but rather whether the patient views the person as an expert concerning mental health and illness. The present research used mental hospital aides as the staff comparison group while Manis, et al. used professional workers (psychiatrists, psychologists, and social workers). Furthermore, it appears that the professionals in the Manis, et al. study spent much more time with their patients than the professional staff members at the hospital where the current research was conducted. Manis, et al. state that "they [staff members] also spent considerable hours interacting with their patients on the wards, as part of a milieu approach which had been practiced in the hospital for a period of years." (1963, p. 227)

While the wards where the current research was conducted involved a "milieu approach," it is probably incorrect to assume that the degree of contact with the patients was as high in the present setting. If it is the expertise of the staff member rather than likability of the staff member by the patient which influences him to change his beliefs about mental illness (at least beliefs as measured by the Information Questionnaire) toward the staff members' beliefs, then the discrepancy between the findings of Manis, et al. (1963) and the present study are understandable. With relatively little contact with mental health experts, one would not expect the patients in the present study to change their beliefs whereas in the Manis, et al. (1963) study, one would expect such change because of the "considerable hours" of interaction that occurred between professional staff and patients.

Another explanation (and a more tenable one from this researcher's point of view) for the difference observed between the Manis, et al. (1963) results and the results of the present study is that the Information Questionnaire that was used to measure expressed beliefs about mental illness in these two studies is not a valid measure of such beliefs. Manis, et al. (1963) had to collapse over all factors in order to obtain a significant difference, stating in a footnote that "When the eleven item clusters [they used six items from Bassel (1955) for the eleventh cluster] were considered one at a time, none of them showed significant changes during the first month of hospitalization." (p. 230) In the present study, even collapsing belief scores over all factors failed to result in significant belief change. And even if significant results had been obtained by collapsing over all items on the Questionnaire, the meaning of such a result would be difficult to assess. Furthermore, Appendix B shows that the items in any given factor

are inconsistent with each other and thus the validity of the factors is in serious question. For example, on two items of Factor One (Mental Patients are Subhuman), the patients answered so that they disagreed<sup>8</sup> more with the factor on the second administration (three weeks after hospitalization) as compared to the first administration (no more than four days after hospitalization); on the other two items of this factor the patients answered in such a manner as to say they agreed more with Factor One on the second administration as compared to the first administration. Similar inconsistencies were found with all ten factors. This should not have occurred if the factors were valid (i.e., if the items of a particular factor had reasonable loadings on that factor).

Finally, the variable of no prior admissions--prior admissions did not seem to affect attitudes or beliefs of mental patients. There were no differences between these two groups of patients on either the expressed attitudes as measured by the Semantic Differential or on their beliefs about mental illness as measured by the Information Questionnaire. This is unlike Wolfensberger's (1956) study which showed that prior admissions had an effect on how the patients viewed the hospital. Perhaps expressed attitudes toward the hospital as a whole (as measured by the Souelem scale) differ from those attitudes and beliefs measured by the questionnaires used in this study. There is some evidence for this reasoning as most studies (Wolfensberger, 1956; Klopfer, Hillson, and Wylie, 1962; Imre and Wolf, 1962) found that patients' attitudes toward the mental hospital are negative, whereas the present study as well as other studies (e.g., Reznikoff, Brady, Zeller, and Toomey, 1960) found that patients' expressed attitudes toward the staff are favorable. Also, Reznikoff, et al. (1960) found that while patients' attitudes toward psychiatrists, treatment, and outcome changed, the patients' attitudes toward the hospital in general did not change.

## CHAPTER SIX

### SUMMARY AND FUTURE DIRECTIONS

This study attempted to relate possible changes in mental hospital patients' beliefs about mental illness to possible changes in their attitudes toward the staff. Using Heider's (1946) balance theory, it was predicted that if the patients' attitudes toward the staff changed in a positive direction, those beliefs held by the patients which were dissimilar to the staff's beliefs would change in the direction of the staff's beliefs. On the other hand, if the patients' attitudes toward the staff changed in a negative direction, those beliefs about mental illness held by the patients which were similar to the beliefs of the staff to begin with would diverge from the staff's beliefs. This prediction hinged, of course, upon the staff communicating to the patients, in one form or another, its beliefs about mental illness.

There have been previous studies which have concerned themselves with the general topics of attitudes of patients toward staff or patients' beliefs about mental illness. However, no study has combined these two topics nor has any study suggested how they might be related. Also, these previous studies were not sufficiently controlled for possible influencing variables such as whether a patient had had previous admissions to a mental hospital.

For reasons mentioned in the Procedure section of this report, aides were chosen as the group of staff most suited to represent the staff in the current study. The Semantic Differential was used to measure the patients' attitudes toward the aides and the Information Questionnaire (Nunnally, 1957, 1961) was used to measure the patients' and the aides' beliefs about mental illness. These two questionnaires were administered twice: the first time being no longer than four days after admission to the hospital; the second time approxi-



mately three weeks after the first administration.

It may be concluded from the results of this study that compared to their attitudes toward the aides when they first entered the hospital, the patients' attitudes toward the aides changed in a favorable direction after three weeks of hospitalization. However, these changes in attitude were not accompanied by changes in beliefs about mental illness by the patients in the direction of greater agreement with the aides' beliefs. In fact, the patients did not change their beliefs about mental illness at all from the time they were admitted to the time they were retested three weeks later. Thus, rather than being related in some manner with each other as predicted, the patients' attitudes toward the aides as measured by the Semantic Differential and their beliefs about mental illness as measured by the Information Questionnaire, appear to be independent of each other.

Many possible reasons for the failure of this study to confirm the predictions were discussed in the Discussion section of this paper. One hypothesis suggested was that it is not increase likability of a person which causes the mental patient to change his beliefs about mental illness toward that person's own beliefs. Rather it is whether the patient views the person as an expert in the field of mental health.

To check this hypothesis, a study similar to the one reported in this paper could be conducted. However, instead of measuring only aides' beliefs about mental illness, one could measure beliefs of both professional and non-professional staff. As for the patients, one would measure their attitudes toward the professional staff (e.g., psychiatrists and nurses) in addition to their attitudes toward nonprofessional staff (e.g. aides) and their beliefs about mental illness.

The results of this study would show whether the nonprofessional or the professional staff influenced the patients' beliefs. It may be that the patients' attitudes change in a favorable direction for both professional and non-professional staff, but only professional staff influence the patients' beliefs. This would lend support to the above hypothesis that it is the expertise rather than the increased likability of a staff member which produces a change in mental patients' beliefs about mental illness.

For this proposed study, it is recommended that a different questionnaire than the Information Questionnaire be used to measure patient and staff beliefs about mental illness. There is evidence from the present study to seriously question its validity. Also, in some instances, the wording of this questionnaire is obsolete. For instance, the word "insane" is used. In 1957, when the questionnaire was first used, this word may have been in common usage. However, today such terms as "mentally disturbed" or "mentally ill" are more appropriate.

Furthermore, in such research it may be wise to select the sample in terms of diagnostic categories. It could be that certain types of patients are more likely to change their beliefs about mental illness than are others. To combine all diagnostic categories as was done in the present study may have the effect of "dampening" any significant change. Thus, it may be best to include only one or two classification categories in the study (e.g., only depressives). For a long-term research project it would be worthwhile to collect data of this type from patients of many different classifications and compare the commonality and differences in their attitudes toward staff and beliefs about mental illness and how each type of patient might change these attitudes and beliefs through hospitalization.

One final note. Although the major hypothesis was not supported by the

data, this study did contribute certain findings. Certain data lend support to previous studies (e.g., Reznikoff, et al., 1960) which found that patients' attitudes toward staff change in a favorable direction as a function of hospitalization. Evidence from this study also places in serious doubt the validity of a questionnaire which has been used rather extensively in past research (e.g., Nunnally, 1957, 1961). Finally the results of this experiment suggest that at least in the realm of beliefs about mental illness, aides may not have any short-term influence over mental patients. This last conclusion however, is only tentative and needs to be supported by further research.

## FOOTNOTES

1. There could be several reasons for this. For example, the staff may be kind and helpful to the patients. Furthermore, they may be lenient toward the patients and allow them considerable freedom.
  2. This, again, could be for several reasons. For example, the staff may be restrictive and rather cruel to the patients. They may be less than helpful to the patients.
  3. Mental hospital ward aides were chosen for this study from all the different groups of personnel at the hospital where this research was conducted for the following reasons. At this hospital, the aides are one group of personnel that has day to day contact with the patients. Thus, the patients are likely to get to know them fairly well. Also, the patients may have come into contact with such personnel as psychiatrists and nurses prior to admission, but unless they have been previously admitted to a mental hospital it is very doubtful that they have come into contact with mental hospital aides.
  4. The author would like to express his gratitude and thanks to the staff at Riverview Hospital, Essondale, British Columbia for their assistance concerning this project. The author is especially grateful to Dr. G. Kontaxopoulos, Director of Crease Unit, for allowing him to use two wards of his Unit for the present research. The author is also grateful to the nurses and aides on wards East<sub>3</sub> and East<sub>4</sub> of Crease Unit who participated in this study and without whose help the present research would not have been possible. The author's special gratitude is also extended to Dr. A. Clark, Chief Psychologist, Riverview Hospital, who gave the author valuable assistance in developing the study and who was kind enough to extend the use of two of his offices to the author for his research.
- The author is also indebted to his advisor, Dr. D. Papageorgis, without whose constant guidance and constructive criticism this research project could not have been completed.
5. There were a total of nine aides on the two wards but because of certain misunderstandings between the experimenter and the aides, only six completed the questionnaires.
  6. The model assumed here is that of conceiving the tests as coordinates, and each subject's score set as a point in the test space. Then distances between points, computed by the D measure, are an indication of similarity between sets of scores.

The D statistic is a measure of similarity between sets of scores but does not indicate statistical significance. As applied to the present study, the D measure indicates whether the patients' responses on the second administration of the Information Questionnaire were more or less similar to the aides' responses on this questionnaire than were their (the patients') responses on the first administration. However, only a test of significance

between the two administrations can indicate whether this change in similarity is statistically significant or not. The D statistic was chosen for the present study since the number of aides per ward (3) was too small to permit an analysis of variance between the aide and patient scores.

7. There are many possible reasons why this change occurred. For example, if the aides were helpful and kind to the patients, the patients could come to like the aides and thus change their attitudes toward the aides in a favorable direction. On the other hand, the patients may have felt that responding favorably toward the aides would help them obtain a desired goal (e.g., early release). Thus, the use of the cautious word "expressed."
8. The differences in "disagreement" and "agreement" discussed here are based on raw scores and in many instances may not be statistically significant.

## REFERENCES

- Cronbach, L. J., & Gleser, G. C. Assessing similarity between profiles. Psychological Bulletin, 1953, 50, 456-473.
- Cumming, J., & Cumming, E. Ego and milieu: Theory and practice of environment therapy. New York: Atherton Press, 1962.
- Goffman, E. Asylums. Garden City: Doubleday and Company, Inc., 1961.
- Heider, F. Attitudes and cognitive organization. Journal of Psychology, 1946, 21, 107-112.
- Imre, P. D. Attitudes of volunteers toward mental hospitals compared to patients and personnel. Journal of Clinical Psychology, 1962, 18, 516-518.
- Imre, P. D., & Wolf, F. Attitudes of patients and personnel toward mental hospitals. Journal of Clinical Psychology, 1962, 18, 232-234.
- Kahn, M. W., Jones, N. F., MacDonald, J. M., Connors, C. K., & Burchard, J. A factorial study of patient attitudes toward mental illness and psychiatric hospitalization. Journal of Clinical Psychology, 1963, 19, 235-241.
- Klopfer, W. O., Wylie, A. A., & Hillson, J. S. Attitudes toward mental hospitals. Journal of Clinical Psychology, 1956, 12, 361-365.
- Mahrer, A. R., & Mason, D. J. Changes in number of self-reported symptoms during psychiatric hospitalization. Journal of Consulting Psychology, 1965, 29, 285.
- Manis, M., Houts, P. S., & Blake, J. B. Beliefs about mental illness as a function of psychiatric status and psychiatric hospitalization. Journal of Abnormal and Social Psychology, 1963, 67, 226-233.
- Meyers, J. L. Fundamentals of Experimental Design. Boston: Allyn and Bacon, Inc., 1966.
- Nunnally, J. C., Jr. The communication of mental health information: A comparison of the opinions of experts and public with mass media presentation. Behavioral Science, 1957, 2, 222-230.
- Nunnally, J. C., Jr. Popular Conceptions of Mental Health. New York: Holt, Rinehart and Winston, Inc., 1961.
- Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. The measurement of meaning. Urbana, Ill.: University of Illinois Press, 1957.
- Reznikoff, M., Brady, J. P., Zeller, W. W., & Toomey, L. C. Attitude change in hospitalized psychiatric patients. Journal of Clinical and Experimental Psychology, 1959, 15, 309-314.

- Reznikoff, M., Brady, J. P., & Zeller, W. W. The Psychiatric Attitudes Battery: Attitudes toward psychiatric treatment and hospitals. Journal of Clinical Psychology, 1959, 15, 260-266.
- Souelem, O. Mental patients' attitudes toward mental hospitals. Journal of Clinical Psychology, 1955, 11, 181-185.
- Szasz, T. S. The Myth of Mental Illness. New York: Harper and Row, Inc., 1961.
- Thurstone, L. L., & Chave, E. J. The measurement of attitude. Chicago: University of Chicago Press, 1929.
- Ullmann, L. P., & Krasner, L. A psychological approach to abnormal behavior. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1969.
- Wolfensberger, W. P. Attitudes of alcoholics toward mental hospitals. Quarterly Journal of Studies of Alcoholism, 1958, 19, 447-451.

APPENDIX A

MEAN SCORES FOR EACH SCALE OF THE SEMANTIC DIFFERENTIAL



	No Prior		Prior		Total Pat.		Aide Once
	Bef.	Aft.	Bef.	Aft.	Bef.	Aft.	
1. Foolish--Wise	5.00	5.65	5.10	5.95	5.05	5.78	5.67
2. Useful--Useless	5.65	6.20	6.10	6.40	5.93	6.30	5.00
3. Cruel--Kind	5.60	6.25	5.85	6.05	5.73	6.15	5.83
4. Valuable--Worthless	6.30	6.20	6.20	6.25	6.25	6.23	6.00
5. Insincere--Sincere	5.45	6.20	5.80	6.25	5.63	6.23	5.83
$\bar{X}$	5.60	6.10	5.83	6.18	5.72	6.14	5.67
6. Weak--Strong	2.80	2.70	2.35	1.90	2.58	2.30	3.00
7. Humorous--Serious	5.00	4.30	4.05	4.10	4.53	4.20	3.50
8. Severe--Lenient	4.50	5.04	5.15	4.50	4.83	4.78	4.77
9. Feminine--Masculine	4.10	4.15	4.35	3.85	4.23	4.00	4.83
10. Prohibitive--Permissive	4.10	4.75	3.95	4.60	4.03	4.68	4.83
$\bar{X}$	4.10	4.19	3.97	3.79	4.04	3.99	4.18

APPENDIX B

MEAN SCORES FOR EACH ITEM OF THE INFORMATION QUESTIONNAIRE  
FOR BOTH ADMINISTRATIONS

	No Prior		Prior		Total Pat.		Aide
	Bef.	Aft.	Bef.	Aft.	Bef.	Aft.	Once
LOOK AND ACT DIFFERENT (SUBMAN)							
1. The mentally ill pay little attention to their personal appearance.	2.85	1.95	1.60	2.30	2.23	2.13	2.33
2. The insane laugh more than normal people.	1.45	2.40	2.05	1.80	1.75	2.10	1.83
3. Most of the people in mental hospitals speak in words that can be understood.(R)	2.30	1.90	2.70	2.20	2.50	2.05	1.83
4. You can tell a person who is mentally ill by his looks.	1.75	1.65	1.85	2.20	1.80	1.93	2.50
WILL POWER							
1. Will power alone will not cure mental disorders.(R)	2.60	1.85	2.95	3.15	2.78	2.50	3.00
2. Psychiatrists try to teach mental patients to hold in their strong emotions.	2.30	2.10	2.90	2.05	2.60	2.08	1.17
3. Mental health is largely a matter of trying to control the emotions.	3.15	3.25	2.20	3.00	2.68	3.13	1.50
4. People who become mentally ill will have little will power.	2.00	2.10	2.80	2.60	2.40	2.35	2.33
SEX DISTINCTION							
1. Women have no more emotional problems than men do.(R)	2.75	2.15	2.35	2.95	2.55	2.55	2.50
2. It is easier for women to get over emotional problems than it is for men.	2.15	2.40	2.40	2.10	2.28	2.25	2.00
3. Women are as emotionally healthy as men. (R)	2.20	2.10	2.15	2.00	2.18	2.05	1.50
4. Women are more likely to develop mental disorders than men.	1.85	1.95	2.30	2.30	2.08	2.13	1.67

	No Prior		Prior		Total Pat.		Aide
	Bef.	Aft.	Bef.	Aft.	Bef.	Aft.	Once
AVOIDANCE OF MORBID THOUGHTS							
1. People who think pleasant thoughts most of the time seldom become mentally ill.	2.70	2.60	3.10	3.00	2.90	2.80	1.50
2. The main job of a psychiatrist is to suggest hobbies and other ways for the mental patient to occupy his mind.	2.70	2.15	3.05	2.90	2.88	2.53	1.67
3. The best way to mental health is by avoiding morbid thoughts.	2.85	2.65	2.95	3.00	2.90	2.83	1.17
4. If a person thinks about happy memories, he will not be bothered by unpleasant things in the present.	2.60	2.65	2.85	3.00	2.78	2.83	1.67
GUIDANCE AND SUPPORT							
1. People cannot maintain good mental health without the help of strong persons in their environment.	2.90	2.60	2.85	2.70	2.88	2.80	2.17
2. Psychiatrists try to show the mental patient where his ideas are wrong.	3.20	2.05	2.85	2.75	3.03	2.40	2.83
3. The mentally ill have not received enough direction from the important people in their lives.	3.15	2.95	2.85	2.65	3.00	2.55	1.83
4. The good psychiatrist acts like a father to his patients.	2.55	2.50	3.50	2.65	3.03	2.58	2.50
HOPELESSNESS							
1. Few people who enter mental hospitals ever leave.	1.20	2.05	1.90	1.80	1.55	1.93	2.17
2. Mental disorder is not a hopeless case. (R)	1.30	1.40	1.50	1.80	1.40	1.60	1.17
3. There is not much that can be done for a person who develops a mental disorder.	2.05	1.20	1.90	1.90	1.98	1.55	1.17

	No Prior		Prior		Total Pat.		Aide Once
	Bef.	Aft.	Bef.	Aft.	Bef.	Aft.	
4. Mental patients usually make a good adjustment to society when they are released. (R)	2.00	1.45	1.70	2.30	1.85	1.88	2.17

#### IMMEDIATE EXTERNAL ENVIRONMENT VERSUS PERSONALITY DYNAMICS

1. Mental illness can usually be helped by a vacation or change of scene.	2.55	2.40	3.10	2.20	2.83	2.30	2.33
2. A change of climate seldom helps an emotional disorder. (R)	2.30	2.85	2.50	2.10	2.40	2.48	2.20
3. Helping the mentally ill person with his money and social problems often improves his condition.	3.25	2.65	2.90	2.60	3.08	2.63	1.67
4. Most disturbances in adults can be traced to emotional experiences in childhood.	3.00	3.20	2.60	2.10	2.80	2.65	2.50

#### NONSERIOUSNESS

1. Emotional problems do little damage to the individual.	1.65	2.15	2.20	2.00	1.93	2.08	1.33
2. Mental health is one of the most important national problems. (R)	1.85	2.10	2.30	2.25	2.08	2.18	1.33
3. Mental disorder is one of the most damaging illnesses that a person can have. (R)	2.10	1.80	2.10	2.10	2.10	1.95	2.00
4. The seriousness of the mental health problem in this country has been overstated.	2.05	1.45	2.60	2.10	2.33	1.78	2.50

#### AGE FUNCTION

1. Older people have fewer emotional problems than younger people.	2.15	1.65	2.45	2.05	2.30	1.85	1.83
--------------------------------------------------------------------	------	------	------	------	------	------	------

	No Prior		Prior		Total Pat.		Aide Once
	Bef.	Aft.	Bef.	Aft.	Bef.	Aft.	
2. Disappointments affect children as much as they do adults. (R)	1.85	2.05	1.70	2.00	1.78	2.03	1.17
3. Children sometimes have mental breakdowns as severe as those of adults. (R)	2.05	2.40	2.15	1.80	2.10	2.10	1.67
4. Early adulthood is more of a danger period for mental illness than later years.	2.55	2.00	1.95	2.45	2.25	2.23	2.33

## ORGANIC CAUSES

1. X-rays of the head will not tell whether a person is likely to become insane. (R)	2.45	2.60	2.45	1.80	2.45	2.20	2.00
2. Mental disorder is usually brought on by physical causes.	1.85	2.05	2.45	2.60	2.15	2.33	2.17
3. Nervous breakdowns seldom have a physical origin. (R)	2.45	1.80	1.80	2.20	2.13	2.00	2.67
4. Almost any disease that attacks the nervous system is likely to bring on insanity.	1.80	2.20	1.85	2.05	1.83	2.13	1.83

APPENDIX C

D-SCORES FOR EACH FACTOR FOR BOTH THE NO PRIOR AND  
PRIOR ADMISSIONS GROUPS

		FACTORS									
		1	2	3	4	5	6	7	8	9	10
NO PRIOR ADMISSION	D <sub>1</sub>	12.670	13.774	14.189	28.864	15.784	8.075	10.577	9.509	13.662	8.075
	D <sub>2</sub>	7.823	9.069	12.088	26.731	13.133	5.182	10.220	10.603	10.964	9.744
PRIOR ADMISSION	D <sub>1</sub>	10.002	15.511	10.826	27.114	16.249	12.119	13.516	10.224	13.445	10.338
	D <sub>2</sub>	12.431	16.958	14.464	28.693	14.306	16.428	14.765	8.739	13.161	15.606



APPENDIX D

QUESTIONNAIRES USED IN PRESENT RESEARCH

THE HOSPITAL IS TRYING TO FIND OUT WHAT YOU THINK ABOUT THE  
HOSPITAL AIDES (ATTENDANTS) THAT WORK AT THIS HOSPITAL. THERE ARE  
NO RIGHT OR WRONG ANSWERS TO THIS QUESTIONNAIRE. PEOPLE ANSWER IN  
DIFFERENT WAYS. PLEASE ANSWER HONESTLY. YOUR ANSWERS WILL BE  
KEPT CONFIDENTIAL.

FAIR: \_\_\_\_\_: UNFAIR OR FAIR: \_\_\_\_\_: UNFAIR

WEAK: ✓ : STRONG OR WEAK: ✓ : STRONG

WARM:            : COLD OR WARM:            : COLD

THE FIRST PAGE CONTAINS THE WORK, "LAWYER", AT THE TOP. THIS IS A PRACTICE PAGE. PLEASE COMPLETE IT BEFORE YOU DO "MENTAL HOSPITAL AIDE."



LAWYER

PROHIBITIVE:	--- :--- :--- :--- :--- :---	: PERMISSIVE
USEFUL:	--- :--- :--- :--- :--- :---	: USELESS
SEVERE:	--- :--- :--- :--- :--- :---	: LENIENT
CRUEL:	--- :--- :--- :--- :--- :---	: KIND
FOOLISH:	--- :--- :--- :--- :--- :---	: WISE
HUMOROUS:	--- :--- :--- :--- :--- :---	: SERIOUS
INSINCERE:	--- :--- :--- :--- :--- :---	: SINCERE
WEAK:	--- :--- :--- :--- :--- :---	: STRONG
FEMININE:	--- :--- :--- :--- :--- :---	: MASCULINE
VALUABLE:	--- :--- :--- :--- :--- :---	: WORTHLESS

MENTAL HOSPITAL AIDE

PROHIBITIVE:	— : — : — : — : — : — : —	: PERMISSIVE
USEFUL:	— : — : — : — : — : — : —	: USELESS
SEVERE:	— : — : — : — : — : — : —	: LENIENT
CRUEL:	— : — : — : — : — : — : —	: KIND
FOOLISH:	— : — : — : — : — : — : —	: WISE
HUMOROUS:	— : — : — : — : — : — : —	: SERIOUS
INSINCERE:	— : — : — : — : — : — : —	: SINCERE
WEAK:	— : — : — : — : — : — : —	: STRONG
FEMININE:	— : — : — : — : — : — : —	: MASCULINE
VALUABLE:	— : — : — : — : — : — : —	: WORTHLESS

PATIENT AND  
AIDE

INSTRUCTIONS

ON THE FOLLOWING PAGES YOU WILL FIND 40 STATEMENTS ABOUT HEALTH PROBLEMS. WE WANT TO KNOW HOW MUCH YOU AGREE OR DIS-AGREE WITH EACH OF THE STATEMENTS. TO THE RIGHT OF EACH STATEMENT YOU WILL FIND A RATING SCALE AS FOLLOWS:

DISAGREE		AGREE	
1	2	3	4
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

THE POINTS ALONG THE SCALE (1,2,3,4) CAN BE THOUGHT OF AS FOLLOWS:

1. STRONGLY DISAGREE
2. MODERATELY DISAGREE
3. MODERATELY AGREE
4. STRONGLY AGREE

THE USE OF THE SCALE CAN BE SHOWN WITH THE FOLLOWING STATEMENT:

"SMOKING CAUSES LUNG CANCER."

IF YOU AGREED STRONGLY WITH THE STATEMENT, YOU WOULD PLACE A MARK IN COLUMN 4. IF YOU MODERATELY AGREED WITH THE STATEMENT, YOU WOULD PLACE A MARK IN COLUMN 3. IF YOU MODERATELY DISAGREED WITH THE STATEMENT, YOU WOULD PLACE YOUR MARK IN 2. IF YOU STRONGLY DISAGREED WITH THE STATEMENT, YOU WOULD MARK COLUMN 1. IN THIS MANNER YOU CAN INDICATE HOW MUCH YOU AGREE OR DISAGREE WITH A STATEMENT.

LIKE EVERYONE ELSE, YOU WILL PROBABLY FEEL THAT YOU DO NOT KNOW THE ANSWERS TO MANY OF THE STATEMENTS. WHEN THIS OCCURS, PLEASE MAKE THE BEST GUESS YOU CAN.

PLEASE BE SURE YOU MAKE A MARK FOR EACH STATEMENT. LEAVE NONE OF THE STATEMENTS BLANK AND MAKE ONLY ONE MARK FOR EACH.

	DISAGREE		AGREE	
	1	2	3	4
1. THE MENTALLY ILL PAY LITTLE ATTENTION TO THEIR PERSONAL APPEARANCE.				
2. PEOPLE WHO THINK PLEASANT THOUGHTS MOST OF THE TIME SELDOM BECOME MENTALLY ILL.				
3. FEW PEOPLE WHO ENTER MENTAL HOSPITALS EVER LEAVE.				
4. OLDER PEOPLE HAVE FEWER EMOTIONAL PROBLEMS THAN YOUNGER PEOPLE.				
5. PEOPLE CANNOT MAINTAIN GOOD MENTAL HEALTH WITHOUT THE HELP OF STRONG PERSONS IN THEIR ENVIRONMENT.				
6. WILL POWER ALONE WILL NOT CURE MENTAL DISORDERS.				
7. WOMEN HAVE NO MORE EMOTIONAL PROBLEMS THAN MEN DO.				
8. X-RAYS OF THE HEAD WILL NOT TELL WHETHER A PERSON IS LIKELY TO BECOME INSANE.				
9. EMOTIONAL PROBLEMS DO LITTLE DAMAGE TO THE INDIVIDUAL.				
10. PSYCHIATRISTS TRY TO TEACH MENTAL PATIENTS TO HOLD IN THEIR STRONG EMOTIONS.				
11. MENTAL ILLNESS CAN USUALLY BE HELPED BY A VACATION OR CHANGE OF SCENE.				
12. DISAPPOINTMENTS AFFECT CHILDREN AS MUCH AS THEY DO ADULTS.				
13. THE MAIN JOB OF THE PSYCHIATRIST IS TO SUGGEST HOBBIES AND OTHER WAYS FOR THE MENTAL PATIENT TO OCCUPY HIS MIND.				
14. THE INSANE LAUGH MORE THAN NORMAL PEOPLE.				
15. PSYCHIATRISTS TRY TO SHOW THE MENTAL PATIENT WHERE HIS IDEAS ARE WRONG.				
16. MENTAL DISORDER IS NOT A HOPELESS CONDITION.				

	DISAGREE		AGREE	
	1	2	3	4
17. MENTAL HEALTH IS ONE OF THE MOST IMPORTANT NATIONAL PROBLEMS.				
18. MENTAL DISORDER IS USUALLY BROUGHT ON BY PHYSICAL CAUSES.				
19. IT IS EASIER FOR WOMEN TO GET OVER EMOTIONAL PROBLEMS THAN IT IS FOR MEN.				
20. A CHANGE OF CLIMATE SELDOM HELPS AN EMOTIONAL DISORDER.				
21. THE BEST WAY TO MENTAL HEALTH IS BY AVOIDING MORBID THOUGHTS.				
22. THERE IS NOT MUCH THAT CAN BE DONE FOR A PERSON WHO DEVELOPS A MENTAL DISORDER.				
23. MENTAL DISORDER IS ONE OF THE MOST DAMAGING ILLNESSES THAT A PERSON CAN HAVE.				
24. CHILDREN SOMETIMES HAVE MENTAL BREAKDOWNS AS SEVERE AS THOSE OF ADULTS.				
25. NERVOUS BREAKDOWNS SELDOM HAVE A PHYSICAL ORIGIN.				
26. MOST OF THE PEOPLE IN MENTAL HOSPITALS SPEAK IN WORDS THAT CAN BE UNDERSTOOD.				
27. MENTAL HEALTH IS LARGELY A MATTER OF TRYING HARD TO CONTROL THE EMOTIONS.				
28. IF A PERSON THINKS ABOUT HAPPY MEMORIES, HE WILL NOT BE BOTHERED BY UNPLEASANT THINGS IN THE PRESENT.				
29. THE MENTALLY ILL HAVE NOT RECEIVED ENOUGH DIRECTION FROM THE IMPORTANT PEOPLE IN THEIR LIVES.				
30. WOMEN ARE AS EMOTIONALLY HEALTHY AS MEN.				
31. THE SERIOUSNESS OF THE MENTAL-HEALTH PROBLEM IN THIS COUNTRY HAS BEEN OVERSTATED.				
32. HELPING THE MENTALLY ILL PERSON WITH HIS MONEY AND SOCIAL PROBLEMS OFTEN IMPROVES HIS CONDITION.				
33. MENTAL PATIENTS USUALLY MAKE A GOOD ADJUSTMENT TO SOCIETY WHEN THEY ARE RELEASED.				



- |                                                                                             | EXCELLENCE |   | AVERAGE |   |
|---------------------------------------------------------------------------------------------|------------|---|---------|---|
|                                                                                             | 1          | 2 | 3       | 4 |
| 34. THE GOOD PSYCHIATRIST ACTS LIKE A FATHER TO HIS PATIENTS.                               |            |   |         |   |
| 35. EARLY ADULTHOOD IS MORE OF A DANGER PERIOD FOR MENTAL ILLNESS THAN LATER YEARS.         |            |   |         |   |
| 36. ALMOST ANY DISEASE THAT ATTACKS THE NERVOUS SYSTEM IS LIKELY TO BRING ON INSANITY.      |            |   |         |   |
| 37. YOU CAN TELL A PERSON WHO IS MENTALLY ILL FROM HIS LOOKS.                               |            |   |         |   |
| 38. PEOPLE WHO BECOME MENTALLY ILL HAVE LITTLE WILL POWER.                                  |            |   |         |   |
| 39. WOMEN ARE MORE LIKELY TO DEVELOP MENTAL DISORDERS THAN MEN.                             |            |   |         |   |
| 40. MOST MENTAL DISTURBANCES IN ADULTS CAN BE TRACED TO EMOTIONAL EXPERIENCES IN CHILDHOOD. |            |   |         |   |