

ABSTRACT<br>ATTITUDES AND OPINIONS OF HIGH SCHOOL TEACHERS TOWARD MENTAL HEALTH<br>By<br>\section*{Katherine Durham}

Mental health has become an area of increasing concern in our society today. The past few decades has seen an upsurge of research interest in the mental health area on the part of sociologists. Much of the research has investigated the views held by the public toward selected aspects of mental illness.

This research directs its attention toward the mental health attitudes and opinions of high school teachers. It is postulated that they play a key role in the socialization process of youth. They may be considered influential in the cognitive as well as emotional development of today's youth.

There are three main groups under investigation in this study. They are: 161 high school teachers representing five Michigan high schools; 69 Future Teachers (Michigan State University secondary education students); 173 Summer Teachers (teachers attending Michigan State University summer school). The Semantic Differential technique ( 15 concepts and 12 scales) and 35 Mental Health Opinion Items (from Nunnally) were used to obtain data from these samples.

In the analysis of the semantic differential data, the concepts were categorized into five broader types. Four general hypotheses were established:

Hypothesis 1: The concept "Ex-Mental Patient" will not be distinctive from the other "Normal" concepts (Me, Average Person, Most People), but will be distinctive from the Disorder concepts (Mental Patient, Neurotic Person), and the Severe Disorder concepts (Schizophrenic, Paranoid, Crazy, Insane).

Hypothesis 2: The array of favorableness for the types of concepts will be in this order: Professionals (with Doctor rated highest), "Normal" (with Me rated highest), Physical Disease, Disorder, Severe Disorder.

Hypothesis 2a: "Heart Disease" and "Cancer" will be more favorably perceived than the Severe Disorder concepts by all three samples (High School Teachers, Future Teachers, Summer Teachers).

Hypothesis 3: The Future Teachers will tend to view the Severe Disorder concepts less negatively than will the Summer Teachers and High School Teachers.

Hypothesis 1, 2 and 2a were supported by the data and hypothesis 3 was not supported. Contrary to hypothesis 3, Future Teachers were as negative in their responses as the High School Teachers and Summer Teachers.

Twenty of the mental health opinion items provided the basis for the development of a "Knowledgeability Score" for each respondent. Knowledgeability was defined operationally in terms of similarity to the responses of mental health professionals to these items. Based on previous research investigations the following hypotheses were set forth concerning the relationship between knowledgeability and nine
social variables. (Summer Teachers were viewed as similar to High
School Teachers for purposes of analysis.)

## High School Teachers

Hypothesis 4: The older teachers will be more knowledgeable about mental health an the younger teachers. (Hypothesis 4 is not supported)

Hypothesis 5: There will be no relationship between sex and knowledgeability.
(Hypothesis 5 is not supported)
Hypothesis 6: Respondents who grew up in an urban area (suburban or non-suburban) will be more knowledgeable than those who grew up in the open country.
(Hypothesis 6 is supported)
Hypothesis 7: There will be no relationship between community size and knowledgeability.
(Hypothesis 7 is supported)
Hypothesis 8: Those teachers who teach social science subjects will be more knowledgeable than the others.
(Hypothesis 8 is not supported)
Hypothesis 9: Teachers who have more years of teaching experience will be more knowledgeable.
(Hypothesis 9 is not supported)
Hypothesis 10: There will be no relationship between type of institution (public vs. private) and knowledgeability.
(Hypothesis 10 is supported)
Hypothesis 11: Respondents who have mental health experience (family, friends, or visits to mental health facilities) will be more knowledgeable than those who have none.
(Hypothesis 11 is not supported)

## Future Teachers

Hypothesis 12: There will be no relationship between age and knowledgeability. (Since this sample is composed of mostly Juniors and Seniors; there is a restricted age range.)
(Hypothesis 12 is not supported)

Hypothesis 13: There will be no relationship between sex and knowledgeability.
(Hypothesis 13 is supported)
Hypothesis 14: Those "Future Teachers" who are social science majors will be more knowledgeable than the other majors.
(Hypothesis 14 is not supported)
Hypothesis 15: Respondents who grew up in an urban area (suburban or non-suburban) will be more knowledgeable than those who have non.
(Hypothesis 15 is supported)
Hypothesis 16: There will be no relationship between community size and knowledgeability.
(Hypothesis 16 is not supported)
Hypothesis 17: Respondents who have mental health experience (family, friends, or visits to mental health facilities) will be more knowledgeable than those who have none.
(Hypothesis 17 is not supported)

The findings in this study revealed that teachers are reasonably well informed with regard to mental illness, however, they tend to view mental disorders in a negative light. The study also indicates that the opinions and attitudes of teachers are not very different from those of the general public, although there is some indication that certain social structural variables have a relationship to knowledgeability.

# ATTITUDES AND OPINIONS OF HIGH SCHOOL <br> TEACHERS TOWARD MENTAL HEALTH 

By

## Katherine Durham

## A DISSERTATION

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## DEDICATION

I wish to dedicate my dissertation to my parents, Mr. and Mrs. Henry L. Durham, and my sister, Helene. Without their inspiration and support, the realization of this goal would not have been possible.

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## CHAPTER I

THE INTRODUCTION AND STATEMENT
OF PROBLEM

The past few decades have seen an increasing number of sociologists become interested in the area of mental health. Aside from other areas of interest in sociology, much research investigation has focused its attention on mental health problems.

The mental health movement, in the past two or three decades, has made a number and variety of attempts to "re-educate" the public regarding mental illness. With its major emphasis on publicizing the medical model of mental illness, the movement, for the most part, has been successful in acquainting the public with psychiatric symptomatology. Although opinions differ as to the increase in genuine popular understanding of psychological disorder as a consequence of these efforts, it seems reasonably clear that one result has been the maintenance of a predominantly medical definition and control of the mental health area.

Past decades have also seen the advent of community mental health programs, with a new emphasis on community based treatment. Public understanding and favorable attitudes are essential for optimum utilization of these new types of mental health facilities
and for acceptance of the greater number of mentally ill persons who can now be treated in the community.

The Joint Commission on Mental Health, in 1961, suggested that:

A national mental health program should avoid the risk of false promise in 'public education for better mental health' and focus on the modest goal of disseminating such information about mental illness as the public needs and wants in order to recognize psychological forms of sickness and to arrive at an informed opinion in its responsibility toward the mentally ill. ${ }^{1}$

It has been recognized that an important source for influencing the mental health levels of the nation and the attitudes of people is the formal education system. Because of the compulsory nature of the educational system in this society, very few persons escape attendance during the developing years of their lives. As a result of this, the American school seems to educators to be in the position to set the tone of mental health and to shape the attitudes of future generations.

Few would deny that the family is the best of all possible settings for the promotion of mental health. Here are concentrated the crucial influences and relationships that shape the development of the child and young adult, for better or for worse. Unfortunately, the family is a rather isolated unit of modern society; its members go forth from the home as individuals but may return to it as components of a different group. The family is not readily accessible to outside help, except as it seeks it, and society has no pervasive mental health resources that encompass the family within their structure.

The school, however, comes remarkably close to achieving this relationship with the family. At least it is in a position to do so. In an era of universal, compulsory education, the school is the one institution of society through which each of
${ }^{1}$ Joint Commission on Mental Illness and Health, Action for Mental Health, (New York: Basic Books, Inc., 1961), p. xviii.
us must pass. During our formative years we are influenced to a varying degree by this education experience, which takes place against the background of the family, yet apart from it. ${ }^{2}$

Rabkin and Suchoski has this to say about the role of schools in mental health education:

If we [educators of teachers] are to succeed in bringing about any basic alteration in this state of affairs, it is clear that the schools are to play a prominent part in this campaign. The child not only learns from the direct tuition of the teachers but incorporates as well his attitudes and conceptualizations about the world. For the primary grade child and the college student alike, this is as true in the sphere of mental health as in that of primary didactic materials. 3

Shaped by varied and often competing, even conflicting, forces that are operative in a diverse and changing society, education in turn is viewed by educators as becoming a decisive and influential institutional complex for shaping the future of modern man and his society.

## The Problem

Teachers, who are generally considered to be important with regard to the socialization of youth, are a vital cog in the educational system.

One good measure of the public's attitudes toward teaching as a profession can be found in whether parents would like to have their children become teachers. In a national study (by Gallup poll), parents were asked whether they would like to have a child of theirs take up teaching in the public schools as a career. Seventy-one percent of the parents of public school children said they would like their
${ }^{2}$ w. Allinsmith and George W. Goethal, The Role of Schools in Mental Health, (New York: Basic Books, Inc., 1962), p. 123.
${ }^{3}$ Leslie Y. Rabkin and Joseph F. Suchoski, Jr., "Teachers' Views of Mental Illness: A Study of Attitude and Information," Journal of Teacher Education, 18 (1967), p. 36.
child to become a teacher, and less than twenty-one percent said no. Apparently then, teaching is held in relatively high esteem by a large segment of the public. ${ }^{4}$

One of the most important functions people everywhere assign to their education agencies is the transmission of the knowledge, attitudes and skills of their society--in short, their culture-from the older to the younger generation. This is the process of socialization.

Teachers, as agents of society, presumably plan an instrumental role in the socialization of youth. They are widely believed to aid in the shaping and molding of personalities and in the nuturance of inquiring minds. Havighurst and Neugarten says this about the role of the teacher:

The teacher's main role in relation to pupils, indeed the most significant of all his roles, is that of mediator of learning. In this role, he transmits knowledge and directs the learning process. In somewhat different terms, the main role of the teacher is to induce socially valued change in his pupils. This is at once the crux of the teaching profession and the most important criterion of the teacher's success. 5

According to Wilson, Robeck, and Michael, ${ }^{6}$ teachers for the most part accept the role assigned by their communities.

In the view of parents, the function of the school is to teach certair subject matter content and skills. The teachers, by and large, have accepted the role assigned to them by the
${ }^{4}$ Wilbur B. Brookover and Edsel L. Erikson, Sociology of Education, (The Dorsey Press: Homewood, Illinois, 1975), pp. 227228.

5 Robert J. Havighurst and Bernice L. Neugarten, Society and Education, (Boston: Allyn and Bacon, Inc., 1967), p. 445.
${ }^{6}$ J.A.R. Wilson, M.C. Robeck, and W.B. Michael, Psychological Foundations of Learning and Teaching, (New York: McGraw-Hill, Inc., 1969), pp. 328-329.
community. Although little or no time or thought was supposed to be given to teaching attitudes, the eventual emergence of young people with the "wrong" attitudes was and still is deplored. Teachers have been blamed for not having developed the "right" attitudes in their students, at the same time that any attention to the fostering of specific attitudes was being systematically attacked. Teachers are a part of culture, and when the community climate insist that cognitive content is the only phase of learning to which the school may properly address itself, most teachers quickly accept this limited definition of their role.

The notion of considerable teacher influence on the beliefs and attitudes of their students seems to be based on both popular and professional beliefs. However, this is a very difficult proposition to either confirm or refute in a convincing manner, and there does not appear to be compelling evidence either way. It seems best to make the assumption that teachers do have some influence on the cognitive development of their students. For the purpose of this study, we assume that this influence extends to knowledge of and development of attitudes about mental health.

In this study we will be investigating the opinions and attitudes of high school teachers toward mental health. More specifically the study will center its attention around the following questions:

1. What are the attitudes of high school teachers toward mental illness?
2. What are the attitudes of future high school teachers (secondary education majors) toward mental illness?
3. Are there important differences between the attitudes of future teachers and teachers on the job toward mental illness? If so, how can these differences be characterized?
4. How similar are the responses of high school teachers and the general public toward mental health?
5. What are the differences, if any, between the responses of high school teachers and mental health experts, toward mental health?

This study, as do several studies in the mental health area, has as its foundation research reported by Jum C. Nunnally, Jr. His book, Popular Conceptions of Mental Health, has been termed a "landmark in its field. ${ }^{7}$ This study, however, tends to follow previous research methodologically, but takes a new direction substantively.

## Importance of Problem

High school teachers come in contact with students during a time when they are about to assume adult roles in our society and validate their stance on certain social issues. It is also during the high school years that students take courses as a part of their curriculum which center their attention on the social problems of our society.
"Data on teachers' attitudes are important because we know that, in certain areas at least, teachers' attitudes are correlated with classroom behavior and both are related in some ways to students' development." 8
${ }^{7}$ Henry Wescheler, L. Solomon, and B.N. Kramer, (eds.), "Mental Health Attitudes," Social Psychology and Mental Health, (New York: Holt, Rhinehart, and Winston, Inc., 1970), p. 436.
${ }^{8}$ Barry Sugarman, The School and Moral Development, (New York: Barner and Noble, 1973), p. 141.

I contend that the attitudes teachers hold toward certain subjects are bound to have some effect on the cognitive and affective development of youth. If one considers this to be a reasonably accurate view, then it becomes important to gain insight into the information and characteristic attitudes that teachers possess in the mental health area.

Popular beliefs about mental health is not just a technical matter for psychiatrists and psychologists, but is a basic dimension of every person's everyday social psychology and is closely related the the definition of self that is taking place during the adolescent years.

## Theoretical Perspectives

Although the last five decades have seen a vast number of studies of functional mental disorders, there is as yet no substantial, verified body of knowledge in this area. At this writing there is no rigorous knowledge of the cause, cure, or even the symptoms of functional mental disorder. Such knowledge as there is, is clinical and intuitive, and thus not subject to verification by scientific methods. 9

Thomas Scheff ${ }^{10}$ in what he calls a sociological theory of mental illness, sets forth two propositions concerning beliefs about mental disorder in the general public:

1. "Stereotyped imagery of mental disorder is learned in early childhood." Scheff feels that the literal meaning of "crazy," a term now used in a wide variety of contexts, is probably grasped by children during the first years of elementary school. Social
${ }^{9}$ Thomas Scheff, Being Mentally Ill: A Sociological Theory, (Chicago: Adine Publishing Company), 1968, p. 6.
${ }^{10}$ Ibid., pp. 64-68.
stereotypes are held by children and play an active part in their cognition and behavior. He admits, however, there are no substantiating studies in this area, and that it is based on his scattered observations.
2. "The stereotypes of insanity are continually reaffirmed, inadvertently, in ordinary social interaction." Scheff feels that although adults become acquainted with medical concepts of mental illness, the traditional stereotypes are not discarded, but continue to exist alongside the medical conceptions, because the stereotypes receive almost continual support from the mass media and ordinary social discourse.

A prominent controversy in the field of mental health, among its professionals, is centered around the claim by T.S. Szasz that mental illness is a "myth." Szasz has been the most outspoken critic of the use of the medical model when applied to mental illness.

In the "Myth of Mental Illness," ${ }^{11}$ Szasz proposes that mental disorder be viewed within the framework of "the game-playing model of human behavior." He then describes hysteria, schizophrenia, and other mental disorders as the "impersonation" of sick persons by those whose "real" problem concerns "problems in living." Although Szasz states that the role-playing by mental patients may be completely or even mostly voluntary, the implication is that mental disorder be viewed as a strategy chosen by the individual as a way of obtaining help from others.

[^0]Before we can determine that these theories are sound, more needs to be learned about the opinions and attitudes of the general public, which is what this study is about. The data in this study can be viewed in that light, as giving evidence to the content of popular views of mental disorder.

In addition, it is also important to know if the views of high school teachers are highly similar to those of the general public as well as other significant adults with whom youth are in contact with.

## CHAPTER II

## REVIEW OF RELEVANT LITERATURE

In the 20 or more years since the establishment of the National Institute of Mental Health, a number of surveys have been made to assess the American public's opinions and attitudes about mental illness. These surveys have been made at different times, by different investigators, with different research designs, and on different populations.

There has emerged a body of literature in the mental health area, concerning the delineation of attitudes held by the general public, by mental health personnel, and by patients and their families; the susceptibility of such attitudes to modification through academic or practical experience; and the relationship between attitudes and behavior.

Knowledge of such attitudes is not only germane to those concerned with the origins and maintenance of disturbed behavior, but critically important to workers involved in primary prevention programs, early intervention, and community treatment of psychiatric patients. Both administrators and clinicians benefit from acquaintance with public attitudes toward the presence of psychiatric facilities and patients in their neighborhoods. Psychiatric rehabilitation is facilitated when mental health professions recognize the social realities that their patients encounter in their daily living. In short, it is becoming generally recognized that mental patients, and those who deal with them exist in the larger framework of society and that it is imperative, in both planning and carrying out treatment
programs, to be aware of the attitudes toward mental illness and treatment that prevail in this larger framework. 1

Elaine and John Cumming ${ }^{2}$ undertook an interesting project in Praire Province, Canada. Their study was designed to investigate to what extent and in what direction attitudes toward mental illness are changed by an intensive educational program. They were aware that ignorance and fear of mental illness are widespread but they were not aware of the feeling and functions underlying public attitudes toward mental illness. They point out that the ignorance and fear are not merely the result of the lack of information about mental illness, but are derived from and maintained by personal and community needs.

The Cummings have characterized public response to mental illness as a pattern of "isolation and denial." That is, the public tends to wall off the mentally ill, both figuratively and literally, and would prefer to deny that they exist.

The experiment in mental health education with Elaine and John Cumming here reported represented a concentrated effort to change attitudes toward mental illness and the mentally ill in a single community. Their goal was both concrete and practical. They had observed the coldness of many communities to patients returning from mental hospitals; patients, released as recovered or remarkably improved, are often unwelcome, feared, isolated. Changing such attitudes would favor complete rehabilitation of former patients. 3
${ }^{1}$ J.G. Rabkin, "Public Attitudes Toward Mental Illness: A Review of the Literature," Schizophrenia Bulletin, 10 (Fall 1974), p. 9 .
${ }^{2}$ Elaine Cumming and John Cumming, Closed Ranks (Cambridge, Massachusetts: Harvard University Press, 1957).
${ }^{3}$ John Clausen, in Cumming and Cumming, op. cit., p. $x$.

The above is in sharp contrast to the finding in the following study.

The results of a study on one Maryland community done by Jon K. Meyers which showed that, "the population sampled is rational and humane in its verbally expressed attitudes toward mental illness and is aware of the signs of some mental disorders. $"^{4}$

In a random sample of respondents in two predominantly rural North Carolina counties, the conclusions were that, "there appears to be very little difference between rural and urban people regarding the treatability of mental illness. Rural people tend to be more tolerant of the mentally ill (than are urban people). Both overwhelmingly accept the role of psychiatrist as unique for themselves and family and friends." ${ }^{5}$

More recently, Crocetti, Spiro and Siassi, ${ }^{6}$ conducted a field survey to test the hypothesis: The preponderance of the public has attitudes toward the mentally ill that are characterized by stereotyping, stigmatization, rejection, and prejudice and regards them as incurable. The hypothesis was rejected. The sample, which consisted of blue collar workers in the Baltimore area, unanimously considered mental illness to be an "illness" requiring the care of a physician
${ }^{4}$ Jon K. Meyer, "Attitudes Toward Mental Illness in a Maryland Community," Public Health Reports, 79 (September 1964), pp. 769-772.
${ }^{5}$ W.J. Edgerton, and W.K. Bentz, "Attitudes and Opinions of Rural People About Mental Illness and Program Services," American Journal of Public Health, 59 (1969), pp. 470-477.
${ }^{6}$ Guido Crocetti, H. Spiro, and I. Siassi, "Are the Ranks Closed? Attitudinal Social Distance and Mental Illness," American Journal of Psychiatry, 127 (1971), pp. 1121-1127.
and one that could be cured with proper treatment. The respondents also showed a sign of greater acceptance than rejection of all those who were formerly mentally ill.

Somewhat along the same line, Linsky ${ }^{7}$ conducted a study of the ratio of involuntary and voluntary commitments (by developing an "exclusion index") to three mental hospitals in Washington State, to discover the types of people who are likely to be excluded from a community for mental illness. The hypotheses tested are:

1. Communities have a greater propensity to exclude for "deviance" lower class persons and members of low status --ethnic groups.
2. Those who lack close social ties in the community are more likely to be excluded for deviance than those with such ties.
3. Communities have a greater propensity to exclude males for deviance than females.

The findings indicated that community tendency to exclude persons for deviance is greater for those who are either culturally marginal or of low social class, and those more isolated from stable ties.

In the last few years the concept of societal reaction has emerged as a critical independent variable in the study of deviance (Erickson, 1962, Kitsuse, 1962). In the ecology of mental illness, societal reaction is an issue on both methodological and substantive grounds. 8
${ }^{7}$ A. Linsky, "Who Shall Be Excluded: The Influence of Personal Attributes in Community Reaction to the Mentally Ill," Social Psychiatry, 5 (1970), p. 166-171.
${ }^{8}$ Ibid., p. 171.

More knowledge about the views of various samples of the general public is needed if this societal reaction approach is to be adequately tested and its implications explored.

There have been some studies in the mental health literature that have centered their attention on the investigation of the attitudes and opinions of ethnic minority groups toward mental illness.

Ring and Schein, ${ }^{9}$ initiated a study to assess the attitudes toward mental illness of the Cobbs Creek neighborhood (an upwardly mobile lower-middle income Black community) in West Philadelphia, before the establishment of a mental health clinic. They were also interested in the nature and extent of psychiatric problems in the target population--type of caretakers currently utilized by the community for help with mental or emotional problems. The general trends in attitudinal responses was in the direction of acceptance and understanding. Respondents expressed or pronounced degrees of willingness to associate with ex-mental patients as fellow workers or club members; but they displayed some reluctance, however, to accepting an ex-patient as a roomer or having one marry a member of the family.

In a survey interview conducted by Karno and Edgerton, ${ }^{10}$ on a Mexican American community in Los Angeles, the findings led to the conclusion that: they share a cultural tradition which causes them
${ }^{9}$ S. Ring and Li. Schein, "Attitudes Toward Mental Illness and the Use of Caretakers in a Black Community," American Journal of Orthopsychiatry, 40 (1970), pp. 710-716.
${ }^{10}$ M. Karno and R. Edgerton, "Perception of Mental Illness in a Mexican American Community," Archives of General Psychiatry, 20 (1969), pp. 233-238.
to perceive and define mental illness in significantly different ways than Anglos. Because of their strong family ties they tend to turn to one another for emotional comfort.

There seems to be some relationship between attitudes and where people are in the social structure--namely class, ethnicity, etc.--but there has not been much research to come to definitive conclusions.

Very few studies in the mental health literature to date have centered their attention on the opinions and attitudes of teachers. The following several studies represent the more significant ones.

Yamamoto and Dizney, ${ }^{11}$ concentrated their attention on attitudes toward the mentally ill as expressed by future teachers. The subjects were student teachers taking a course in educational psychology at the University of Iowa. They used a questionnaire which included a brief case description of a hypothetical fellow student, with Guttman scales of social tolerance and suggested help sources. The results showed that students tended to order the cases on the basis of social visibility (deviation from socially prescribed norms rather than severity of pathological conditions). It was also found that a larger number of help sources was suggested for men than women in each pathological category.

In a study comparing the attitudes of teachers and the general public by Bentz et al., it was found that:
${ }^{11}$ Karou Yamamoto and Henry F. Dizney, "Rejection of the Mentally Ill: A Study of Attitude of Student Teacher," Journal of Counseling Psychology, 14 (1967), p. 264.

A comparison of the attitudes shows a positive consensus between the two groups regarding general perceptions of mental illness, and mental hospitals that is best described as 'enlightened.' An absence of consensus was found in their attitudes about the etiology and the treatment of mental illness. The general public expressed old stereotyped ideas about the causes of mental illness more frequently than the teachers. However, the public appears more positive about treatment than teachers, who seem to be uncertain about how mental illness should be treated. 12

Rabkin and Suchoski also concentrated on the attitudes of teachers. Their sample was composed of 107 teachers taking summer courses at the University of Washington. They found that teachers are reasonably well informed in regard to mental illness. However, when it comes to the more affective components of their responses, teachers present a picture similar to that of the general population. Mental patients are viewed with distrust and generally devalued and are considered unsafe. But on a relative basis teachers have more positive attitudes toward the mentally ill. Rabkin and Suchoski concluded:

If in the long, hard struggle to improve public attitudes on mental health problems we are to utilize the schoolroom effectively, we must first take a serious look at the feelings and understanding of teachers about these issues. An important emphasis in any program of primary prevention must be on the development of more positive attitudes in our educators. 13

In general, there is a high degree of similarity between teachers and the general public. If there are relationships between social structural variables and attitudes operating in the general public, then it should also operate with teachers.

[^1]Even though there has been an increase in the number of studies in the mental health area, research investigating the opinions and attitudes of the general public are few. While the research studies here do not exhaust the literature available, they are representative and provide a background of the kind of studies that have been conducted in this sector of the mental health area.

For the most part investigations of popular attitudes have been of particular kinds of people as reviewed by Judith Rabkin ${ }^{14}$.relatives of patients who have been released, nurses, family members, professionals, hospital attendants. These studies tend to be more concerned with how these people respond and interact with the mentally ill, rather than what their opinion and attitudes are; making the assumption that behavior is related to an underlying set of variables, which are hard to measure.

There is an enormous amount of theoretical and empirical literature that has tried to make a distinction between opinions and attitudes. Without trying to resolve those issues, for operational purposes within this study, I will view semantic differential responses as indicators of attitudes, and responses to the "mental health opinion statements" as indicators of opinions. This is not at variance with the way the terms are used in the literature, but it would take me too far afield to get into the issues.

[^2]
## THE SAMPLE AND THE RESEARCH INSTRUMENTS

This study investigates the responses of three groups: MSU secondary education majors (the title "Future Teacher" will be used to identify this group) $\mathrm{N}=69$, teachers attending summer school at Michigan State University (the title "Summer Teachers" will be used to identify this group) $\mathrm{N}=173$, and "High School Teachers" on the job in selected schools in the surrounding area, $N=161$.

The "Future Teachers" sample was taken from Secondary Teacher Methods classes, offered by the College of Education during the fall (1975) at Michigan State University. These are courses that all secondary education majors are required to take as a part of their curriculum.

Many teachers come to Michigan State during the summer from all over the state of Michigan (and outside the state) to earn graduate credits, complete graduate degrees, and/or update teaching certificates. The "Summer Teachers" sample was taken from several graduate courses offered by the College of Education during the Summer (1975) at Michigan State University. These teachers represent many different communities; they came from 30 counties in the state of Michigan (see Figure 1), four other states (California, Indiana,


Figure 1.--Counties where "Summer Teachers" are employed.

Ohio and Oklahoma), and four other countries (Ethiopia, Canada, Uganda and West Indies). The composition of this sample is as follows:

| Elementary Teachers | 56 |
| :--- | ---: |
| Junior High Teachers | 42 |
| Senior High Teachers | 20 |
| College Teachers | 9 |
| Administrators | 14 |
| Graduate Students | 24 |
| Foreign | 4 |
| Others (Unknown) | 4 |

$$
173
$$

For both this sample and the "Future Teachers" sample, Professors in the College of Education were consulted as to which courses would contain a large number of secondary education majors, and during the summer, which graduate courses would contain a large number of teachers who are on the job during the regular school year.

Five high schools in the south central Michigan area comprise the sample of "High School Teachers" used in this study. The schools are: Fowler High School ( $\mathrm{N}=14$ ), Ovid-E1sie High School ( $\mathrm{N}=23$ ), St. Johns High School ( $\mathrm{N}=62$ ), Williamston High School $(\mathrm{N}=23)$, and Grand Rapids Christian High School ( $\mathrm{N}=39$ ). The following chart gives the total number of teachers in each school, the number in each sample, and the percentage:

| Name of High School | Total No. of <br> Teachers in School |  | Data From |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  | 17 |  | 0 |
| Fowler of Total |  |  |  |  |

We were interested in both rural and urban schools in this research study and we gained access to several "rural" schools (Fowler, Ovid-Elsie, St. Johns, Williamston) in the surrounding area, but lacked success with the urban schools. However we were able to get one high school in the Grand Rapids area, Grand Rapids Christian High School, which is unique in that it is parochial, middle class, and suburban. These five schools represent three counties in the state--Clinton, Ingham and Kent.

Fowler, Ovid-Elsie, and St. Johns (Clinton county) are quite interesting school districts in terms of size, because out of 530 districts in the state they rank 414,313 and 253 respectively.

Previous research investigations have shown that the usual social variables that sociologists are concerned with when conducting research (such as social class, rural-urban, etc.) do not seem to have strong positive relationships in the mental health area. Nevertheless, several attempts to gain access to more urban schools for data collection were made, but without success. Even though in this research study, we are not concerned with assessing one's mental or
psychological state of mind, it seems that the term "mental health" raises much concern on the part of school administrators.

## Description of Communities

Table 1 gives characteristic information about the communities from which the school samples were drawn. It shows that Grand Rapids is the largest by population $(197,649)$ and Elsie is the smallest (988). Williamston's percent population increase between 1960-1970 ( $17.4 \%$ ), more than doubled the increase of $1950-1960$ ( $7.9 \%$ ). This table also shows that Fowler has the largest proportion of residents under 18 years ( $41.4 \%$ ); and Grand Rapids has the largest proportion of residents 65 and over ( $12.2 \%$ ). For the state of Michigan, most of the population is between 18-64 years of age. By county, one finds that out of 83 counties in the state of Michigan, Kent ranks 5th $(411,044)$, Inghan ranks 6 th $(261,039)$ and Clinton ranks 28th $(48,492)$. Clinton county had the largest percent population change during the last decade, 1960-1970 (27.7\%). Ingham county has the largest percent under 18 years ( $41.6 \%$ ), and Kent county has the largest percent 65 and over ( $9.3 \%$ ).

Clinton county has the largest percent of rural population both farm and non-farm ( $20.8 \%$ and $57.9 \%$ respectively). There are more foreign born residents in Kent county ( $4.0 \%$ ) which is closest to that of the state of Michigan ( $4.8 \%$ ). In Clinton county almost all of the residents between 14 years and 17 years are in school (97.5\%); which is greater than the state's percentage (94.2\%). The largest percentage of residents working inside the county is in Kent county (92.2\%).
Table 1.--Selected Demographic Characteristics of Five School Communities and Counties.

| Community | Population | $\begin{array}{r} \mathrm{Pe} \\ \mathrm{Chan} \\ \mathrm{Popu} \\ 150-60 \end{array}$ | cent <br> ed in <br> ation <br> '60-70 | Percent Non-White | Percent Under 18 years | $\begin{aligned} & \text { Percent } \\ & 18-64 \mathrm{yrs} . \end{aligned}$ | Percent 65 and Over | Percent Male 18 and Over | Persons Per Household |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grand Rapids | 197,649 | 0.5 | 11.5 | 12.0 | 33.9 | 54.0 | 12.2 | 45.0 | 3.00 |
| St. Johns | 6,672 | 13.6 | 18.5 | 0.3 | 38.7 | 50.6 | 10.7 | 46.4 | 3.26 |
| Williamston | 2,600 | 7.9 | 17.4 | 0.2 | 37.9 | 50.8 | 11.3 | 45.8 | 3.12 |
| Fowler | 1,020 | 26.5 | 19.4 | 0.6 | 41.4 | 47.5 | 11.1 | 46.9 | 3.56 |
| Ovid | 1,650 | 6.7 | 9.6 | 0.2 | 37.1 | 51.1 | 11.8 | 46.1 | 3.23 |
| Elsie | 988 | 2.4 | 5.9 | --- | - | ---- | ---- | ---- | -- |
| Counties * |  |  |  |  |  |  |  |  |  |
| Kent(5) | 411,044 | 26.0 | 13.2 | 6.1 | 37.3 | 53.4 | 9.3 | 46.5 | 3.25 |
| Ingham (6) | 261,039 | 22.2 | 23.5 | 6.4 | 32.6 | 60.6 | 6.8 | 48.3 | 3.10 |
| Clinton(28) | 48,492 | 21.2 | 27.7 | 0.4 | 41.6 | 51.4 | 6.9 | 48.9 | 3.55 |
| Michigan | 8,875,083 | - | 13.4 | 11.7 | 36.6 | 54.9 | 8.5 | 47.9 | 3.27 |

Table 1.--Continued.




## General Discussion of the Instruments

The instruments used to obtain data from these samples were the Semantic Differential Technique and Thirty-Five Mental Health Opinion Items (a copy of the instruments is found in the appendix). The Semantic Differential

The "Semantic Differential" is a combination of word associations and scaling techniques, that has found a variety of uses in recent years since its development by Osgood, Suci and Tannenbaum (1957); ${ }^{1}$ one of which is the structuring of an attitude domain. It is a limited association test measuring the meaning of a concept on bipolar adjectival scales (usually seven-point scales). When a concept is decoded by a subject, a complex reaction is assumed to occur, consisting of a pattern of these alternative bipolar reactions elicited with varying intensities. When the subject encodes this semantic state against the differential, his selection of directions (i.e. good vs. bad; strong vs. weak, etc.) is assured to be coordinate within the intensity of these reactions.

In an evaluation of this instrument, Osgood et al. found evidence to support the fact that it has objectivity, reliability and validity. ${ }^{2}$

[^3]A series of experiments performed to attempt to determine the generality of the affective semantic space revealed three dominate factors that appear to dominate the space. "The salient factors, Evaluation, Potency, Activity, have been found in many populations, samples with different linguistic and cultural backgrounds. ${ }^{3}$

Osgood suggests that the instrument measures connotative rather than denotative aspects of meaning. More precisely, he states:

It is also apparent that, contrary to my early expectations, these factors are more reactive in nature than sensory, more broadly affective than discriminately cognitive and thus closer to connotative than to denotative aspects of meaning. 4

Many semantic differential scales have been reported to have a strong evaluative factor, that is, one end which represents "favorableness" and the other end which represents "unfavorableness." Ten of the 12 scales used in this study have a strong evaluative component (possible exception of Simple-Complicated and RuggedDelicate).

The "Semantic Differential" has the advantage of being an easily administered instrument. There are three other important features of the semantic differential that are of particular importance to this research investigation. They are:

1. The semantic differential can be used as an attitudinal measure.
2. The respenses of the semantic differential can easily be compared with other data (such as previous data of my own and of Nunnally).
$3^{\text {Ibid., p. } 289 . ~}$
${ }^{4}$ Snider and Osgood, op. cit., p. 305.
3. It's factor analytic approach.

The following "dummy table" will be used to establish terminology for the use of the semantic differential in this research:


## Mental Health Opinion Items

Thirty-five of the original 60 items used by Nunnally ${ }^{5}$ were selected to be used in this study. Responses to the items were made on a one to seven scale (one on the scale indicates "disagreement" with the statement, and seven indicates "agreement" with the statement).

Nunnally's questionnaire items were derived from a broad spectrum of popular and professional conceptions and then subjected to a considerable array of validation procedures. Over three thousand statements concerning mental illness were gathered

5 Jum C. Nunnally, Jr., Popular Conceptions of Mental Health (New York: Holt, Rinehart and Winston, Inc., 1961).
from 22 public-information pamphlets, from professional publications, and from over 200 personal interviews with the general public. The statements were then made randomly positive or negative and were pre-tested for clarity and for bias in phrasing. A final pre-test on 350 persons was conducted to further refine the instrument. 6

It was decided to reduce the number of mental health opinion items from 60 to 35 because of a concern for length and the respondents' attentiveness to the instrument, which could have an affect on the responses. The selection of the particular 35 items was made on the basis of: (1) consensus among mental health experts ${ }^{7}$ and (2) previous research among college students. ${ }^{8}$
"Knowledgeability Score."--Twenty mental health opinion items provide the basis for the development of a "knowledgeability score" for each respondent in this study. They are 20 of the same items used to get responses from a sample of mental health experts by Nunnally. The selection of the particular 20 items is the result of close examination of the 35 items by three people who have several years of experience with mental health data--the author, Dorothy Smith, ${ }^{9}$ and Donald W. O1msted ${ }^{10}$ (academic advisor for the author and
${ }^{6}$ J. Marshall Townsend, "Cultural Conceptions, Mental Disorders and Social Roles: A Comparison of Germany and America," American Sociological Review, 40, 1975, p. 741.
${ }^{7}$ Nunnally, op. cit., 1961.
${ }^{8}$ Dorothy L. Smith, College Students' Knowledgeability and Opinions About Mental Health in 1962 and 1971, M.A. thesis, Michigan State University, 1972.
${ }^{9}$ Smith, Ibid., 1972.
${ }^{10}$ Donald W. Olmsted and Robert K. Ordway, The Final Report of Concepts of Mental Health: A Pilot Analysis, (Report to NIMH, Grant m-5880(A), June 1963).

Smith). For example, an item was considered a candidate for rejection if: (1) the statement contained ambiguity, and (2) the structure of the statement represented a double negative. Consensus among the three of us determined whether an item was retained or deleted. The responses given by the mental health experts to these items was viewed as "correct," and was used as a response indicating knowledgeability about mental health by the respondent concerning the item. If the response given by a respondent was in one of the two "officially correct" categories, he received a score of five for that item; if his response was one category away, his score was four and so on to a score of zero. For example, if categories one and two are the "correct" answer to an item by professional consensus, then the score received by a respondent for his response on that item would be:

| Response Category | Disagree |  | 3 | 4 | 5 | Agree |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 |  |  |  | 6 | 7 |
| Score on "Disagree" Item: | 5 | 5 | 4 | 3 | 2 | 1 | 0 |
| Score on "Agree" Item: | 0 | 1 | 2 | 3 | 4 | 5 | 5 |

The maximum score obtainable by a respondent for the 20 items is 100; the minimum score is zero. A low score indicates low accord with the experts' responses; a high score indicates high accord with the experts' responses. Accord with the experts' opinions is the operational measure of knowledgeability about mental health. (In the analysis of data the means of the 35 items and the K - score will be used.)

## CHAPTER IV

GENERAL HYPOTHESES

There are 15 semantic differential concepts used in this study. They have been divided into five types for heuristic purposes. They are: Professionals--Doctor, Psychologist, Psychiatrist; "Normal"--Me, Average Person, Most People, Ex-Mental Patient; Disorder --Neurotic Person, Mental Patient; Severe Disorder--Schizophrenic Person, Paranoid Person, Crazy Person, Insane Person; Physical Disease--Person with Heart Disease, Person with Cancer. Concepts in a "concept type" would be viewed similarly. It is easier to discuss five types of concepts than it is to discuss 15 concepts.

Each respondent responded to only ten of the 15 concepts. Five concepts were identical for all respondents (Doctor, Me, ExMental Patient, Neurotic Person and Mental Patient). The remaining ten concepts were paired (Psychologist-Psychiatrist; Average PersonMost People; Schizophrenic Person-Paranoid Person; Crazy PersonInsane Person; Person with Heart Disease-Person with Cancer), and each respondent received a response form containing one of the other concepts of these five pairs. It was a matter of chance as to which one of the concepts in a pair, a given respondent received.

The following chart will show the "evolution" of the concepts used in this investigation. That is, the way in which new concepts were selected and the development of concept types for a more adequate analysis of the data. The 1976 study builds on previous research investigations.

| Before 1971 |  | Results of 1971 Study (M.A. Thesis) |  | 1976 Study |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Doctor <br> Psychiatrist | Professionals | Doctor <br> Psychiatrist Me | Professional and 'Normal" | Doctor <br> Psychologist <br> Psychiatrist | Professional |
| Me <br> Average Man <br> Most People | "Normal" | Average Man Most People Ex-Mental Patient | 'Normal" | Me <br> Average Person Ex-Mental Patient | 'Normal' |
| Ex-Mental Patient | ? | Mental Patient Insane People | Disorder | Mental <br> Patient <br> Neurotic <br> Person | Disorder |
|  |  |  |  | Schizophrenic Person Paranoid Person Crazy Person Insane Person | Severe Disorder |
|  |  |  |  | ```Person with Heart Disease Pearson with Cancer``` | Physical Disorder |

("Average Man" and "Insane People" were changed to "Average Person" and "Insane Person" for consistency.)

An objective of the 1971 study (see Durham, 1972) was to see how the concept "Ex-Mental Patient" would be viewed. The results of the study showed that the respondents viewed "Ex-Mental Patient"
approximately as favorable as the "Normal" concepts, and distinctly more favorable than the Disorder concepts (see Olmsted, Durham 1976). It is expected that this will be supported in the 1976 study.

Our research studies prior to 1976 also investigated only the responses to the Disorder concepts, "Mental Patient" and "Insane People;" each time they were the lower rated concepts with "Insane People" lowest (similar results were also found by Nunnally). This prompted the decision to add more Disorder concepts. The concepts "Neurotic Person," "Schizophrenic Person," "Paranoid Person" (technical terms), and "Crazy Person" (popular term) were added in the 1976 study. The 1971 study also revealed that the college students were less negative toward the Disorder concepts than the general public. It is expected that the Future Teachers will show similar results in this study.

The concepts "Heart Disease" and "Cancer," which are two of the most dangerous physical diseases, were added to provide a contrast to the mental disorders. This was done to gain insight into whether respondents tend to view all disease "negatively" or "unfavorably," or if they make this distinction only with mental disorders.

The results of these research investigations is the rationale for setting forth the following general hypotheses:

Hypothesis 1:. The concept "Ex-Mental Patient" will not be distinctive from the other "Normal" concepts (Me, Average Person, Most People), but will be distinctive from the Disorder concepts (Neurotic Person, Mental Patient), and the Severe Disorder concepts (Schizophrenic, Paranoid, Crazy, Insane).

Hypothesis 2: The array of favorableness for the types of concepts will be in this order: Professionals (with Doctor rated highest), "Normal" (with Me rated highest), Physical Disease, Disorder, and Severe Disorder.

Hypothesis 2a: "Heart Disease" and "Cancer" will be more favorably perceived than the Severe Disorder concepts by all three samples (High School Teachers, Future Teachers and Summer Teachers).

Hypothesis 3: The Future Teachers will tend to view the Severe Disorder concepts less negatively than will the Summer Teachers and High School Teachers.

## "Knowledgeability"

This part of the chapter is concerned with the development of specific hypotheses dealing with the relationship between knowledgeability and nine social variables which characterize the samples. These variables are: Age, Sex, Subjects Taught, Teaching Major, Type of Institution Attended (Public or Private), Years of Teaching Experience, Type of Hometown Community, Size of Hometown Community, and Reported Mental Health Experience.

Jum C. Nunnally, who has done a considerable amount of work in the mental health area, has discovered that subgroups in the population have only slightly different attitudes toward the mentally ill. He sought to distinguish the differences between specific social variables in relation to mental health attitudes.

Even though Nunnally found marked differences between the kind of information held by old as compared to young people, and by more educated as compared with less educated people, the differences in the attitudes of these and other subgroups are relatively small.

He found a small, but statistically significant tendency for more educated people to hold less derogatory attitudes toward the mentally ill.

None of the other demographic variables showed more than minor differences. He found some significant differences (by t-test) between the mean responses of women and men. The differences, however, formed no clearly interpretable pattern, and differences in one study sometimes were not supported in the other studies. Nunnally concluded that subgroups in the population do not differ substantially in their attitudes toward mental illness and the mentally ill, (see Nunnally, 1961).

The 1971 study on college students (see Smith, 1972) revealed that the older respondents (graduate students) were higher with regard to knowledgeability and only a weak relationship or none between sex and knowledgeability. With regard to type of hometown community and size of hometown community and knowledgeability the 1971 study indicated a weak or no relationship.

It is expected that social science teachers and majors will be more knowledgeable because of the nature of the subject matter which centers its attention on social issues. It is not expected that type of institution attended will make a difference, because if we are participants in a "cultural belief system" than where we attend school will not effect responses in this area.

The 1971 study also revealed that those who had mental health experience were more knowledgeable. It is expected that this will be supported in the 1976 study.

These research investigations provide the rationale for the following hypotheses concerning knowledgeability. (For the purpose of analysis, the Summer Teachers are viewed as similar to the High School Teachers.)

## High School Teachers

Hypothesis 4: The older teachers will be more knowledgeable about mental health than the younger teachers.

Hypothesis 5: There will be no relationship between sex and knowledgeability.

Hypothesis 6: Respondents who grew up in an urban area (suburban or non-suburban) will be more knowledgeable than those who grew up in the open country.

Hypothesis 7: There will be no relationship between community size and knowledgeability.

Hypothesis 8: Those teachers who teach social science subjects will be more knowledgeable than the others.

Hypothesis 9: Teachers who have more years of teaching experience will be more knowledgeable.

Hypothesis 10: There will be no relationship between type of institution attended (public vs. private) and knowledgeability.

Hypothesis 11: Respondents who have mental health experience (family, friends, or visits to mental health facilities) will be more knowledgeable than those who have had none.

Future Teachers
Hypothesis 12: There will be no relationship between age and knowledgeability. (Since this sample is composed of mostly Juniors and Seniors there is a restricted age range.)

Hypothesis 13: There will be no relationship between sex and knowledgeability.

Hypothesis 14: Those "Future Teachers" who are social science majors will be more knowledgeable than the other majors.

Hypothesis 15: Respondents who grew up in an urban area (suburban or non-suburban) will be more knowledgeable than those who grew up in the open country.

Hypothesis 16: There will be no relationship between community size and knowledgeability.

Hypothesis 17: Respondents who have mental health experience (family, friends, or visits to mental health facilities) will be more knowledgeable than those who have none.

The following chart will summarize the hypotheses set forth concerning the relationship between knowledgeability and the social variables:

| Social Variables | High School Teachers | Future Teachers |
| :---: | :---: | :---: |
| Age | $\begin{aligned} & \text { Older more } \\ & \text { knowledgeable } \end{aligned}$ | None expected |
| Sex | None expected | None expected |
| Community Type | Urban more knowledgeable | Urban more knowledgeable |
| Community Size | None expected | None expected |
| Subjects Taught | Social Science more knowledgeable | Not applicable |
| Teaching Major | Not applicable | Social Science more knowledgeable |
| Type of Institution attended (Public vs. Private) | None expected | Not applicable |
| Years of Teaching experience | Greater teaching experience, more knowledgeable | Not applicable |
| Reported Mental Health Experience (some vs. none) | Some reported experience, more knowledgeable | Some reported experience, more knowledgeable |

## CHAPTER V

## ANALYSIS OF DATA

The results of the 1971 study showed high intercorrelations among ten of the 12 scales investigated (see M.A. thesis, 1972). These ten scales, because of their high intercorrelations and strong evaluative dimension, compose a "Favorableness Index" to be used in the analysis of the semantic differential data in this study. The scales are (with "favorable" end listed first and assigned a value of seven): Valuable-Worthless, Sincere-Insincere, Clean-Dirty, Safe-Dangerous, Warm-Cold, Wise-Foolish, Strong-Weak, Fast-Slow, and Predictable-Unpredictable. The scales not included are SimpleComplicated and Rugged-Delicate, because they have low correlations or are negatively correlated with the other scales.

The "Favorableness Index" will be used in the evaluation of the concepts used in this study. A high mean score (4.00 and above) indicates "favorableness" toward a concept; a low mean score (below 4.00) indicates "unfavorableness" toward a concept.

Hypothesis 1 states: The concept "Ex-Mental Patient" will not be distinctive from the "Normal" concepts (Me, Average Person, Most People), but will be distinctive from the Disorders concepts (Mental Patient, Neurotic Person), and the Severe Disorder concepts (Schizophrenic, Paranoid, Crazy, Insane).

Results: The relevant data are in Tables 2 and 3 and Figure 2 which clearly show that "Ex-Mental Patient" is viewed favorably (mean score above 4.00) along with the other "Normal" concepts by the High School Teachers, (4.36), Future Teachers (4.52), and Summer Teachers (4.27). It is distinguished from the "Disorder" and "Severe Disorder" concepts which are viewed unfavorably (mean scores below 4.00) by all three samples. Hypothesis 1 is supported.

Hypothesis 2 states: The array of favorableness for the types of concepts will be in this order: Professionals (with "Doctor" rated highest), "Normal" (with 'Me" rated highest), Physical Disease, Disorder, and Severe Disorder.

Results: Tables 2 and 3 and Figure 2 show that the array of types of concepts for the three samples, High School Teachers, Future Teachers, and Summer Teachers is: Professionals (5.15), "Normal" (4.72), Physical Disease (4.40), Disorder (3.47) and Severe Disorder (3.26). "Doctor" is the highest rated concept for the High School Teachers (5.54), and Future Teachers (5.37); it is the second highest for the Summer Teachers (5.71). " Me " is the highest rated concept for all the samples--High School Teachers (5.48), Future Teachers (5.33), and Summer Teachers (5.75). Hypothesis 2 is supported.

Hypothesis 2a states: "Heart Disease" and "Cancer" will be more favorably perceived than the Severe Disorder concepts by all three samples (High School Teachers, Future Teachers, and Summer Teachers).

Results: The relevant data is in Figure 3 which shows that the High School Teachers, Future Teachers, and Summer Teachers make a distinction between the way they view the Physical Diseases and the Severe Disorder. "Heart" and "Cancer" have mean scores above 4.00

Table 3.--Favorableness Index Toward Five Concept Types, Responses of High School Teachers, Future Summer Teachers (Higher Index Equals more "Favorableness").


Physical Disease
Severe Disorder

$$
\begin{array}{llll}
\vec{n} & \vec{j} & \vec{\sigma} & 0 \\
\dot{\sigma} & \dot{\sigma} & \dot{\theta}
\end{array}
$$

$$
\begin{aligned}
& \text { gh School Teachers } \\
& \text { ture Teachers } \\
& \text { mmer Teachers } \\
& \text { Average } \bar{X}
\end{aligned}
$$

gh School Teachers
ture Teachers
mmer Teachers
Average $\bar{X}$

Figure 2.--"Favorableness Index" of Five Types of Concepts, Responses of Teachers in Five High Schools.

F - Fowler
G - Grand Rapids
O-Ovid
S - St. Johns
W - Williamston
(-) Average Mean for Concept



```
AEART
CANCER
```

DISEASE
5.20
5.00
4.80
or
11.60

$$
\text { os of ow } \theta
$$

0
$4.100 \quad 0.00$
$\rho$
4.20
(with the exception of a 3.69 for the concept "Cancer" by the Summer Teachers), and the Severe Disorder have mean scores below 4.00. Hypothesis 2a is supported.

Hypothesis 3 states: The Future Teachers will tend to view the Severe Disorder concepts less negatively than will the Summer Teachers and High School Teachers.

Results: Figures 3 and 4 show that the Future Teachers are not distinctive in their views toward the Severe Disorder concepts. All three samples have highly similar views toward these concepts (the mean are very close). Table 3 shows that the average mean score of the Severe Disorders are as follows: High School Teachers (3.37), Future Teachers (3.24), and Summer Teachers (3.16). Hypothesis 3 is not supported.

> Analysis of Responses to Types of Concepts for High School Teachers

1. Professionals: "Doctor" is rated highest in three of the five samples (Grand Rapids--5.61; Williamston--5.61, and St. Johns--5.49). "Psychologist" is rated highest in two of the samples (Fowler--5.33, and Ovid-Elsie--5.78). "Psychiatrist" is seen as the least favorable of the concepts by four of the five samples (Ovid-Elsie--4.60, Williamston--4.97, St. Johns--4.67, and Fowler--4.79).
2. "Normal": "Me" is the highest rated concept by all five samples (Ovid-Elsie--5.75, St. Johns--5.59, Grand Rapids--5.49, Fowler--5.29, and Williamston--5.26). "Average Person" is the second highest rated by Ovid-Elsie (4.75) and Williamston (4.65). "Most People" is second highest concept by Fowler (5.09), Grand Rapids

# Figure 3.--"Favorableness Index" of Five Types of Concepts, Responses of High School Teachers, Future Teachers, Summer Teachers. 

HST - High School Teachers
FT - Future Teachers
ST - Summer Teachers



2.60

Figure 4.--"Favorableness Index" of Five Types of Concepts, Responses of Future Teachers.

| PROFESSIONATS |  |  |
| :---: | :---: | :---: |
|  |  |  |
| DOCTOR | PSYCHO- | PSYCHIA- |
|  | LOGIST | TRIST |

5040


2.60
(4.73) and St. Johns (4.63). "Ex-Mental Patient" is the lowest along the favorableness dimension by respondents in Williamston (4.09), Ovid-Elsie (4.27), and St. Johns (4.35).
3. Disorder: "Neurotic" was viewed somewhat along the favorable dimension by the Fowler teachers (4.07), and clearly unfavorably by Grand Rapids (3.73), Williamston (3.66), St. Johns (3.56), and Ovid-Elsie (3.55). "Mental Patient" was responded to with general unfavorableness by all five teacher samples, Williamston (3.28), Fowler (3.48), Ovid-Elsie (3.13), Grand Rapids (3.58).
4. Severe Disorder: All the concepts in this category are viewed the unfavorable dimension. "Schizophrenic" is considered the least unfavorable concept by Grand Rapids (3.76) and Ovid-Elsie (3.31). "Paranoid" is the least unfavorable to the Fowler (3.72), St. Johns (3.70), and Williamston (3.48) teachers. "Crazy" is the most unfavorable concept to the Grand Rapids teachers (3.19) and St. Johns Teachers (3.44). "Insane" is viewed as the most unfavorable by Williamston (3.05), Ovid-Elsie (2.93) and Fowler (2.88).
5. Physical Disease: "Heart" was rated higher by Ovid-Elsie (4.36), St. Johns (4.50), and Fowler (4.71). "Cancer" has the higher mean score for Williamston (4.55) and Grand Rapids (5.05) teacher samples.

## Analysis of Responses to Types of Concepts for Future Teachers

Data relevant to this discussion is found in Figure 4.

1. Professionals: "Doctor" (5.37) is rated higher than the other professionals "Psychologist" (4.75) and "Psychiatrist"
(4.62). The concept Psychiatrist is viewed with least favorableness of the group.
2. "Normal": While all the concepts that compose this category are seen in a favorable light, the concept " Me " has the highest mean (5.33). The concept "Ex-Mental Patient" (4.52) is viewed somewhat more favorably than "Average Person" (4.46) and "Most People" (4.11).
3. Disorder: The future teachers responded to the concepts "Neurotic" (3.48) and "Mental Patient" (3.55) similarly; more toward the unfavorable dimension, with "Mental Patient" somewhat less unfavorable.
4. Severe Disorder: All the concepts that make up this category are viewed with a general unfavorableness. "Insane" (2.98) has the lowest mean score of them all--"Schizophrenic" (3.49), "Paranoid" (3.14), and "Crazy" (3.35).
5. Physical Disease: "Heart" and "Cancer" are viewed favorably by the future teacher respondents, with "Cancer" (4.53) more favorable than "Heart" (4.25).

Analysis of Responses to Types of Concepts for Summer Teachers

Data relevant to this discussion is found in Figure 5.

1. Professionals: The concept "Doctor" is rated highest (5.53) among the professionals. "Psychologist" and "Psychiatrist" are close with regard to favorableness with means of 4.93 and 4.99 respectively.

Figure 5.--'Favorableness Index" of Five Types of Concepts, Responses of Summer Teachers.

| PROESSSIONALS |  |  | mNORMAL" |  |  |  | DISORDER |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DOCTOR | $\begin{aligned} & \text { PSYCHO- } \\ & \text { LOGIST } \end{aligned}$ | PSYCHIATKIST | ME | average PERSON | MOST <br> PEOPLE | EX-MENTAL <br> PATIENT | NEUROTIC PERSON | MENTAL <br> patient |

5.60
5.20
4.80
4.40

PHYSICAL DISEASE

|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| SEVVERE DISORAER |  |  |  |
| SCHIZO- | PARANOID | CRAZY | INSANE |
| PHRENIC | PERSON | PERSON | PERSON |
| PERSON |  |  |  |

4.10
2. "Normal": The respondents view themselves more favorably than the "Average Person" (4.62), "Most People" (4.38) and the "Ex-Mental Patient" (4.46). The concept "Me" has a mean of 5.59.
3. Disorder: "Neurotic" and "Mental Patient" are seen as unfavorable with means of 3.53 and 3.52 respectively.
4. Severe Disorder: While all four concepts that compose this category are toward the unfavorable dimension, "Crazy" (3.03) is the most unfavorable. The means of "Schizophrenic" (3.42) and "Insane" (3.43) are close, with "Paranoid" somewhat less (3.29).
5. Physical Disease: The summer teachers tend to view "Heart Disease" (4.01) slightly more favorable than "Cancer" (3.69).

Analysis of Types of Concepts for All
High School Teachers, Summer Teachers, and Future Teachers

1. Professionals: The concepts "Doctor," "Psychologist," and "Psychiatrist" are all viewed with general favorableness. However, in all three groups the respondents rated "Doctor" highest among the professionals--Future Teachers (5.37), Summer Teachers (5.53), and High School Teachers (5.54). In two of the three samples (Future Teachers and High School Teachers) "Psychologist" is second and "Psychiatrist" lowest.
2. "Normal": The concept 'Me" is the highest rated in this category among all samples--High School Teachers (5.48), Summer Teachers (5.59), and Future Teachers (5.33). While "Average Person," "Most People," and "Ex-Mental Patient" are viewed along the favorable dimension, the respondents view themselves most favorably.
3. Disorder: "Neurotic" and "Mental Patient" are both viewed with a general unfavorableness by the respondents of all three samples. It varies somewhat among the samples as to the degree of unfavorableness.
4. Severe Disorder: "Schizophrenic," "Paranoid," "Crazy," and "Insane" were viewed along the unfavorable dimension by all three samples. It was consistent among the samples that "Schizophrenic" was the least unfavorable.
5. Physical Disease: "Heart" is viewed with general unfavorableness by the Summer Teachers, Future Teachers, and High School Teachers. The concept "Cancer," on the other hand, was seen in an unfavorable light by the Summer Teachers (3.69).

Now we turn our attention to the hypotheses concerning knowledgeability, which are based on the mental health opinion items.

## High School Teachers

Hypothesis 4 states: The older teachers will be more knowledgeable than the younger teachers.

Results: Table 4 shows that for the most part, across schools the older age group (34 and over) have lower knowledgeability scores than the younger group ( 25 years-less). The middle age group (26-33) seem to be more knowledgeable; they tend to have higher scores than both the older and younger groups in all samples except Fowler. This could indicate the possible existence of a curvilinear relationship. Hypothesis 4 is not supported.

Hypothesis 5 states: There will be no relationship between sex and knowledgeability.

Table 4.--Relationship Between Knowledgeability Score and Age for High School Teachers.

|  | Mean Knowledgeability Score |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Fowler | Ovid- <br> Elsie | St. <br> Johns | Williamston | Grand <br> Rapids | Average <br> Score |
| 25 - less | 92.00 | 84.00 | 76.20 | 82.67 | 81.67 | 83.31 |
| $26-33$ | 84.33 | 84.67 | 79.26 | 84.67 | 90.43 | 84.67 |
| $34-$ over | 92.67 | 77.36 | 76.32 | 82.40 | 80.56 | 80.56 |
|  |  |  | N for Each Knowledgeability Mean | Total |  |  |
| $25-1$ less | 1 | 4 | 5 | 6 | 3 | 19 |
| $26-33$ | 9 | 6 | 27 | 6 | 7 | 55 |
| $34-$ over | 3 | 11 | 22 | 10 | 18 | 64 |

Results: Table 5 shows that for each sample of high school teachers, the females have higher knowledgeability scores. This indicates that the female teachers are more knowledgeable. Hypothesis 5 is not supported.

Hypothesis 6 states: Respondents who grew up in an urban area (suburban or non-suburban) will be more knowledgeable than those who grew up in the open country.

Results: Table 6 shows that those who grew up in an urban area (suburban or non-suburban) are more knowledgeable than those who grew up in the open country. This is indicated for the most part across all High School Teacher groups (with the exception of OvidElsie where it is the reverse, but very small). The suburban group is also somewhat higher than the non-suburban group. Hypothesis 6 is supported.

Table 5.--Relationship Between Knowledgeability Score and Sex for High School Teachers.

| Sex | Mean Knowledgeability Score |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fowler | OvidElsie | St. Johns | Williamston | Grand Rapids | Average Score |
| Male | 82.29 | 79.43 | 75.89 | 80.92 | 82.20 | 80.15 |
| Female | 92.17 | 83.29 | 80.70 | 86.40 | 88.50 | 86.21 |
|  | N for Each Knowledgeability Mean |  |  |  |  | Total |
| Male | 7 | 15 | 35 | 13 | 25 | 94 |
| Female | 6 | 7 | 23 | 10 | 4 | 50 |
| $\begin{aligned} & \text { Probability } \\ & \text { t-test } \\ & \text { (two-tail) } \end{aligned}$ | . 02 | . 42 | . 12 | . 11 | . 25 |  |

Table 6.--Relationship Between Knowledgeability Score and Community Type for High School Teachers.

| $\begin{aligned} & \text { Community } \\ & \text { Type } \end{aligned}$ | Mean Knowledgeability Score |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fowler | OvidElsie | St. Johns | Williamston | Grand Rapids | Average Score |
| Open |  |  |  |  |  |  |
| Suburb | 85.00 | 87.00 | 80.80 | 84.70 | 88.75 | 85.25 |
| Urban | 90.00 | 79.38 | 78.25 | 84.86 | 81.25 | 82.75 |
| N for Each Knowledgeability Mean |  |  |  |  |  | Total |
| Open |  |  |  |  |  |  |
| Suburb | 3 | 3 | 10 | 10 | 8 | 34 |
| Urban | 6 | 13 | 28 | 7 | 16 | 70 |

Hypothesis 7 states: There will be no relationship between community size and knowledgeability.

Results: Table 7 indicates very little difference in the knowledgeability scores of those who grew up in communities $\mathbf{2 0 , 0 0 0}$ and less, or communities of over 20,000. In general, hypothesis 7 stating no difference is supported.

Table 7.--Relationship Between Knowledgeability Score and Community Size for High School Teachers.

| $\begin{aligned} & \text { Community } \\ & \text { Size } \end{aligned}$ | Mean Knowledgeability Score |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fowler | OvidElsie | St. Johns | Williamston | Grand Rapids | Average Score |
| $\begin{array}{r} 20,000- \\ \text { less } \end{array}$ | 87.10 | 79.00 | 77.17 | 83.00 | 82.91 | 81.84 |
| over $20,000$ | 84.25 | 83.50 | 79.11 | 83.78 | 81.54 | 82.44 |
| N for Each Knowledgeability Mean |  |  |  |  |  | Total |
| $\begin{array}{r} 20,000- \\ \text { less } \end{array}$ | 10 | 13 | 41 | 14 | 11 | 89 |
| over $20,000$ | 4 | 8 | 19 | 9 | 26 | 66 |
| Probability, <br> t-test <br> (two-tail) |  |  |  |  |  |  |

Hypothesis 8 states: Those teachers who teach social science subjects will be more knowledgeable than the other teachers.

Results: Table 8 shows very little difference in the knowledgeability scores of those who teach social science and those who

Table 8.--Relationship Between Knowledgeability Score and Subject Taught for High School Teachers.

|  | Mean Knowledgeability Score |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Subject <br> Taugnt | Fowler | Ovid- <br> Elsie | St. <br> Johns | Williamston | Grand <br> Rapids | Average <br> Score |
| Social <br> Science | 86.20 | 81.60 | 79.94 | 83.40 | 83.70 | 82.97 |
| All <br> Others | 86.33 | 80.44 | 76.93 | 83.23 | 81.30 | 81.65 |
| Social <br> Science | 5 | 5 | 17 | 10 | 10 | 47 |
| All for Each Knowledgeability Mean <br> Others | 9 | 16 | 43 | 13 | 27 | 108 |
| Probability, <br> t-test <br> (one-tail) | .49 | .41 | .18 | .48 | .26 | Total |

teach other subjects. The scores of the social science group are somewhat higher, but not enough to indicate a clear-cut difference. In general, hypothesis 8 is not supported.

Hypothesis 9 states: Teachers who have more years of teaching experience will be more knowledgeable.

Results: Table 9 does not indicate a pattern of higher knowledgeable scores across schools for teachers who have 11 or more years of teaching experience. Hypothesis is not supported.

Hypothesis 10 states: There will be no relationship between knowledgeability and type of institution attended (public vs. private).

Table 9.--Relationship Between Knowledgeability Score and Teaching Experience for High School Teachers.

| Teaching Experience | Mean Knowledgeability Score |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fowler | OvidElsie | St. Johns | Williamston | Grand <br> Rapids | Average Score |
| $10 \text { years }$ or less | 85.42 | 84.62 | 79.05 | 82.86 | 85.92 | 83.57 |
| 11 years or more | 91.50 | 74.38 | 75.74 | 84.00 | 80.04 | 81.13 |
|  | N for Each Knowledgeability Mean |  |  |  |  | Total |
| 10 years or less | 12 | 13 | 37 | 14 | 12 | 88 |
| 11 years or more | 2 | 8 | 23 | 9 | 25 | 67 |
| $\begin{aligned} & \text { Probability, } \\ & \text { t-test } \\ & \text { (one-tail) } \end{aligned}$ | . 17 | . 01 | . 13 | . 37 | . 05 |  |

Results: In Table 10 we find that the knowledgeability scores for teachers who attend public (including MSU) and private institutions are very close. There are no distinctive differences. Hypothesis 10 stating no relationship is supported.

Hypothesis 11 states: Respondents who have mental health experience (family, friends, or visit mental health facilities) will be more knowledgeable than those who have none.

Results: In Table 11 we do not find a pattern of outstanding differences in knowledgeability scores between respondents with mental health experience and those without mental health experience.

Table 10.--Relationship Between Knowledgeability Score and Type of Institution Attended for High School Teachers.

| Type of Institution Attended | Mean Knowledgeability Score |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fowler | OvidElsie | St. <br> Johns | Williamston | Grand Rapids | Average Score |
| MSU | 84.50 | 81.38 | 79.46 | 85.42 | 0 | 82.69 |
| Other Public College | 86.71 | 80.33 | 75.96 | 81.00 | 90.33 | 82.87 |
| Private College | 94.00 | 80.00 | 82.67 | 81.00 | 82.28 | 83.99 |
|  | N for Each Knowledgeability Mean |  |  |  |  | Total |
| MSU | 6 | 8 | 24 | 12 | 0 | 50 |
| $\begin{array}{lllllll}\text { Other } \\ \begin{array}{l}\text { Public } \\ \text { College }\end{array} & 7 & 12 & 25 & 8 & 3\end{array}$ |  |  |  |  |  |  |
| Private College | 1 | 1 | 6 | 3 | 25 | 36 |

Table 11.--Relationship Between Knowledgeability Score and Mental Health Experience Indexes for High School Teachers.

| Mental Health Experience Index | Mean Knowledgeability Score |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Fowler | OvidElsie | St. Johns | Williamston | Grand Rapids | Average Score |
| FRIENDS: |  |  |  |  |  |  |  |
| None | 83 | 87.00 | 79.50 | 74.39 | 83.25 | 79.29 | 80.69 |
| Some | 72 | 85.33 | 81.82 | 82.88 | 83.36 | 84.20 | 83.52 |
| $\begin{aligned} & \text { Probability } \\ & \text { t-test } \\ & \text { (one-tail) } \end{aligned}$ |  | . 36 | . 30 | . 002 | . 48 | . 07 |  |
| FAMILY: |  |  |  |  |  |  |  |
| None | 87 | 85.88 | 79.15 | 76.44 | 83.46 | 79.21 | 80.83 |
| Some | 68 | 86.83 | 83.25 | 79.54 | 83.10 | 84.83 | 83.51 |
| $\begin{aligned} & \text { Probability } \\ & \text { t-test } \\ & \text { (one-tail) } \end{aligned}$ |  | . 14 | . 19 | . 15 | . 46 | . 03 |  |

VISITS:

| None | 60 | 88.90 | 84.29 | 74.50 | 83.56 | 78.40 | 81.93 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Some | 95 | 79.75 | 78.93 | 79.97 | 83.14 | 83.16 | 81.01 |
| Probability <br> t-test <br> (One-tail) |  | .02 | .13 | .03 | .45 | .20 |  |

COMBINED:

| 3 or less | 90 | 86.56 | 79.86 | 75.11 | 83.47 | 79.50 | 80.90 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| "Yes" |  |  |  |  |  |  |  |
| (or more <br> "Yes" | 65 | 85.80 | 82.43 | 81.79 | 83.00 | 83.81 | 83.37 |
| Probability <br> t-test <br> (One-tail) |  | .48 | .30 | .01 | .45 | .20 |  |

For the most part, the scores are relatively close across schools. In general, hypothesis 11 is not supported.

## Future Teachers

Hypothesis 12 states: There will be no relationship between age and knowledgeability. (Since the sample is composed of mostly Juniors and Seniors there is a restricted age range.)

Results: Table 12 shows that the knowledgeability score tended to increase with each age level, with the 26 and over group having the highest score (85.22); though there are only nine cases. Hypothesis 12 is not supported.

Table 12.--Relationship Between Knowledgeability Score and Age for Future Teachers.

| Age | N | Mean Knowledgeability Score |
| :--- | :---: | :---: |
| (a) 21 or less | 29 | 77.24 |
| (b) $22-25$ | 26 | 79.88 |
| (c) 26 and over | 9 | 85.22 |
| Probability, t-test |  |  |
| (two-tail) |  |  |
| (a) and (b) | .30 |  |
| (a) and (c) | .03 |  |
| (b) and (c) | .15 |  |

Hypothesis 13 states: There will be no relationship between sex and knowledgeability.

Results: Table 13 shows that the males have a slightly higher knowledgeability score, but there is not very much difference. In general, hypothesis 13 of no relationship is supported.

Table 13.--Relationship Between Knowledgeability Score and Sex for Future Teachers.

| Sex | N | Mean Knowledgeability Score |
| :--- | :---: | :---: |
| Male | 38 | 80.60 |
| Female | 28 | 77.68 |
| Probability, t-test <br> (two-tail) |  | .22 |

Hypothesis 14 states: Those Future Teachers who are social science majors will be more knowledgeable than the other majors.

Results: Table 14 shows that the social science majors have a slightly lower knowledgeability score than the other majors. However there is very little difference in the scores. In general, hypothesis 14 is not supported.

Table 14.--Relationship Between Knowledgeability Score and Teaching Major for Future Teachers.

| Teaching Major | N | Mean Knowledgeability Score |
| :--- | :---: | :---: |
| Social Science | 27 | 78.18 |
| All Others | 39 | 80.18 |
| Probability, t-test <br> (one-tail) | .20 |  |

Hypothesis 15 states: Respondents who grew up in an urban area (suburban or non-suburban) will be more knowledgeable than those who grew up in the open country.

Results: Table 15 shows that the Future Teachers who grew up in an urban area (suburban or non-suburban) have higher knowledgeability scores, and thus are more knowledgeable. Hypothesis 15 is supported.

Table 15.--Relationship Between Knowledgeability Score and Community Type for Future Teachers.

| Community Type | N | Mean Knowledgeability Score |
| :--- | :---: | :---: |
| (a) Open Country | 15 | 76.07 |
| (b) Suburb | 28 | 78.43 |
| (c) Urban | 23 | 83.09 |
| Probability, t-test <br> (two-tail) |  |  |
| (a) and (b) | .23 |  |
| (a) and (c) | .01 |  |
| (b) and (c) | .01 |  |

Hypothesis 16 states: There will be no difference between community size and knowledgeability.

Results: Table 16 shows that those Future Teachers who came from communities of over 20,000 have a higher knowledgeability score. This indicates that they are somewhat more knowledgeable. Hypothesis 16 is not supported.

Table 16.--Relationship Between Knowledgeability Score and Community Size for Future Teachers.

| Community Size | N | Mean Knowledgeability Score |
| :--- | :---: | :---: |
| 20,000 and less | 28 | 75.93 |
| Over 20,000 | 38 | 81.89 |
| Probability, t-test <br> (two-tail) | .01 |  |

Hypothesis 17 states: Respondents who have mental health experience (family, friends, or visits to mental health facilities) will be more knowledgeable than those who have none.

Results: Table 17 does not indicate outstanding differences in the knowledgeability score of those with mental health experience and those without. However, with reference to visits to mental health facilities, those with some experience are somewhat higher; there still does not seem to be a clear-cut pattern. Contrary to expectations, hypothesis 17 is not supported.

Table 18 gives a summary of the results between knowledgeability and the nine social variables used in this study.

## Mental Health Opinion Items

The 35 opinion items have been divided into nine factors of similar items, for convenience of analysis. These factors were derived by Townsend (see Townsend, 1975) through a factor analysis of his research in the mental health area. They are also very similar to the factors derived by Nunnally in his research investigations

Table 17.--Relationship Between Knowledgeability Score and Mental Health Experience Indexes for Future Teachers.

| Mental Health <br> Experience Index |
| :--- |

FRIENDS:
No experience
29
79.24
Some Experience
37
79.46
Probability, t-test
(one-tail) . 46

FAMILY:
No Experience
31
79.64

Some Experience
35
79.11

Probability, t-test
(one-tail) .41

## VISITS:

No Experience
31
78.32

Some Experience
35
80.29

Probability, t-test
(one-tail) .20

COMBINED:
3 or less "Yes"
36
79.08

4 or more "Yes"
30
79.70

Probability, t-test
(one-tail) . 40
Table 18.--Summary of the Relationship Between Social Variables and Knowledgeability.

| Variables | Hypotheses |  | Conclusion |  |
| :---: | :---: | :---: | :---: | :---: |
| Know1edgeability Score | High School Teachers | Future Teachers | High School Teachers | Future Teachers |
| 1. Age | Older-Higher | No Relationship | Not Supported | Not Supported |
| 2. Sex | No Relationship | No Relationship | Not Supported | Supported |
| 3. Community Type | Urban-Higher | Urban-Higher | Supported | Supported |
| 4. Community Size | No Relationship | No Relationship | Supported | Not Supported |
| 5. Subjects Taught | Social Science-Higher | Not Applicable | Not Supported |  |
| 6. Teaching Major | Not Applicable | Social Science-Higher | --- | Not Supported |
| 7. Teaching Experience | More-Higher | Not Applicable | Not Supported | ----- |
| 8. Type of Insitution Attended | No Relationship | Not Applicable | Supported | ------ |
| 9. Mental Health Experience | Some-Higher | Some-Higher | Not Supported | Not Supported |

during the 1950's. The following chart shows the factors and the number of items in each that corresponds to our research study:
Mental Health FactorsNumber of Items
I. Negative Stereotypes ..... 4
II. Will Power ..... 6
III. Sex Differences ..... 1
IV. Environmental Forces ..... 3
V. Role of Psychiatrist ..... 4
VI. Damage, Incurability, Seriousness ..... 7
VII. Age and Childhood Experiences ..... 3
VIII. Physical Causes ..... 3
IX. Miscellaneous ..... 4
Several tables and Figure 6 will be used as references in the analysis of opinion factor items.

## I. Negative Stereotypes

Item 7: "You can tell a person who is mentally ill from his appearances." There is strong disagreement with this item across all five high schools. The Future Teachers (2.17) and Summer Teachers (1.91) also disagree with this item (the Future Teachers somewhat more strongly), as shown in Table 19.
Item 16: "The insane laugh more than normal people." Table 19 shows there is disagreement with this item, with Fowler (1.86) disagreeing the strongest. The High School Teachers (2.56), Future Teachers (2.49) and Summer Teachers (2.60) all have very similar opinions toward this item.

Figure 6.--Means of Mental Health Opinion Items for High School Teachers, Future Teachers and Summer Teachers.

Table 19.--Opinion Statements, Responses of Teachers in Five High Schools, Future Teachers, and Summer Teachers ('Negative Stereotypes"). Ovid-

Item 26: "Most of the people in mental hospitals speak in words that can be understood." Table 19 indicates agreement with this item across all five schools, with the Williamston Teachers (5.56) agreeing strongest. The average deviation is .12 which also indicates consensus among the teachers in their opinions. The Summer Teachers (5.06) agree somewhat more strongly than the High School Teachers (4.74) and the Future Teachers (4.39).

Item 33: "The eyes of the insane are glassy." Table 19 shows that across the five schools, the Fowler teachers (1.79) disagree strongest. The High School Teachers (2.46), Future Teachers (2.58), and Summer Teachers (2.35) all disagree strongly with this item.
II. Will Power

Item 8: "People who become mentally ill have little will power." Table 20 shows that the average deviation is .14 for this item which indicates that the teachers' opinions are very similar. The Future Teachers (2.88) and Summer Teachers (2.67), along with the High School Teachers (2.55) disagree strongly with this item.

Item 10: "People who keep themselves occupied with pleasant thoughts seldom become mentally ill." Table 20 shows there is less disagreement with this item among the Fowler teachers (3.36) and Grand Rapids Teachers (3.08). The High School Teachers, Future Teachers, and Summer Teachers have very similar opinions of strong disagreement with this item.

Item 13: "Will power alone will not cure mental disorder." Table 20 shows very strong agreement with this item among four of
Table 20.--Opinion Statements, Responses of Teachers in Five High Schools, Future Teachers and Summer Teachers ('Will Power").

| Will Power | Fowler | OvidElsie | $\begin{aligned} & \text { William- } \\ & \text { ston } \\ & \hline \end{aligned}$ | Grand Rapids | St. <br> Johns | *Ave. Dev. | High School Teachers | Future Teachers | Summer <br> Teachers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8. People who become mentally ill have little will power. | 2.14 | 2.52 | 2.74 | 2.51 | 2.60 | . 14 | 2.55 | 2.88 | 2.67 |
| 10. People who keep themselves occupied with pleasant thoughts seldom become mentally ill. | 3.36 | 2.43 | 2.74 | 3.08 | 3.02 | . 27 | 2.94 | 2.97 | 3.03 |
| 13. Will power alone will not cure mental disorder. | 5.57 | 5.61 | 5.39 | 5.74 | 4.94 | . 26 | 5.35 | 4.94 | 5.19 |
| 24. If a person concentrates on happy memories he will not be bothered by unpleasant things in the present. | 2.50 | 1.91 | 2.52 | 2.46 | 2.55 | . 17 | 2.43 | 2.15 | 2.38 |
| 25. Mental health is largely a matter of trying hard to control the emotions. | 3.07 | 2.83 | 2.30 | 2.56 | 3.50 | . 37 | 2.97 | 2.59 | 2.88 |
| 35. A person can not rid himself of unpleasant memories by trying hard to forget them. | 5.00 | 4.65 | 4.65 | 5.28 | 4.44 | . 25 | 4.75 | 4.71 | 4.92 |

*Average deviatın, means for five high schools.
the five schools. The St. Johns teachers (4.94) agree somewhat less strongly. Of the three groups the Future Teachers (4.94), like the St. Johns teachers, agree less strongly.

Item 24: "If a person concentrated on happy memories he will not be bothered by unpleasant things in the present." Table 20 shows that the strongest disagreement with this item is among the Obid-E1sie teachers (1.91). The means of the Summer Teachers (2.38) and High School Teachers (2.43) are very close, and the Future Teachers (2.15) are lower.

Item 25: "Mental health is largely a matter of trying hard to control the emotions." The average deviation of . 37 in Table 20 indicates much dispersion in the means across schools. Though they all tend to disagree with the item, Fowler (3.04) and St. Johns (3.50) disagree less. The Future Teachers (2.15) disagree with the item more than the other two groups.

Item 35: "A person cannot rid himself of unpleasant memories by trying hard to forget them." Table 20 shows very strong agreement with the item among Fowler (5.00) and Grand Rapids (5.28) teachers; somewhat less in Ovid-Elsie (4.65), Williamston (4.65) and St. Johns (4.44). Of the three groups, the Summer Teachers have stronger agreement (4.92).

## III. Sex Differences

Item 14: "Women have no more emotional problems than men do." Table 21 shows that Ovid-Elsie (4.70) and Williamston (4.13) tend to agree with the item; Fowler (3.93), Grand Rapids (3.85) and St.

Johns (3.95) tend to disagree with the item. The Summer Teachers (4.42) tend to agree with the item more than the High School Teachers (4.06) and Future Teachers (4.06).
IV. Environmental Forces

Item 4: "Helping the mentally ill person with his financial and social problems often improve his condition." Table 22 shows that the strongest agreement with the item is in Fowler (5.50) and Williamston (5.22) samples. The Future Teachers (5.23) and Summer Teachers (5.10) have stronger opinions of agreement toward this item.

Item 15: 'Mental illness can usually be helped by a vacation or change of scene." Table 22 indicates disagreement across all five schools, but it's not very strong. The Future Teachers (3.68) disagree with the item much less than the other two groups.

Item 12: "People cannot maintain good mental health without the support of strong persons in their environment." Table 22 shows that Fowler (3.43) and Williamston (3.96) tend to disagree with the item; Ovid-E1sie (4.52), Grand Rapids (4.39) and St. Johns (4.07) tend to agree with the item. There are very similar opinions of agreement among the High School Teachers, Future Teachers and Summer Teachers.
V. Role of Psychiatrist

Item 6: "The good psychiatrist acts like a father to his patients." Table 23 shows that all five schools disagree with the item; though somewhat less among the Williamston teachers (3.13). There are very similar opinions of disagreement among the three groups.
Table 21.--Opinion Statements, Responses of Teachers in Five High Schools, Future Teachers and Summer Teachers ("Sex Differences").

| Sex Differences | Fowler | Ovid- <br> Elsie | $\begin{aligned} & \begin{array}{l} \text { William- } \\ \text { ston } \end{array} \\ & \hline \end{aligned}$ | Grand Rapids | St. <br> Johns | *Ave. Dev. | $\begin{array}{c}\text { High School } \\ \text { Teachers }\end{array}$ | Future <br> Teachers | Summer Teachers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14. Women have no more emotional problems than me do. | 3.93 | 4.70 | 4.13 | 3.85 | 3.95 | . 23 | 4.06 | 4.06 | 4.42 |

Table 22.--Opinion Statements, Responses of Teachers in Five High Schools, Future Teachers and Summer Teachers ("Environmental Forces").

| Environmental Forces | Fowler | Ovid- <br> Elsie | $\begin{aligned} & \text { William- } \\ & \text { ston } \\ & \hline \end{aligned}$ | Grand Rapids | St. <br> Johns | *Ave. Dev. | High School <br> Teachers | Future Teachers | Summer Teachers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4. Helping the mentally ill person with his financial problems often improve his condition and social. | 5.50 | 4.83 | 5.22 | 4.80 | 4.84 | . 24 | 4.94 | 5.23 | 5.10 |
| 15. Mental illness can usually be helped by a vacation or change of scene. | 3.21 | 3.22 | 3.26 | 3.08 | 3.50 | .15 | 3.30 | 3.68 | 3.39 |
| 12. People can not maintain good mental health without the support of strong persons in their environment. | 3.43 | 4.52 | 3.96 | 4.39 | 4.07 | . 32 | 4.14 | 4.22 | 4.03 |

[^4]Table 23.--Opinion Statements, Responses of Teachers in Five High Schools, Future Teachers and Summer Teachers ("Role of Psychiatrist").

*Average deviation, means for five high schools.

Item 17: "Psychiatrists try to show the mental patient where his ideas are incorrect." Table 23 indicates varying opinions (Average Deviation .37) toward this item across schools. The Fowler teachers (4.29) tend to agree; St. Johns (3.47), Ovid-Elsie (3.30), Grand Rapids (3.13) and Williamston (2.83) all tend to disagree (with Williamston strongest). The Future Teachers (3.73) stand out from the other groups with less disagreement toward the item.

Item 21: "The main job of the psychiatrist is to recommend hobbies and other ways for the mental patient to occupy his mind." Table 23 shows strong disagreement with this item across all five schools. All three groups tend to strongly disagree with the item and their mean scores are very close.

Item 22: "Psychiatrists try to teach mental patients to hold in their strong emotions." Table 23 shows that all five schools strongly disagree with the item; with Grand Rapids (1.74) strongest in disagreement. There is a consensus of strong disagreement with this item among all three groups.
VI. Damage, Incurability, Seriousness

Item 1: "Mental disorder is one of the most damaging illnesses that a person can have." Table 24 shows that Williamston (3.96) disagrees somewhat with the item, and the other four schools agree with the item. The Future Teachers (4.87), High School Teachers (4.36) and Sumer Teachers (4.76) all tend to agree with the item.
Table 24.--Opinion Statements, Responses of Teachers in Five High Schools, Future Teachers and Summer Teachers ('Damage, Incurability, Seriousness").

| Damage, Incurability, Seriousness | Fowler | OvidElsie | $\begin{aligned} & \text { William- } \\ & \text { ston } \\ & \hline \end{aligned}$ | Grand Rapids | $\begin{gathered} \text { St. } \\ \text { Johns } \\ \hline \end{gathered}$ | *Ave. Dev. | $\qquad$ | Future <br> Teachers | Summer Teachers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Mental disorder is one of the most damaging illnesses that a person can have. | 4.07 | 5.09 | 3.96 | 4.28 | 4.36 | . 30 | 4.36 | 4.87 | 4.76 |
| 3. The seriousness of the mental health problem in the country has been exaggerated. | 2.00 | 2.30 | 1.70 | 2.82 | 2.74 | . 41 | 2.48 | 2.15 | 2.27 |
| 5. Mental patients usually make a good adjustment to society when they are released. | 4.21 | 3.87 | 4.04 | 4.31 | 4.00 | . 14 | 4.08 | 3.88 | 4.32 |
| 11. Few people who enter mental hospitals ever leave. | 1.79 | 2.13 | 2.44 | 1.72 | 2.39 | . 27 | 2.14 | 2.64 | 2.31 |
| 18. Mental disorder is not a hopeless condition. | 6.57 | 6.04 | 6.30 | 6.49 | 6.13 | . 18 | 6.27 | 6.10 | 6.07 |
| 19. Mental health is one of the most important national problems. | 6.14 | 6.17 | 5.91 | 5.39 | 5.39 | . 36 | 5.64 | 5.59 | 5.91 |
| 27. There is not much that can be done for a person who develop a mental disorder. | 1.21 | 1.78 | 1.65 | 1.67 | 1.87 | . 17 | 1.72 | 1.83 | 1.83 |

[^5]Item 3: "The seriousness of the mental health problem in this country has been exaggerated." Table 24 indicates strong disagreement with Williamston teachers (1.70) strongest. There is strong disagreement with this item among all three groups.

Item 5: "Mental patients usually make a good adjustment to society when they are released." Table 24 shows that four of the schools tend to agree while Ovid-Elsie (3.87) disagrees somewhat. Of the three groups the Future Teachers (3.88) also disagree somewhat with the item.

Item 11: "Few people who enter mental hospitals ever leave." Table 24 shows that Fowler (1.79) and Grand Rapids (1.72) very strongly disagree with the item. While all three groups tend to disagree with the item, the Future Teachers disagree somewhat less.

Item 18: "Mental Disorder is not a hopeless condition." Table 24 shows that all five schools very strongly agree with the item (mean score above 6.00). The Future Teachers (6.10) and Summer Teachers (6.07), along with the High School Teachers (6.27) all tend to agree very strongly with the item.

Item 19: "Mental health is one of the most important national problems." Table 24 shows that while they all agree strongly, Fowler (6.57) and Ovid-Elsie (6.04) are the strongest. Of the three groups, the Summer Teachers (5.91) have the strongest agreement with the item.

Item 27: "There is not very much that can be done for a person who develops a mental disorder." Table 24 shows very strong
disagreement across all five schools. The three groups very strongly disagree with the item and their means are very close.

VII. Age and Childhood Experiences

Item 31: "Disappointments do not affect children as much as they do adults." Table 25 shows that all five schools disagree strongly with this item. The three groups disagree strongly with the item, (Future Teachers somewhat less.)

Item 32: "Most of the insanity cases are found in people over 50 years of age." Table 25 shows that all five schools have strong disagreement with the item. The Future Teachers (3.04) disagree with the item somewhat less than the other two groups.

Item 9: "Most mental disturbances in adults can be traced to emotional experiences in childhood." Table 25 shows that there is agreement with the item across the five schools. Of the three groups, the High School Teachers (4.84) agree strongest with the item.
VIII. Physical Causes

Item 2: "Nervous breakdowns seldom have a physical origin." Table 26 shows that while all five schools disagree with the item, Grand Rapids (2.44) is strongest. The strongest disagreement with the item is among the Future Teachers (2.77).

Item 20: "Mental disorder is usually brought on by physical causes." Table 26 shows that the Fowler teachers (2.86) have the strongest disagreement with the item. The Future Teachers (3.73) disagree less with the item than the other two groups.
*Average deviation, means for five high schools.
Table 25.--Opinion Statements, Responses of Teachers in Five High Schools, Future Teachers and Summer Teachers ("Age and Childhood Experiences").


Item 23: "Almost any disease that attacks the nervous system is likely to bring on insanity." Table 26 shows that Grand Rapids (1.95) has the strongest disagreement with the item. All three groups tend to disagree strongly with the item.
IX. Miscellaneous

Item 28: 'Most people can recognize the type of person who is likely to have a nervous condition." Table 27 shows that Williamston (1.96) has very strong disagreement with the item. The Future Teachers, Summer Teachers, and High School Teachers disagree strongly with the item.

Item 29: "Most suicides occur because of rejection in love." Table 27 shows that while all five schools disagree with the item, Williamston (2.74) is strongest. The Future Teachers (3.58) disagree with the item somewhat less than the other two groups.

Item 30: 'Many of the people who go to mental hospitals are able to return to work in our society." Table 27 shows that for the most part all five schools agree strongly with the item, but Fowler (6.07) is strongest. There is strong agreement with the item among the three groups.

Item 34: "People who go from doctor to doctor with many complaints know that there is nothing really wrong with them." Table 27 shows that there is strong disagreement with this item across schools. There is strong disagreement with the item among the three groups.

A comparison of the mean scores on the mental health opinion items for the High School Teachers and a sample of Grand Rapids
Table 27.--Opinion Statements, Responses of Teachers in Five High Schools, Future Teachers and
Summer Teachers ("Miscellaneous").

|  | Miscellaneons | Fowler | OvidElsie | $\begin{aligned} & \begin{array}{l} \text { William- } \\ \text { ston } \end{array} \\ & \hline \end{aligned}$ | Grand Rapids | $\begin{gathered} \text { St. } \\ \text { Johns } \\ \hline \end{gathered}$ | *Ave. Dev. | High School Teachers | Future Teachers | Summer Teachers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28. | Most people can recognize the type of person who is likely to have a nervous condition. | 2.43 | 2.44 | 1.96 | 2.36 | 2.52 | . 14 | 2.38 | 2.57 | 2.42 |
| 29. | Most suicides occur because of rejection in love. | 3.00 | 3.83 | 2.74 | 3.77 | 3.32 | . 34 | 3.39 | 3.58 | 3.36 |
| 30. | Many fo the people who go to mental hospitals are able to return to work in our society. | 6.07 | 5.30 | 5.61 | 5.46 | 4.92 | . 29 | 5.30 | 5.19 | 5.33 |
| 34. | People who go from doctor to doctor with many complaints know that there is nothing really wrong with them. | 2.07 | 2.70 | 2.65 | 2.31 | 2.44 | . 19 | 2.44 | 2.59 | 2.45 |

*Average deviation, means for five high schools.
citizens (which are viewed as a general public sample), revealed a very high correlation of .96 (see Appendix C).

## CHAPTER VI

## SUMMARY AND CONCLUSIONS

We began this investigation with a general look at the problem concerning mental illness in our society today. The fact that mental health educators seem to look to schools, rather than the family, to disseminate knowledge and attitudes about mental health, leads to the stressing importance of schools in transmitting knowledge and values, and thus to the need to study the attitudes and opinions of teachers. Our purpose in this study has been just that, to investigate the attitudes and opinions of high school teachers toward mental health.

There were three main groups of teachers involved in this investigation. They are: 161 High School Teachers representing five high schools in Michigan (Fowler, Ovid-Elsie, St. Johns, Williamston, and Grand Rapids); 69 Future Teachers (MSU secondary education students); 173 Summer Teachers (teachers attending MSU summer school).

The Semantic Differential technique and 35 Mental Health Opinion Items were used to obtain data from these samples. The semantic differential was selected as an instrument because (1) it probes the psychological meanings and associative connotations of the scales and concepts in the language repertory of the subjects,
thus avoiding, it is hoped, some of the "facade response" limitations of more direct questions; (2) it can be used as an attitudinal measure and provides the advantage of quantitative data; and (3) since the technique has been used very heavily in the investigation of a wide range of social psychological questions, the present results can be compared and contrasted to a vast amount of other research. The 35 opinion items were selected from 60 items used by Nunnally, on the basis of (1) consensus among mental health experts and (2) our previous research investigations.

There were five types of concepts used in the semantic differential part of this study: Professionals--Doctor, Psychologist, Psychiatrist; "Normal"--Me, Average Person, Most People, Ex-Mental Patient; Physical Disease--Heart Disease and Cancer; Disorder--Mental Patient, Neurotic Person; Severe Disorder--Schizophrenic, Paranoid, Insane, Crazy. The following general hypotheses were set forth concerning these concepts.

Hypothesis 1: The concept "Ex-Mental Patient" will not be distinctive from the other "Normal" concepts (Me, Average Person, Most People), but will be distinctive from the Disorder concepts (Mental Patient, Neurotic Person), and the Severe Disorder concepts (Schizophrenic, Paranoid, Crazy, Insane).

Hypothesis 2: The array of favorableness for the types of concepts will be in this order: Professionals, "Normal," Physical Disease, Disorder, Severe Disorder.

Hypothesis 2a: "Heart Disease" and "Cancer" will be more favorably perceived than the Severe Disorder concepts by all three samples (High School Teachers, Future Teachers, Summer Teachers).

Hypothesis 3: The Future Teachers will tend to view the Severe Disorder concepts less negatively than will the Summer Teachers and High School Teachers.

The data revealed support for hypotheses 1,2 and $2 a$, but did not support hypothesis 3 . The way in which the teachers arrayed the concepts gives us some information about how they view these concepts. Both the Future Teachers and High School Teachers (as well as Summer Teachers) tend to view mental illness in a negative light. The fact that the physical diseases are viewed more favorably tells us that it is not just any disease, but mainly mental disorders that tend to provoke negative responses.

In this study, as in the 1971 study, the concept "Ex-Mental Patient" is viewed the same as essentially "normal" people. This leads to the possible conclusion of less stigmatization of people once diagnosed as mentally ill, at least as far as these respondents are concerned.

It is of basic sociological importance to determine whether opinions about mental health are related to structural varialbes, if more adequate theoretical formulations are to be developed. The nine social variables used in the investigation of the respondents' knowledgeability about mental health are:

Age
Sex
Community Type (one grew up in--open country, suburban, urban)
Community Size
Subjects Taught (High School Teachers)
Teaching Major (Future Teachers)

Type of Institution Attended
Years of Teaching Experience
Reported Mental Health Experience
These variables are examples of the kind of structural variables that need to be examined in order to understand better the functioning of attitudes and opinions concerning mental health and mental disorder, including the critical dimension of "knowledgeability." From the theoretical standpoint, these variables have an "in-between" status--that is, they have some degree of likely relevance on the basis of previous research and widely held beliefs, but they have not been derived or deduced as important as part of a welldeveloped theory. Their in-between status underlines the exploratory nature of this research. The following hypotheses were developed concerning the relationship between knowledgeability and these nine social variables:

## High School Teachers

Hypothesis 4: The older teachers will be more knowledgeable about mental health than the younger teachers. (Hypothesis 4 is not supported)

Hypothesis 5: There will be no relationship between sex and knowledgeability.
(Hypothesis 5 is not supported)
Hypothesis 6: Respondents who grew up in an urban area (suburban or non-suburban) will be more knowledgeable than those who grew up in the open country.
(Hypothesis 6 is supported)
Hypothesis 7: There will be no relationship between community size and knowledgeability. (Hypothesis 7 is supported)

Hypothesis 8: Those teachers who teach social science subjects will be more knowledgeable than the others.
(Hypothesis 8 is not supported)
Hypothesis 9: Teachers who have more years of teaching experience will be more knowledgeable.
(Hypothesis 9 is not supported)
Hypothesis 10: There will be no relationship between type of institution (public vs. private) and knowledgeability.
(Hypothesis 10 is supported)
Hypothesis 11: Respondents who have mental health experience (family, friends, or visits to mental health facilities) will be more knowledgeable than those who have none.
(Hypothesis 11 is not supported)

## Future Teachers

Hypothesis 12: There will be no relationship between age and knowledgeability. (Since this sample is composed of mostly Juniors and Seniors; there is a restricted age range.)
(Hypothesis 12 is not supported)
Hypothesis 13: There will be no relationship between sex and knowledgeability.
(Hypothesis 13 is supported)
Hypothesis 14: Those "Future Teachers" who are social science majors will be more knowledgeable than the other majors.
(Hypothesis 14 is not supported)
Hypothesis 15: Respondents who grew up in an urban area (suburban or non-suburban) will be more knowledgeable than those who have none.
(Hypothesis 15 is supported)
Hypothesis 16: There will be no relationship between community size and knowledgeability.
(Hypothesis 16 is not supported)
Hypothesis 17: Respondents who have mental health experience (family, friends, or visits to mental health facilities) will be more knowledgeable than those who have none.
(Hypothesis 17 is not supported)

Given these assumptions (1) that teachers are important with respect to influence on the attitudes of young people, and hence on the future characteristics of popular beliefs, (2) that they differ with respect to knowledgeability about mental health, and (3) that we have a reasonably adequate measure of knowledgeability, one can conclude that (a) it is socially significant to learn more about factors related to this knowledgeability and (b) learning more about how such factors are related to attitudes and opinions is prerequisite to "improving" teacher's knowledgeability.

The data revelaed that the teachers tend to differ in knowledgeability with regard to age, sex (High School Teachers), type of community they grew up in and community size (Future Teachers). The relationship between age and knowledgeability (for both High School Teachers and Future Teachers) seem to indicate a curvilinear relationship, that is it increases up to a certain age group (26-33) and then begins to taper off. Among the high school teachers, females were clearly more knowledgeable, as indicated by their higher scores. Those teachers who grew up in urban areas were also found to be more knowledgeable. This seems to suggest the liklihood of more contact with mentally ill persons in urban areas.

The teachers did not differ in knowledgeability with regard to subjects taught (High School Teachers), teaching major (Future Teachers), type of institution attended and whether they had mental health experience (as this was measured). The social science teachers and the secondary education students who are social science majors, were not significantly more knowledgeable than the others.

It seems that whether a teacher attended a public institution or a private institution doesn't make much difference in knowledgeability. The results, if confirmed by further research, would suggest that teachers are participants in what might be termed a "cultural belief system" which is not affected by what one teaches and where one attends school. These variables do not seem to have a differential effect.

Contrary to what one might expect, having mental health experience did not indicate higher knowledgeability among these teachers. It is both a popular and professional belief, that greater mental health experience leads to greater knowledgeability and to favorableness or sympathy for people with psychological problems; but in this study, this notion was not supported. This whole notion about mental health experience is important because of the increased number of former patients being released from mental hospitals in our society today.

The 35 mental health opinion items used in this study were analyzed in relation to the following nine factors which were derived by J.M. Townsend (see Townsend, 1975) through a factor analysis. These factors were used to group similar items together for convenience of analysis:
I. Negative Stereotypes
II. Will Power
III. Sex Differences
IV. Environmental Forces
V. Role of Psychiatrist
VI. Damage, Incurability, Seriousness
VII. Age and Childhood Experiences
VIII. Physical Causes
IX. Misce $\ddagger$ laneous

These factors would seem to provide a way of conceptualizing some of the "key themes" that underly the views that teachers hold toward mental health. However, the differences in opinions were not concentrated in any one or few factors. For example, had the teachers differed on the Will Power or Environmental Forces factor, this would have pinpointed the dimensions of difference of opinion; but the data did not reveal support for such conclusions.

Again these data would indicate that these factors probably summarize many of the issues that are controversial topics among professionals--in some ways they are classic factors on which theorists have differed--but nevertheless these factors do not seem to be related to the differences in opinions found.

## Conclusions

The future teachers (who will be on the job in a year or so) and the high school teachers were highly similar in their views in this study. This would seem to indicate that these attitudes are not acquired while on the $j o b$, but rather that one has them when he starts the job.

The findings of this study tend to support the findings of studies in the literature on teacher attitudes toward mental health (Yamamoto and Dizney, Bentz et al., Rabkin and Suchoski). Teachers
are reasonably well informed with regard to mental illness, however they tend to view mental disorders in a negative light. Studies of teachers' attitudes have not been based on sociological theory as such, but rather on the common-sense notion that teachers influence attitudes and "better" attitudes in teachers might lead to "better" attitudes on the part of the students.

This research indicates that the opinions and attitudes of teachers are not very different from those of the general public, although there is some indication that certain social structural variables have a relationship to knowledgeability. However, finding that teachers' views are not very different from those of the general public, is not the same as finding teachers have no influence.

If teacher attitudes are not different from those of the general public, it would be exceedingly difficult, if not theoretically impossible, to separate out the effects of teachers from those of other adults students are in contact with. This suggests that teachers are reflections of community attitudes rather than relatively autonomous shapers of students' attitudes. This tends to confirm the notion of Wilson, Robeck and Michael (see Chapter I) that teachers have accepted the role assigned to them by their communities. It may be that as a result it is a better expenditure of effort to determine the general conception of popular views.

Since teachers tend to reflect and accept the role assigned to them by the communities they represent, an effort to improve popular view will have to be done in the total community as well as in the school. If the views of teachers were too different from
those of the surrounding community, one could not count on them being influential.

In Chapter I Scheff's approach, which is often called the "societal reaction" approach, was outlined. An example of how research, as represented by this thesis, might contribute to theory in this area will be given:

Following upon Scheff's theory, one aspect of stereotypic notions, is it's implication of incurability or "permanent craziness." On the other hand, the "medical view" which (with its other shortcomings) implies curability and no permanent stigma.

Therefore if teachers accept this aspect of the medical view and really believe in curability (or no psychological "weakness" implied by having been ill), and if they could influence students' attitudes, they could help to squelch the stereotypic notions of incurability.

The increased importance of this notion is associated with the growing trend to release patients from mental hospitals into communities.

Apart from a contribution to theory, this study presents some hard empirical data which has not been here-to-fore available, that the author and others can use to build a better theoretical base.

## Suggestions for Future Research

As stated earlier, very little research in the mental health area thus far has concentrated on the views of high school teachers. If high school teachers do have an influence on the attitudinal development of students, more research is needed to investigate where this influence takes place.

One possible way of tapping this notion would be to do a more intensive study within schools than we have done here, comparing the responses of teachers and the students they teach. Presumably any given teacher does not interact with the total student body as such, but he comes into certain degrees of association with certain students. The same is presumably true of any given student, that he also comes into certain degrees of association with certain teachers. If this could be determined through intensive research in a given school (using sociometric techniques, probing interviews, etc.), it could then become an empirical question as to whether the attitudes of particular teachers are related to those of particular students.

In a general way the research question of whether teachers have some discernible influence on students could be determined. One could also see what other variables are related to this question, as well as look at certain details of the socialization process.

The present data makes a contribution to this effort in that it provides leads as to how teacher influence in the mental health area could be investigated.

BIBLIOGRAPHY

Allinsmith, Wesley and Goethal, George W. The Role of Schools in Mental Health. New York: Basic Books, Inc., 1962.

Bentz, W.K., Edgerton, J.W., and Miller, F.T. "Perceptions of Mental Illness Among Public School Teachers." Sociology of Education. 42(1969), pp. 401-406.
. "Attitudes of Teachers and the Public Toward Mental Illness." Mental Hygiene. 55 (1971), pp. 324-330.

Brookover, Wilbur B. and Erikson, Edel L. Sociology of Education. The Dorsey Press. Homewood, Illinois. 1975.

Clarizio, Harvey, F. (Editor) Mental Health and the Educative Process. Rand McNally Company. 1969.

Crocetti, Guido, Spiro, H., and Siassi, I. "Are the Ranks Closed?: Attitudinal Social Distance and Mental Illness." American Journal of Psychiatry. 127 (1971), pp. 1121-1127.

Cumming, Elaine and Cumming, John. Closed Ranks. Cambridge, Massachusetts: Howard University Press. 1957.

Durham, Katherine. "Stability and Change in the Views of College Students Toward Mental Health Concepts: A Semantic Differential Study." M.A. Thesis. Michigan State University. 1972.

Edgerton, W.J. and Bentz, W.K. "Attitudes and Opinions of Rural People About Mental Illness and Program Services." American Journal of Public Health. 59 (1969), pp. 470-477.

Havighurst, Robert J. and Neugarten, Bernice L. Society and Education. Boston: Allyn and Bacon Inc. 1967.

Joint Commission on Mental Health. Action for Mental Health. New York: Basic Books, Inc. 1961.

Karno, M. and Edgerton, R. "Perceptions of Mental Illness in a Mexican American Community." Archives of General Psychiatry. 20 (1969), pp. 233-238.

Liberman, Lewis R. "Attitudes Toward the Mentally Ill, Knowledge of Mental Illness and Personal Adjustment." Psychological Reports. 26 (1960), pp. 47-52.

Linsky, A. "Who Shall Be Excluded: The Influence of Personal Attributes in Community Reaction to the Mentally Ill." Social Psychiatry. 5 (1970), pp. 166-171.

Maguire, T.O. "Semantic Differential Methodology for the Structuring of Attitudes." American Education Journal. 10 (1973), pp. 295-306.

Meyer, Jon K. "Attitudes Toward Mental Illness in a Maryland Community." Public Health Reports. (September 1974), pp. 769772.

Nunnally, Jum C. Sr. Popular Conceptions of Mental Health. New York: Holt, Rinehart and Winston, Inc. 1961.

Olmsted, Donald W. and Durham, Katherine. "Stability of Mental Health Attitudes: A Semantic Differential Study." Journal of Health and Social Behavior. 17, No. 1 (March 1976), pp. 35-44.

Olmsted, Donald W. and Ordway, Robert K. The Final Report of Concepts of Mental Health: A Pilot Analysis. (Report to NIMH, Grant m-4880(A). June 1963).

Osgood, Charles E., Suci, George J., and Tannerbaum, Percy H. The Measurement of Meaning. Urbana, Illinois: University of Illinois Press. 1957.

Rabkin, J.G. "Opinions About Mental Illness: A Review of the Literature." Psychological Bulletin. 1972. 153-171.
. "Public Attitude Toward Mental Illness: A Review of the Literature." Schizophrenia Bulletin. No. 10 (Fall 1974), pp. 9-33.

Rabkin, Leslie Y: and Suchoski, Joseph F. Jr. "Teachers' Views of Mental Illness: A Study of Attitudes and Information." Journal of Teacher Education. 18 (1967), pp. 37-41.

Ring, S. and Schien, L. "Attitudes Toward Mental Illness and the Use of Caretakers in a Black Community." American Journal of Orthopsychiatry. 40 (1970), pp. 710-716.

Rokeach, Milton. Beliefs, Attitudes and Values. San Francisco: Jossey-Bass, Inc. 1969.

Scheff, Thomas. Being Mentally Ill: A Sociological Theory. Chicago: Aldine Publishing Company. 1968.

Smith, Dorothy L. 'College Students' Knowledgeability and Opinions About Mental Health in 1962 and 1971." M.A. Thesis. Michigan State University. 1972.

Snider, James G. and Osgood, Charles, Editors. Semantic Differential Technique. Chicago: Aldine Publishing Company. 1969.

Spitzer, Stephan P. and Denzin, Norman K. The Mental Patient: Studies in the Sociology of Deviance. New York: McGraw-Hill Book Company. 1968.

Sugarman, Barry. The School and Moral Development. New York: Barnes and Noble. 1973.

Szasz, T.S. "The Myth of Mental Illness." American Psychologist. 15 (1960), pp. 113-118.

Townsend, Marshall J. "Cultural Conceptions, Mental Disorders and Social Roles: A Comparison to Germany and America." American Sociological Review. 40 (December 1975), pp. 739-752.
. "Cultural Concepts and Mental Illness." Journal of Nervous and Mental Disease. 60, No. 6 (1975), pp. 409-421.

Wechsler, H., Solomon, L., and Kramer, B.N. (Editors). 'Mental Health Attitudes." Social Psychology and Mental Health. New York: Holt, Rinehart, and Winston. 1961.

Wilson, J.A.R., Robeck, M.C., and Michael, W.B. Psychological Foundations of Learning and Teaching. New York: McGraw-Hill Inc. 1969.

Yamamoto, Karou and Dizney, Henry F. "Rejection of the Mentally Ill: A Study of Attitudes of Student Teachers." Journal of Counseling Psychology. 14 (1967).

APPENDICES

## APPENDIX A

SEMANTIC DIFFERENTIAL MEANS, HIGH SCHOOL TEACHERS, FUTURE TEACHERS, SUMMER TEACHERS, GRAND RAPIDS CITIZENS



 TABLE A-1. Semantic Differential Means, Fowler Teachers ( $N=14$ )

Concepts
Scales
 $n$
n $\infty$
N $\begin{array}{ll}0 & 0 \\ \dot{0} & \dot{0} \\ \dot{n} & \end{array}$ $\begin{array}{ll}\circ \\ \div & -1 \\ \div\end{array}$
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uosiod Kzexj $00^{\circ} \varepsilon \quad 0 z^{\circ} \varepsilon$ $\begin{array}{llll}0 & M & \dot{N} & M \\ N \\ \dot{N} & M & M & M \\ N\end{array}$ $\infty$
$\infty$

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|  | M | $\begin{array}{ll}0 & n \\ \dot{\circ} & \\ n\end{array}$ $n$

$\cdots$
$\cdots$ $\begin{array}{ll}\infty & n \\ \cdots & \infty \\ i & -i\end{array}$ $\begin{array}{ll}m & m \\ n & a \\ n & \cdots \\ n & \infty \\ m & m \\ n & m \\ m & m\end{array}$ $\begin{array}{cc}\text { quetifed } & 8 \\ \text { reiund } & 8 \\ & 8\end{array}$ 8 $\infty$
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$\stackrel{\infty}{\sim}$ $m$
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 $\begin{array}{ll}M & \dot{8} \\ \dot{F} & \text { m }\end{array}$ ジ O
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 $\begin{array}{ll}\text {－in } \\ \sim & \text { N }\end{array}$ $\begin{array}{llll}0 & N & N & \hat{0} \\ \dot{N} & \text { M } & \text { N } & \text { N }\end{array}$ $\begin{array}{ll}0 & 8 \\ \text { M } & \\ \text {－}\end{array}$ 8 | $\infty$ | 1 |
| :--- | :--- |
| $\div$ |  | $\begin{array}{llll}N & \infty & \dot{\infty} & \infty \\ \dot{N} & \dot{N} & \dot{N} & \dot{N}\end{array}$

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\end{tabular} －$\quad \infty$ 8

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| :--- | :--- | :--- |
| $\dot{\sim}$ | $\dot{\sim}$ |  | $\dot{\sim} \dot{\infty} \dot{\ddagger}$

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\cdots 80
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\end{array}
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0 & \dot{\gamma}
\end{array}
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& \dot{N} \\
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\end{aligned}
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0 \\
\dot{8} & \infty \\
\hline
\end{array}
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\begin{array}{ll}
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\dot{8}
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0 & 0
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\begin{array}{ll}
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\dot{0} & \dot{0} \\
0 & m \\
\dot{0} & \dot{n}
\end{array}
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& \text { N }
\end{aligned}
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\begin{aligned}
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& \text { M } \\
& \text { M }
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|  | TABLE A-3 |  | Semanti |  | Differential |  | Means$\begin{aligned} & \text { Ex-Mental } \\ & \text { Patient } \end{aligned}$ | St. | Johns | Teachers $(\mathrm{N}=62)$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Concepts Scales | N | $H$ $O$ U 0 0 | $$ |  |  | Most People |  |  |  | $\begin{aligned} & 0 \\ & .4 \\ & \sim \\ & 0 \\ & \hline \end{aligned}$ |  |  |  | $\begin{aligned} & \text { E } \\ & 0 \\ & 0 \\ & 0 \\ & \text { a } \\ & \text { N } \\ & \text { N్j } \end{aligned}$ | E O ¢ 0 0 0 N N H |
| Valuable-Worthless | 6.06 | 6.29 | 5.43 | 4.97 | 5.24 | 5.55 | 4.70 | 5.24 | 5.15 | 4.31 | 4.24 | 4.56 | 4.24 | 3.69 | 3.79 |
| Clean-Dirty | 6.23 | 6.44 | 5.50 | 5.44 | 4.76 | 5.07 | 4.75 | 4.93 | 4.76 | 4.25 | 4.50 | 4.19 | 4.05 | 4.13 | 4.16 |
| Sincere-Insincere | 6.15 | 5.45 | 5.27 | 4.91 | 4.70 | 4.93 | 4.55 | 5.41 | 5.06 | 3.92 | 3.80 | 3.81 | 4.26 | 3.53 | 3.61 |
| Warm-Cold | 5.84 | 4.61 | 4.70 | 4.21 | 4.58 | 4.55 | 4.38 | 4.48 | 4.45 | 3.74 | 3.79 | 3.85 | 3.82 | 3.87 | 3.71 |
| Safe-Dangerous | 5.92 | 5.63 | 4.57 | 4.88 | 4.67 | 5.07 | 4.38 | 4.55 | 4.82 | 3.30 | 2.32 | 3.70 | 2.97 | 2.65 | 3.16 |
| Wise-Foolish | 5.56 | 5.71 | 5.17 | 5.09 | 4.39 | 4.45 | 4.37 | 4.83 | 4.73 | 3.74 | 3.65 | 4.00 | 3.47 | 3.52 | 3.65 |
| Fast-Slow | 5.21 | 5.32 | 4.10 | 3.94 | 4.36 | 4.66 | 4.23 | 3.97 | 3.97 | 4.21 | 4.44 | 4.41 | 3.66 | 4.32 | 4.06 |
| Strong-Weak | 5.48 | 5.71 | 4.57 | 4.82 | 4.09 | 4.24 | 4.22 | 3.93 | 4.36 | 3.33 | 3.85 | 3.67 | 3.08 | 3.74 | 3.71 |
| Rugged-Delicate | 4.76 | 4.32 | 3.73 | 4.09 | 4.03 | 3.83 | 3.80 | 3.38 | 3.82 | 3.75 | 3.97 | 4.04 | 3.27 | 4.28 | 4.09 |
| Relaxed-Tense | 4.02 | 4.31 | 4.57 | 4.35 | 3.76 | 3.48 | 3.95 | 2.69 | 2.70 | 2.07 | 2.24 | 2.04 | 1.94 | 2.65 | 2.66 |
| Simple-Complicated | 2.98 | 2.63 | 2.37 | 2.85 | 3.22 | 3.14 | 3.42 | 3.14 | 3.12 | 3.05 | 2.68 | 2.63 | 2.84 | 3.10 | 3.06 |
| Pred.-Unpredictable | 5.35 | 5.32 | 4.17 | 4.12 | 4.79 | 4.28 | 4.07 | 4.93 | 4.15 | 2.66 | 2.12 | 2.74 | 2.55 | 2.29 | 2.84 |
| $\bar{\chi}$ | 5.30 | 5.15 | 4.51 | 4.47 | 4.38 | 4.44 | 4.23 | 4.29 | 4.26 | 3.53 | 3.47 | 3.64 | 3.35 | 3.48 | 3.54 |
| $\overline{\mathbf{X}}^{*}$ | 5.59 | 5.49 | 4.80 | 4.67 | 4.37 | 4.63 | 4.35 | 4.50 | 4.41 | 3.56 | 3.50 | 3.70 | 3.41 | 3.44 | 3.61 |


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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 0 \\ & \text { M } \\ & \hline+ \end{aligned}$ | $\begin{aligned} & \text { P } \\ & \text { m } \end{aligned}$ | $\begin{aligned} & 0 \\ & \text { M } \\ & \dot{8} \end{aligned}$ | ¢ | $\begin{aligned} & 0 \\ & \stackrel{0}{n} \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & \text { m } \end{aligned}$ | $\begin{aligned} & \text { B } \\ & \text { + } \end{aligned}$ | $\begin{aligned} & 0 \\ & \infty \\ & \text { m } \end{aligned}$ | $\begin{aligned} & \text { oㅇ } \\ & \text { m } \end{aligned}$ | io | $\begin{aligned} & 8 \\ & i \end{aligned}$ | － | N m | M |
| $\begin{array}{r} \text { uosiad } \\ \text { o!zoInaN } \end{array}$ | － | $\begin{aligned} & 0 \\ & j \\ & \hline \end{aligned}$ | $\begin{aligned} & n \\ & \text { in } \end{aligned}$ | N | $\cdots$ | $\begin{aligned} & \text { in } \\ & \text { m } \end{aligned}$ | $\begin{aligned} & n \\ & \dot{8} \end{aligned}$ | $\begin{aligned} & \infty \\ & \text { m } \end{aligned}$ | $\begin{aligned} & \infty \\ & 0_{0} \\ & \dot{m} \end{aligned}$ | $\begin{aligned} & \text { og } \\ & \text { i } \end{aligned}$ | $\begin{aligned} & n \\ & 0 \\ & \text { m } \end{aligned}$ | － | N00 | \％ |
| səouej <br> पҰ！M UOSI2d | $\begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\underset{\sim}{\sim}$ | $\begin{aligned} & \text { N } \\ & \text { in } \end{aligned}$ | $\infty$ + + | $\begin{aligned} & \text { M } \\ & \dot{8} \end{aligned}$ | \％ | － | $\begin{aligned} & 0 \\ & \text { i } \\ & \therefore \end{aligned}$ | $\begin{aligned} & \text { + } \\ & \text { m } \end{aligned}$ | n $m$ | $\begin{aligned} & \dot{N} \\ & \dot{m} \end{aligned}$ | $\begin{aligned} & \text { 궁 } \\ & \div \end{aligned}$ | $\stackrel{8}{+}$ | $\stackrel{n}{3}$ |
| әseəsṭa 7xeәH 47 ṬM UOSXə | $\begin{aligned} & n \\ & i \end{aligned}$ | $\vec{F}$ | $\stackrel{m}{\square}$ | $\sim$ + + | \％ | ¢ + + | i <br> 8 | ＋ | $N$ $N$ | m $\sim$ $\sim$ | $\begin{aligned} & 8 \\ & \text { m } \end{aligned}$ | $\cdots$ | 0 | ※ |
| $\begin{array}{r} \text { quә!̧ed } \\ \text { [ełuəw-x马 } \end{array}$ | $\begin{aligned} & \pi \\ & \dot{8} \end{aligned}$ | $\stackrel{\infty}{+}$ | $\stackrel{\infty}{+}$ | $m$ $*$ | ＋ | ¢ | $\cdots$ | $\begin{aligned} & \infty \\ & \infty \\ & m \end{aligned}$ | N | $\begin{aligned} & m \\ & \dot{m} \end{aligned}$ | $\begin{aligned} & 8 \\ & \text { m } \end{aligned}$ | $\cdots$ | か | $\begin{aligned} & 8 \\ & \hline \end{aligned}$ |
| Oldoed 7 SOW | n | $\stackrel{\infty}{\sim}$ | $\stackrel{\circ}{\circ}$ | $\stackrel{\infty}{+}$ | $\pm$ | $\cdots$ | $\stackrel{\rightarrow}{-7}$ | $\pm$ | $\cdots$ | ¢ m | 0 $\infty$ 0 | $\pm$ | N $\cdots$ | $\cdots$ |
| uosiad <br> ว8อภวへ $\forall$ | $\underset{i}{7}$ | $\begin{aligned} & \text { N } \\ & \dot{8} \end{aligned}$ | $\begin{aligned} & \infty \\ & \stackrel{\sim}{8} \end{aligned}$ | $\stackrel{\sim}{\infty}$ | ～\％ | － | $\stackrel{\sim}{*}$ | m | 8 | $\stackrel{\sim}{i}$ | $\sim$ $\sim$ $\sim$ | $\stackrel{0}{0}$ | $\stackrel{0}{8}$ | 0 |
| 75！ア7e！${ }^{\text {¢ }}$ | $\begin{aligned} & \text { ㅇ } \\ & \text { i } \end{aligned}$ | $\begin{aligned} & 0 \\ & \infty \\ & i \end{aligned}$ | － | $\stackrel{+}{\infty}$ | $\cdots$ | － | － | ＋ | $\begin{aligned} & 0 \\ & \infty \\ & \text { m } \end{aligned}$ | $\stackrel{\circ}{+}$ | N N | 8 | ＋ | － |
| 75 ¢01040Ksd | $\begin{aligned} & \text { n } \\ & \text { in } \end{aligned}$ | $\begin{aligned} & \infty \\ & n \\ & i \end{aligned}$ | 8－ | \％ | $\stackrel{\sim}{\sim}$ | $\cdots$ | 8 <br> 8 | $\cdots$ | $\cdots$ | $\stackrel{\sim}{\sim}$ | $\cdots$ | $\underset{\sim}{\sim}$ | $\pm$ | 9 |
| 1072001 | $\begin{aligned} & \text { o } \\ & \text { 0 } \\ & 0 \end{aligned}$ | 앗 0 | $\stackrel{\infty}{\sim}$ | M $\dot{-}$ | $m$ $\infty$ 0 | N N－ | 980 | － | $n$ $m$ | O | $\stackrel{\sim}{\sim}$ | $\stackrel{\infty}{\sim}$ | $\cdots$ | －7 |
| OW | $\begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \text { N } \\ & \text { in } \end{aligned}$ | O | in | $n$ 0 $i$ | 9 0 0 | $\stackrel{\sim}{*}$ | $\pm$ | ¢ $\sim$ + | $\cdots$ | $\cdots$ | \％ | $\stackrel{\infty}{\infty}$ | $\stackrel{0}{\sim}$ |



Concepts
 Valuable－Northless
Clean－Dirty Sincere－Insincere
Warm－Cold Safe－Dangerous Wise－Foolish MOLS－7SEJ Strong－Weak Rugged－Delicate Relaxed－Tense Simple－Complicated

Pred．－Unpredictable 즘
$\times 1 \times$
Concepts
TABLE A－5 Semantic Differential Means，Grand Rapids Christian Teachers（ $\mathrm{N}=39$ ）

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| 0¢＊${ }^{\text {b }}$ | ZS｀¢ | $61 \cdot \varepsilon$ | $8 S^{\circ} \mathrm{\varepsilon}$ | $\tau \chi^{\prime} \varepsilon$ | $9 L^{\prime} \varepsilon$ | $\varepsilon L^{\prime} \varepsilon$ | SO＊S | $\square \underbrace{\circ} \downarrow$ | 09＊${ }^{\circ}$ | EL＇D | $8 \varepsilon^{\circ} \mathrm{b}$ | $62 \cdot s$ | 69＊ | $19^{\circ} \mathrm{S}$ | $60^{\circ} \mathrm{S}$ | $\underline{x}$ |
| 2I＊ | $\varepsilon \nabla^{\bullet} \varepsilon$ | 乙て＇£ | $6 t^{\circ} \mathrm{E}$ | てI• | S $9^{\circ} \mathrm{E}$ | $6 S^{\circ} \varepsilon$ | 8L＇b | 21＊ | $8 \varepsilon^{\circ} \mathrm{b}$ | OS＊${ }^{\circ}$ | $L て \cdot \square$ | It＊ | $80^{\circ}$ | LI＇S | －I＇s | $\underline{x}$ |
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| $\angle 8^{\prime}$ Z | $s s^{\prime}$ | $90 \cdot \varepsilon$ | OT＇$\underbrace{1}$ | İ＇z | zs・て | 8E＇Z | $t \nabla^{\circ} \mathrm{E}$ | $96^{\circ} \mathrm{Z}$ | $\angle 6^{\circ} \mathrm{Z}$ | $00^{\circ} \mathrm{\varepsilon}$ | $\nabla<\cdot \varepsilon$ | $8 t^{\circ} \varepsilon$ | $68^{\circ}$ Z | $9 \varepsilon^{\prime}$ 乙 | ts $\quad$ z |  |
| $\dagger \chi^{\prime} \varepsilon$ | $0 \chi^{\prime}$＇ | $\rightarrow t^{\circ}$ て | S0＇z | IL＇I | SL＇z | 28＊ | 29＊2 | 16＊2 | $\angle 6^{\circ} \mathrm{E}$ | S $8^{\circ} \mathrm{\varepsilon}$ | $6 L^{\circ} \mathrm{E}$ | 2S＊ | £ \％${ }^{\circ}$ | $29^{\circ}$ | L8＇$\varepsilon$ | әsuəı－pəxeโəy |
| $\angle S^{\circ} \mathrm{E}$ | $0 L^{\circ} \mathrm{E}$ | ZL＇E | $\varepsilon 0^{\circ} \mathrm{\varepsilon}$ | $00^{\circ} \mathrm{\varepsilon}$ | ZL＇£ | $9 \varepsilon^{\circ} \mathrm{E}$ | $\rightarrow \nabla^{\circ} \mathrm{E}$ | $\varepsilon I^{\prime} \varepsilon$ | $9 S^{\circ} \mathrm{\Sigma}$ | $S \angle \cdot \varepsilon$ | 加を | 2S．E | $66^{\circ} \mathrm{\Sigma}$ | 29＊E | $82^{\circ}$ |  |
| L0＊\％ | 0L｀${ }^{\circ}$ | $82^{\circ} \mathrm{E}$ | 2L｀Z | 0S ${ }^{\circ}$ | 96．$£$ | $80^{\circ} \mathrm{E}$ | $\varepsilon I^{\prime} \mathrm{S}$ | ヤL｀£ | 95＊${ }^{\circ}$ | 00＊${ }^{\circ}$ | SO＇t | かでも | 19＊ | 2L＇S | 9 ${ }^{\circ} \mathrm{S}$ | уеәм－840x7S |
| IE ${ }^{\circ}$ | $s \chi^{*} \downarrow$ | で・カ | t9＊ | $62 \cdot \square$ | E¢＊${ }^{\circ}$ | てL＇t | $69^{\circ} \mathrm{E}$ | ¢ $8^{\circ} \mathrm{\varepsilon}$ | โ ${ }^{\circ} \downarrow$ | S9．b | $97^{*} \downarrow$ | $\angle 9^{\circ} \varepsilon$ | $8 L^{\circ} \mathrm{\varepsilon}$ | $8 \varepsilon^{\prime} \mathrm{S}$ | ャ9＊s | MOIS－7SEj |
| $82 \%$ | Sカ・ | $68^{\circ}$ Z | カS ${ }^{\circ}$ | 9 ${ }^{\circ} \mathrm{E}$ | 26＊ | $9 \nabla^{\circ} \varepsilon$ | SZ＇S | 19＊＊ | ＋6． 0 | St＊${ }^{\circ}$ | $92 \cdot 6$ | IL＇b | 84＊ | 2L＇S | $9 \varepsilon^{\circ} \mathrm{S}$ | YST¢TOOA－əSTM |
| LE＊＊ | $06^{\circ} 2$ | $0 \nabla^{\circ}$ Z | L8＇ $\mathcal{L}$ | 七9 ${ }^{\circ}$ | $8 t^{\circ} \mathrm{E}$ | $\angle L \cdot \varepsilon$ | $8 \varepsilon^{\circ} \mathrm{S}$ | SE＇b | 七ぐも | SI＇S | £9＊ | $80^{\circ}$ | L9＊ | 28＊S | 01•9 | snoxasued－əjes |
| 26＊＊ | SL＊ $\mathcal{L}$ | OS ${ }^{\circ} \mathrm{E}$ | $82^{\circ} \mathrm{b}$ | $98^{\circ}$ | L9 ${ }^{\circ} \mathrm{E}$ | L9 $\underbrace{\circ}$ | SZ ${ }^{\text {S }}$ | LS＇b | てL＊ | SL＇t | £S＊ | $61^{\circ} \mathrm{S}$ | $82^{\circ} \mathrm{S}$ | S6＊＊ | โも｀S | PIOJ－шлем |
| EL＇b | S $8^{\circ} \mathrm{E}$ | ZL｀$\varepsilon$ | IS ${ }^{\circ}$ | $L L^{\circ} \varepsilon$ | $88^{\circ} \mathrm{E}$ | IE＊ | t6＊S | 0L＇b | $00^{\circ} \mathrm{S}$ | 06＊ | $92 *$ | $\dagger t^{\circ} \mathrm{S}$ | $82^{\prime} \mathrm{S}$ | $69^{\circ} \mathrm{S}$ | S0＊9 | əxววuṭsuI－əxəวuţ |
| 18＊${ }^{\circ}$ | 00＊ | $\varepsilon \varepsilon^{\circ} \varepsilon$ | S0＇b | I2＇t | Sて＇b |  | 6I＇S | 8L＇b | L8＇b | $00^{\circ} \mathrm{S}$ | $66^{\circ} \mathrm{b}$ | S0＊s | 加•S | カカ＊9 | S6．${ }^{\text {S }}$ | 47xid－ueat |
| $00^{\circ} \mathrm{S}$ | $S L^{\prime} \downarrow$ | $\underline{\varepsilon} 8^{\circ} \varepsilon$ | カ9＊ | $69^{\circ} \mathrm{E}$ | 96\％ | $69^{\circ} \mathrm{b}$ | $69^{\circ} \mathrm{S}$ | てz＊S | $\varepsilon \Sigma \cdot \mathrm{S}$ | Ss•S | $50 * 5$ | IL＇b | $2 L \cdot \square$ | to ${ }^{\circ} 9$ | $69^{\circ} \mathrm{S}$ | ssarymam－əiqunten |
| $\underline{X}$ |  |  |  | $\begin{aligned} & \text { ö } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \hline 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | $\begin{aligned} & 0 z \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ |  |  |  | $\begin{aligned} & \text { z } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  | $$ | $\begin{aligned} & { }_{8}^{0} \\ & 0 \\ & \stackrel{0}{4} \end{aligned}$ | $\frac{3}{6}$ | sadersos |




Semantic Differential Means，＂Future Teachers＂
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Semantic Differential Means, "Summer Teachers" (Teachers attending MSU summer school) N= h 73


| Concepts Scales | $\pm$ | $\begin{gathered} \mu \\ 0 \\ 0 \\ 0 \\ 0 \\ \hline \end{gathered}$ | $n$ 0 0 0 0 0 0 $\frac{\pi}{U}$ 0 $n$ 0 |  | $\begin{array}{ll} 0 & 0 \\ \infty \\ 0 & 0 \\ 0 & 0 \\ 0 & 0 \\ < & 0 \end{array}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  | E O N 0 N N N H |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuable-Worthless | 6.23 | 6.44 | 5.44 | 5.57 | 5.35 | 5.67 | 5.09 | 4.70 | 3.39 | 4.49 | 4.58 | 4.27 | 4.40 | 3.47 | 4.38 |
| Clean-Dirty | 6.28 | 6.64 | 5.61 | 5.66 | 4.79 | 4.73 | 4.80 | 4.69 | 3.94 | 4.34 | 4.22 | 4.23 | 4.07 | 3.51 | 3.95 |
| Sincere-Insincere | 6.28 | 5.40 | 5.12 | 5.21 | 4.73 | 4.37 | 4.76 | 4.49 | 4.49 | 3.95 | 3.65 | 3.79 | 4.30 | 3.68 | 3.90 |
| Warm-Cold | 5.89 | 4.72 | 4.68 | 4.75 | 4.71 | 4.41 | 4.41 | 4.36 | 3.50 | 3.78 | 3.63 | 3.11 | 3.98 | 3.34 | 3.50 |
| Safe-Dangerous | 6.12 | 5.71 | 4.89 | 4.84 | 4.87 | 4.66 | 4.53 | 4.05 | 2.86 | 3.29 | 2.35 | 2.56 | 3.21 | 2.20 | 2.40 |
| Wise-Foolish | 5.34 | 5.88 | 5.38 | 5.48 | 4.38 | 4.09 | 4.38 | 4.22 | 4.14 | 3.47 | 3.86 | 3.05 | 3.47 | 2.77 | 3.57 |
| Fast-Slow | 5.32 | 5.33 | 4.20 | 3.83 | 4.44 | 4.49 | 4.10 | 3.91 | 4.49 | 4.26 | 4.28 | 4.44 | 3.65 | 4.16 | 4.37 |
| Strong-Heak | 5.31 | 5.50 | 5.04 | 5.12 | 4.43 | 3.94 | 4.35 | 3.24 | 4.60 | 3.13 | 3.66 | 3.26 | 3.05 | 3.39 | 3.78 |
| Rugged-Delicate | 4.29 | 3.94 | 3.64 | 3.78 | 4.05 | 3.62 | 3.64 | 2.68 | 3.76 | 3.51 | 3.55 | 3.24 | 3.35 | 3.64 | 3.32 |
| Relaxed-Tense | 3.94 | 4.42 | 4.54 | 4.80 | 4.09 | 3.37 | 3.98 | 2.64 | 2.26 | 1.85 | 2.03 | 1.67 | 2.34 | 2.14 | 2.32 |
| Simple-Complicated | 2.37 | 2.28 | 2.47 | 2.38 | 3.15 | 2.66 | 2.90 | 3.06 | 2.42 | 2.49 | 2.06 | 2.25 | 2.17 | 2.45 | 2.11 |
| Pred. -Unpredictable | 5.15 | 5.32 | 4.49 | 4.62 | 4.40 | 4.09 | 4.21 | 3.78 | 3.20 | 2.68 | 2.00 | 2.51 | 2.65 | 1.64 | 2.18 |
| $\bar{\chi}$ | 5.21 | 5.13 | 4.62 | 4.67 | 4.45 | 4.18 | 4.26 | 3.82 | 3.59 | 3.44 | 3.32 | 3.20 | 3.39 | 3.03 | 3.31 |
| $\overline{\mathbf{X}}^{*}$ | 5.59 | 5.53 | 4.93 | 4.99 | 4.62 | 4.38 | 4.46 | 4.01 | 3.69 | 3.53 | 3.42 | 3.29 | 3.52 | 3.03 | 3.43 |

TABLE A－8 Semantic Differential Means，Grand Rapids Citizens（Reservists）Noll

|  |  |  |  |  | apuI s | səuə 19 | Onej | ：po | ¢！ 1 d | －－ 1 | IS P | วาe | ！ 100 | 88n4 | səโe |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 61＊${ }^{\text {\％}}$ | $26^{\circ} \mathrm{Z}$ | 6L｀2 | II $\underbrace{\text { c }}$ |  | Z ${ }^{\circ} \mathrm{E}$ | $66^{\circ} \mathrm{E}$ | カガカ |  | 8E＊${ }^{\text {b }}$ | 29.0 | ヤぐカ | 28．${ }^{\circ}$ | L6＇b | \＆9＊S | $95^{\circ} \mathrm{S}$ | ＊${ }^{x}$ |
| SO＊${ }^{\circ}$ | 20＊\＆ | $18^{\circ} \mathrm{Z}$ | SİE | $87^{\circ} \mathrm{E}$ | $8 \chi^{\circ} \mathrm{E}$ | $2 t^{\circ} \mathrm{E}$ | $97^{\circ} \mathrm{b}$ | St＊＊ | カて＊ | $80^{\circ}$ | 09＊ | 95＊${ }^{\circ}$ | 29＊＊ | てz＇S | $6 z^{\prime} s$ | $\underline{X}$ |
| $60^{\circ} \mathrm{E}$ | 9S．${ }^{\text {c }}$ | ¢S＇t | $\varepsilon L^{\prime} \mathbf{I}$ | £ $9^{\circ}$ Z | 16＊1 | $85^{\prime}$ \％ | 69＊ | 2I＇S | $08^{\circ} \mathrm{\Sigma}$ | $62 \cdot \square$ | カS＊ | IS＇$\varepsilon$ | $80^{\circ}$ | ャて＇s | 6L＊ |  |
| $86^{\circ} \mathrm{Z}$ | S¢ ${ }^{1}$ | $29^{\circ} \mathrm{Z}$ | İ ${ }^{1} \varepsilon$ | LL｀Z | $\angle \varepsilon^{\prime} \tau$ | $0 L^{\prime}$ Z |  | $\varepsilon 0^{\circ} \mathrm{E}$ | to $\nabla^{\circ}$ | $62 \cdot \varepsilon$ | $6 S^{*} \varepsilon$ | Lて＇Z | で・て | $L L^{\prime}$ Z | $\varepsilon \chi^{\wedge} \Sigma$ |  |
| てZ•£ | ¢0｀2 | 6 ${ }^{\circ}$ I | 10＊2 | 08 ${ }^{1}$ | It＇z | $90^{\circ} 2$ | 9\％＇Z | L6＊2 | $65^{\circ} \mathrm{E}$ | ヤL｀£ | $9 \nabla^{\circ}$ | L6＇t | 8I＇s | 64＊${ }^{\circ}$ | It＊ | әsuə」－рәхеโәу |
| $89^{\circ} \mathrm{E}$ | S $9^{\circ} \mathrm{E}$ | 16．$£$ | $\varepsilon \nabla^{\prime} \varepsilon$ | OZ＇E | $L L^{\prime} \mathrm{E}$ | $\angle t^{\circ} \mathrm{E}$ | 91＇E | $0 \varepsilon^{\prime} \mathrm{E}$ | S9＊E | $62 \cdot \square$ | カでも | 6S ${ }^{\circ} \mathrm{\Sigma}$ | $9 \varepsilon^{\prime} \varepsilon$ | ZS＊$\Sigma$ | 29.7 |  |
| OT＊ | SI＊${ }^{\text {b }}$ | SE ${ }^{\circ} \mathrm{E}$ | $60{ }^{\circ} \mathrm{E}$ | ¢ $0^{\circ} \mathrm{\varepsilon}$ | $\angle \varepsilon^{\circ} \mathrm{E}$ | $s z^{\prime} \varepsilon$ | 19＊$\Sigma$ | $90^{\circ} \mathrm{t}$ | 0¢＇t | 2¢＊ | 29＊ | ts＊${ }^{\text {¢ }}$ | L6＊${ }^{\circ}$ | LE． S | $6 \varepsilon^{\circ} \mathrm{S}$ | уеәм－8иол7S |
| sて＊ | $88^{\circ} \mathrm{E}$ | 2¢．t | $6 L^{\prime} \varepsilon$ | $\angle 6^{\circ} \mathrm{E}$ | 98．${ }^{\circ}$ | TE．${ }^{\text {b }}$ | ¢8．$\varepsilon$ | S $8^{\circ} \mathrm{\varepsilon}$ | 90＊ | 96．${ }^{\circ}$ | S9＊＊ | $68^{\circ} \mathrm{E}$ | $9 L^{\circ} \mathrm{E}$ | $90 \cdot \mathrm{~S}$ | $\angle E \cdot S$ | MOTS－7SEj |
| $6 L^{\circ} \mathrm{b}$ | $89^{\circ} \mathrm{Z}$ | $9 t^{\circ} \mathrm{Z}$ | L6．z | $\varepsilon z^{\prime} \varepsilon$ | $\angle S^{\circ} \mathrm{E}$ | $86^{\circ} \mathrm{E}$ | OS＊${ }^{\circ}$ | 19＊${ }^{\circ}$ | 92＊ | カ！$\dagger$ | S $9^{\circ} \mathrm{t}$ | SE．s |  | L6＊S | $s \varepsilon^{\circ} \mathrm{S}$ | YSTI00才－2S！M |
| trib | $88^{\circ}$ L | 88＇ | £ $9^{\prime}$ 亿 | $0 \chi^{*} \varepsilon$ | ¢9 ${ }^{\circ}$ Z | £で£ | ＊6＊ | $\dagger z^{\circ} \mathrm{S}$ | 8¢＇b | L6＊ | $18^{\circ} \mathrm{b}$ | SE． S | 90＊S | $6 L^{\circ} \mathrm{S}$ | It＇9 | snoxerued－əjes |
| $s z^{* * * *}$ | ¢ $0^{\circ} \mathrm{E}$ | ［L＇て | 9 ${ }^{\circ} \mathrm{E}$ | $\dagger \chi^{\circ} \mathrm{E}$ | £て＇£ | 2L＇£ | 19＊＊ | 00＊s | $60^{\circ} \mathrm{b}$ | 28.7 | $89^{\circ} \mathrm{b}$ | IS＊${ }^{\text {b }}$ | 16＊ | $96^{\circ} \mathrm{b}$ | L6．${ }^{\circ}$ | PIOJ－шגем |
| 9S＊${ }^{\circ}$ | $67^{\circ} \mathrm{E}$ | $9 L^{\circ} \mathrm{Z}$ | ¢ $6^{\circ} \mathrm{E}$ | $69^{\circ} \mathrm{E}$ | $62^{\circ} \mathrm{E}$ | $68^{\circ} \mathrm{E}$ | $\angle t \cdot s$ | $s t \cdot s$ | $06^{\circ} \mathrm{t}$ | 65＊${ }^{\circ}$ | $26^{\circ} \mathrm{b}$ | $8 \varepsilon^{\circ} \mathrm{S}$ | S8．t | 06 S | $\varepsilon[9$ | əxəวuṭsuI－əxəวuts |
| E6＊ | $\tau \varepsilon^{\bullet} \varepsilon$ | S $9^{\circ} \mathrm{\Sigma}$ | $69^{\circ} \mathrm{E}$ | £2＊ | IE＇t | $\downarrow \underbrace{\bullet} \downarrow$ | $80^{\circ} \mathrm{S}$ | St＇s | $00^{\circ} \mathrm{S}$ | $8 \mathrm{I}^{\circ} \mathrm{S}$ | SI＇S | $68^{\circ} \mathrm{S}$ | $6 L^{\circ} \mathrm{S}$ | $29 * 9$ | $82^{\circ} 9$ | ¢7x＋9－ueatว |
| 08＇b | $90^{\circ}$ ¢ | $8 \varepsilon^{\prime} \mathrm{E}$ | $60^{\circ} \mathrm{b}$ | IE＊${ }^{\text {d }}$ | $68^{\circ} \mathrm{E}$ | 10＊ | $L L^{\prime} \mathrm{S}$ | 0E＊S | 10＊s | 2I＇S | L6＇b | $90^{\circ} \mathrm{S}$ | $0 \varepsilon^{\circ} \mathrm{S}$ | $19 * 9$ | $98^{\circ} \mathrm{S}$ |  |
| $\underline{X}$ |  |  |  |  | 0 |  |  |  |  | $\begin{aligned} & 3 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  | 0 0 0 0 0 0 0 0 0 0 0 0 | $\circ$ 0 + + $\rightarrow$ | $\bigcirc$ | salejs |

APPENDIX B

## DEMOGRAPHIC DATA, HIGH SCHOOL TEACHERS, FUTURE TEACHERS, SUMMER TEACHERS, GRAND RAPIDS CITIZENS

Table B-1.--Demographic Data for High School Teachers.

|  | Fowler | Ovid- | St. | William- | Grand | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Elsie | Johns | Ston | Rapids |  |  |
|  | $\mathrm{N}=14$ | $\mathrm{~N}=23$ | $\mathrm{~N}=62$ | $\mathrm{~N}=23$ | $\mathrm{~N}=39$ | $\mathrm{~N}=161$ |

## AGE

| 25 or less | 1 | 4 | 5 | 6 | 3 | 19 |
| :--- | :--- | :--- | ---: | :--- | ---: | ---: |
| $26-33$ | 9 | 6 | 29 | 6 | 7 | 57 |
| $34-41$ | 1 | 8 | 13 | 2 | 8 | 32 |
| $42-49$ | 2 | 1 | 7 | 5 | 6 | 21 |
| 50 and over | 0 | 2 | 3 | 3 | 5 | 13 |
| NA | 1 | 2 | 5 | 1 | 10 | $\frac{19}{161}$ |

## SEX

| Male | 7 | 14 | 37 | 13 | 26 | 97 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Female | 6 | 7 | 24 | 10 | 4 | 51 |
| NA | 1 | 2 | 1 | 0 | 9 | $\frac{13}{161}$ |

## MARITAL

| Single | 5 | 5 | 8 | 4 | 4 | 26 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Married | 8 | 16 | 48 | 14 | 26 | 112 |
| Separated, Divorced, |  |  |  |  |  |  |
| $\quad$ Widowed | 1 | 0 | 5 | 4 | 0 | 10 |
| NA | 0 | 2 | 1 | 1 | 9 | $\frac{13}{161}$ |

COMMUNITY TYPE

| Farm, Open Country | 4 | 5 | 23 | 4 | 6 | 42 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Suburban Town <br> or City | 3 | 3 | 10 | 10 | 8 | 34 |
| Non-Suburban <br> Town or City | 6 | 13 | 29 | 7 | 17 | 72 |
| NA | 1 | 2 | 0 | 2 | 8 | $\frac{13}{161}$ |

## COMMUNITY SIZE

| Less than 20,000 | 10 | 13 | 44 | 14 | 11 | 92 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| $20,000-99,000$ | 1 | 4 | 7 | 2 | 8 | 22 |
| $100,000-499,000$ | 2 | 1 | 5 | 1 | 10 | 29 |
| $500,000-1$ million | 0 | 1 | 2 | 1 | 1 | 5 |
| Over 1 million | 0 | 1 | 3 | 1 | 1 | 6 |
| NA | 1 | 3 | 1 | 4 | 8 | $\frac{17}{161}$ |

Table B-1.--Continued.

|  | Fowler | Ovid- St. William- Grand Total <br>  $\mathrm{N}=14$ $\mathrm{~N}=23$   | Johns <br> $\mathrm{N}=62$ | Ston <br> $\mathrm{N}=23$ | Rapids <br> $\mathrm{N}=39$ | $\mathrm{~N}=161$ |
| :---: | :---: | :---: | :--- | :---: | :--- | :---: |

SUBJECTS TAUGHT

| Math, Science | 2 | 5 | 10 | 6 | 6 | 29 |
| :--- | :--- | :--- | ---: | :--- | ---: | ---: |
| Social Studies | 1 | 2 | 4 | 4 | 4 | 15 |
| English, <br> $\quad$ Literature | 3 | 3 | 14 | 5 | 6 | 31 |
| Counselor | 1 | 0 | 0 | 1 | 0 | 2 |
| Physical Education | 2 | 1 | 5 | 0 | 1 | 9 |
| Vocational | 1 | 3 | 15 | 3 | 3 | 25 |
| Business Education | 2 | 2 | 6 | 2 | 2 | 14 |
| Music | 1 | 0 | 0 | 2 | 2 | 5 |
| Other | 1 | 1 | 2 | 0 | 6 | 10 |
| NA | 0 | 6 | 6 | 0 | 9 | 21 |
|  |  |  |  |  |  | 161 |

BACHELOR'S DEGREE?

| Yes | 14 | 21 | 59 | 23 | 31 | 148 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| NA | 0 | 2 | 3 | 0 | 8 | $\frac{13}{161}$ |

COLLEGE ATTENDED

| Michigan State University | 6 | 8 | 25 | 12 | 0 | 51 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Central Michigan |  |  |  |  |  |  |
| University | 5 | 5 | 10 | 2 | 0 | 22 |
| University of |  |  |  |  |  |  |
| Michigan | 0 | 0 | 0 | 1 | 0 | 1 |
| Wayne State |  |  |  |  |  |  |
| University | 1 | 0 | 0 | 0 | 0 | 1 |
| Western Michigan |  |  |  |  |  |  |
| University | 1 | 2 | 5 | 2 | 2 | 12 |
| Other Michigan |  |  |  |  |  |  |
| Public School | 0 | 3 | 9 | 0 | 0 | 12 |
| Other Michigan |  |  |  |  |  |  |
| Private School | 1 | 1 | 4 | 2 | 24 | 32 |
| Outside Michigan |  |  |  |  |  |  |
| Public School | 0 | 2 | 3 | 3 | 1 | 9 |
| Outside Michigan |  |  |  |  |  |  |
| Private School | 0 | 0 | 2 | 1 | 2 | 5 |
| NA | 0 | 2 | 4 | 0 | 10 | 16 |
|  |  |  |  |  |  | $\overline{161}$ |

Table B-1.--Continued.

|  | Fowler <br> $\mathrm{N}=14$ | Ovid- <br> E1sie <br> $\mathrm{N}=23$ | St. <br> Johns <br> $\mathrm{N}=62$ | William- <br> ston <br> $\mathrm{N}=23$ | Grand <br> Rapids <br> $\mathrm{N}=39$ | Total <br> $\mathrm{N}=161$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| GRADUATE WORK? |  |  |  |  |  |  |
| Yes | 14 | 19 | 57 | 23 | 29 | .142 |
| GRADUATE CREDITS |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| None | 1 | 2 | 2 | 1 | 7 | 13 |
| Less than 10 | 1 | 2 | 7 | 7 | 1 | 18 |
| $10-25$ | 5 | 5 | 13 | 5 | 3 | 31 |
| $26-40$ | 5 | 4 | 13 | 8 | 1 | 31 |
| 41 and over | 2 | 5 | 16 | 0 | 17 | 40 |
| NA | 0 | 5 | 11 | 2 | 10 | 28 |
|  |  |  |  |  |  | 161 |

M.A. DEGREE?

| Yes | 3 | 7 | 22 | 8 | 22 | 62 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

YEARS OF TEACHING
EXPERIENCE

| Less than 3 | 1 | 2 | 5 | 5 | 3 | 16 |
| :--- | :--- | :--- | ---: | :--- | ---: | ---: |
| $3-6$ | 6 | 6 | 11 | 6 | 5 | 34 |
| $7-10$ | 5 | 5 | 23 | 3 | 5 | 41 |
| $11-14$ | 1 | 4 | 9 | 2 | 4 | 20 |
| $15-18$ | 0 | 2 | 6 | 3 | 5 | 16 |
| $19-22$ | 1 | 0 | 4 | 1 | 3 | 9 |
| $23-26$ | 0 | 1 | 1 | 2 | 2 | 6 |
| 27 and over | 0 | 0 | 1 | 0 | 4 | 5 |
| NA | 0 | 3 | 2 | 1 | 8 | 14 |

ELEMENTARY TEACHING?

| Yes | 1 | 3 | 8 | 1 | 2 | 15 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

MENTAL HEALTH EXPERIENCE
"Number of Yes Answers"
INSTITUTIONALIZED?
Friends
Family
2
4
$\begin{array}{ll}6 & 18 \\ 4 & 18\end{array}$
5
19
50

$$
0
$$

Table B-1.--Continued.

|  | Fowler $N=14$ | OvidElsie $\mathrm{N}=23$ | St. Johns $\mathrm{N}=62$ | $\begin{gathered} \text { William- } \\ \text { ston } \\ \mathrm{N}=23 \end{gathered}$ | Grand Rapids $\mathrm{N}=39$ | $\begin{aligned} & \text { Total } \\ & \mathrm{N}=161 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TREATED? |  |  |  |  |  |  |
| Friends | 4 | 10 | 24 | 8 | 19 | 65 |
| Family | 5 | 5 | 26 | 7 | 17 | 60 |
| VIEWED AS ILL? |  |  |  |  |  |  |
| Friends | 5 | 8 | 15 | 8 | 17 | 53 |
| Family | 5 | 5 | 18 | 7 | 13 | 48 |
| VISITED? |  |  |  |  |  |  |
| Mental Hospital | 2 | 11 | 27 | 11 | 26 | 51 |
| Psychiatric Ward | 2 | 5 | 23 | 6 | 15 | 51 |
| Community Mental Health Clinic | 3 | 7 | 17 | 8 | 17 | 52 |
| MENTAL HEALTH |  |  |  |  |  |  |
| EXPERIENCE INDEX |  |  |  |  |  |  |
| "Number of Yes Answers" |  |  |  |  |  |  |
| Friends |  |  |  |  |  |  |
| 0 | 8 | 12 | 36 | 12 | 18 | 86 |
| 1 | 3 | 3 | 6 | 5 | 2 | 19 |
| 2 | 1 | 3 | 10 | 2 | 5 | 21 |
| 3 | 2 | 5 | 10 | 4 | 14 | 35 |
|  |  |  |  |  |  | $\overline{161}$ |
| Family |  |  |  |  |  |  |
| 0 | 8 | 15 | 34 | 13 | 20 | 90 |
| 1 | 2 | 5 | 7 | 4 | 4 | 22 |
| 2 | 0 | 0 | 9 | 3 | 4 | 16 |
| 3 | 4 | 3 | 12 | 3 | 11 | 33 |
|  |  |  |  |  |  | $\frac{161}{}$ |
| Visits |  |  |  |  |  |  |
| 0 | 10 | 9 | 24 | 9 | 11 | 63 |
| 1 | 2 | 9 | 17 | 7 | 8 | 43 |
| 2 | 1 | 1 | 13 | 3 | 10 | 28 |
| 3 | 1 | 4 | 8 | 4 | 10 | 27 |

Table B-1.--Continued.

|  | Fowler <br> $\mathrm{N}=14$ | Ovid- <br> Elsie <br> $\mathrm{N}=23$ | St. <br> Johns <br> $\mathrm{N}=62$ | William- <br> ston <br> $\mathrm{N}=23$ | Grand <br> Rapids <br> $\mathrm{N}=39$ | Total <br> $\mathrm{N}=161$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Combined |  |  |  |  |  |  |
| 0 | 6 | 6 | 13 | 7 | 10 | 42 |
| 1 | 1 | 3 | 8 | 2 | 4 | 18 |
| 2 | 0 | 2 | 8 | 0 | 0 | 10 |
| 3 | 2 | 5 | 7 | 6 | 3 | 23 |
| 4 | 1 | 4 | 12 | 2 | 3 | 22 |
| 5 | 3 | 1 | 4 | 3 | 3 | 14 |
| 6 | 1 | 0 | 5 | 1 | 7 | 14 |
| 7 | 0 | 0 | 1 | 1 | 2 | 4 |
| 8 | 0 | 0 | 2 | 0 | 2 | 4 |
| 9 | 0 | 2 | 2 | 1 | 5 | 10 |
|  |  |  |  |  |  |  |

Table B-2.--Demographic Data for Future Teachers.

|  | N | Percentage |
| :--- | ---: | ---: |
| AGE |  |  |
| 21 or less |  |  |
| $22-25$ | 30 | 43.5 |
| $26-29$ | 27 | 39.1 |
| $30-33$ | 7 | 10.1 |
| $34-37$ | 1 | 1.5 |
| NA | 1 | 1.5 |
|  | $\frac{3}{4.3}$ | 100.0 |

SEX

| Male | 40 | 57.9 |
| :--- | ---: | ---: |
| Female | 28 | 40.6 |
| NA | 1 | 1.5 |
|  | 69 | 100.0 |

MARITAL STATUS

| Single | 51 | 73.9 |
| :--- | ---: | ---: |
| Married | 15 | 21.7 |
| Separated, Divorced, Widowed | 2 | 2.9 |
| NA | 1 | 1.5 |
|  | 69 | 100.0 |

YEARS IN SCHOOL

| Junior | 8 | 11.6 |
| :--- | ---: | ---: |
| Senior | 53 | 76.8 |
| Graduate | 7 | 10.1 |
| NA | $\frac{1}{1.5}$ | 100.0 |

TEACHING MAJOR

| Math, Science | 14 | 20.3 |
| :--- | ---: | ---: |
| Social Studies | 9 | 13.0 |
| English, Literature | 19 | 27.5 |
| Special Education | 1 | 1.5 |
| Physical Education | 2 | 2.9 |
| Vocational | 6 | 8.7 |
| Business Education | 7 | 10.1 |
| Other | 6 | 8.7 |
| NA | 5 | 7.3 |
|  | 69 | 100.0 |

Table B-2.--Continued.

|  | N | Percentage |
| :--- | :---: | :---: |
| COMMUNITY TYPE |  |  |
|  |  |  |
| Farm or Open Country | 15 | 21.7 |
| Suburban Town or City | 28 | 40.6 |
| Non-Suburban Town or City | 23 | 33.3 |
| NA | 3 | 4.4 |
|  | 69 | 100.0 |

## COMMUNITY SIZE

| Less than 20,000 | 29 | 42.0 |
| :--- | ---: | ---: |
| $20,000-99,000$ | 14 | 20.3 |
| $100,000-499,000$ | 15 | 21.7 |
| $500,000-1$ million | 2 | 2.9 |
| Over 1 million | 5 | 7.3 |
| NA | 4 | 5.8 |
|  | 69 | 100.0 |

MENTAL HEALTH EXPERIENCE
"Number of Yes Answers"
INSTITUIONALIZED?
$\begin{array}{lll}\text { Friends } & 27 & 39.1 \\ \text { Family } & 16 & 23.2\end{array}$
TREATED?
Friends
32
46.4

Family
26
37.7

VIEWED AS ILL?
$\begin{array}{lll}\text { Friends } & 27 & 39.1 \\ \text { Family } & 25 & 36.2\end{array}$
VISITED?
Mental Hospital 27
39.1

Psychiatric Ward 16
23.2

Community Mental Health Clinic 20
29.0

Table B-2.--Continued.

|  | N | Percentage |
| :---: | :---: | :---: |
| MENTAL HEALTH EXPERIENCE INDEX |  |  |
| "Number of Yes Answers" |  |  |
| Friends |  |  |
| 0 | 29 | 42.1 |
| 1 | 10 | 14.5 |
| 2 | 11 | 15.9 |
| 3 | 19 | 27.5 |
|  | $\overline{69}$ | $\underline{100.0}$ |
| Family |  |  |
| 0 | 33 | 47.8 |
| 1 | 16 | 23.2 |
| 2 | 6 | 8.7 |
| 3 | 14 | 20.3 |
|  | $\overline{69}$ | $\overline{100.0}$ |
| Visits |  |  |
| 0 | 33 | 47.8 |
| 1 | 16 | 23.2 |
| 2 | 10 | 14.5 |
| 3 | 10 | 14.5 |
|  | $\overline{69}$ | $\overline{100.0}$ |
| Combined |  |  |
| 0 | 15 | 21.7 |
| 1 | 7 | 10.1 |
| 2 | 7 | 10.1 |
| 3 | 8 | 11.6 |
| 4 | 10 | 14.5 |
| 5 | 3 | 4.4 |
| 6 | 14 | 20.3 |
| 7 | 2 | 2.9 |
| 8 | 1 | 1.5 |
| 9 | $\frac{2}{69}$ | $\underline{2.9}$ |
|  | $\overline{69}$ | $\overline{100.0}$ |

Table B-3.--Demographic Data For Summer Teachers.

|  | N | Percentage |
| :--- | :---: | :---: |
| AGE |  |  |
| 25 or less | 52 |  |
| $26-33$ | 78 | 30.1 |
| $34-41$ | 29 | 45.1 |
| $42-49$ | 7 | 16.8 |
| 50 and over | 2 | 4.0 |
| NA | 5 | 1.2 |
|  | 173 | 2.8 |
|  |  | 100.0 |

SEX
Male
79
45.7

Female
92
53.1

NA
$\frac{2}{173}$
$\frac{1.2}{100.0}$
MARITAL
Single 52
Married 111
30.1

Separated, Divorced, Widowed NA

7
$\frac{3}{173}$
64.2
4.0
$\frac{1.7}{100.0}$
COMMUNITY TYPE
Farm, Open Country 40
Suburban Town or City 36
Non-Suburban Town or City 96
NA
$\frac{1}{173}$
23.1
20.8
55.5
0.6
100.0

COMMUNITY SIZE
Less than $20,000 \quad 72 \quad 41.6$
20,000 - 99,000 41
23.7

100,000-499,000 32
18.5

500,000-1 million
10
Over 1 million
12
NA
$\frac{6}{173}$
5.8
6.9
3.5
100.0

Table B-3.--Continued.

|  | N | Percentage |
| :---: | :---: | :---: |
| ACTIVITY AND LEVEL |  |  |
| Elementary Teacher | 56 | 32.4 |
| Middle School Teacher | 42 | 24.3 |
| High School Teacher | 20 | 11.6 |
| College Teacher | 9 | 5.2 |
| Administrator | 14 | 8.0 |
| Graduate Student | 24 | 13.9 |
| Other | 7 | 4.0 |
| NA | 1 | 0.6 |
|  | $\overline{173}$ | $\overline{100.0}$ |
| *SUBJECTS TAUGHT |  |  |
| Math, Science | 19 | 10.9 |
| Social Studies | 13 | 7.5 |
| English, Literature | 11 | 6.3 |
| Special Education | 5 | 2.8 |
| Physical Education | 4 | 2.3 |
| Vocational | 6 | 3.4 |
| Business Education | 4 | 2.3 |
| Counselor | 3 | 1.7 |
| Other (e.g. Drivers Ed.) | 4 | 2.3 |
| *NA | 104 | 60.5 |
|  | $\overline{173}$ | $\overline{100.0}$ |
| MENTAL HEALTH EXPERIENCE |  |  |
| "Number of Yes Answers" |  |  |
| INSTITUTIONALIZED? |  |  |
| Friends | 55 | 31.8 |
| Family | 26 | 15.6 |
| TREATED? |  |  |
| Friends | 71 | 41.0 |
| Family | 43 | 24.9 |
| VIEWED AS ILL? |  |  |
| Friends | 54 | 31.2 |
| Family | 43 | 24.9 |
| *Elementary teachers, middle-school teachers, college teachers, administrators and graduate students were not required to respond to this question. |  |  |

Table B-3.--Continued.

|  | N | Percentage |
| :---: | :---: | :---: |
| VISITED? |  |  |
| Mental Hospital | 85 | 49.1 |
| Psychiatric Ward | 67 | 38.7 |
| Community Mental Health Clinic | 80 | 46.2 |
| MENTAL HEALTH EXPERIENCE INDEX |  |  |
| "Number of Yes Answers" |  |  |
| Friends |  |  |
| 0 | 90 | 52.1 |
| 1 | 17 | 9.8 |
| 2 | 26 | 15.0 |
| 3 | 37 | 21.4 |
| NA | $\bigcirc$ | 1.7 |
|  | $\overline{173}$ | $\overline{100.0}$ |
| Family |  |  |
| 0 | 105 | 62.7 |
| 1 | 27 | 15.6 |
| 2 | 18 | 10.4 |
| 3 | 17 | 9.8 |
| NA | 6 | 3.5 |
|  | $\overline{173}$ | $\overline{100.0}$ |
| Visits |  |  |
| 0 | 52 | 30.1 |
| 1 | 47 | 27.2 |
| 2 | 31 | 17.9 |
| 3 | 40 | 23.1 |
| NA | 3 | 1.7 |
|  | $\overline{173}$ | $\overline{100.0}$ |
| Combined |  |  |
| 0 | 26 | 15.0 |
| 1 | 25 | 14.5 |
| 2 | 20 | 11.6 |
| 3 | 35 | 20.3 |
| 4 | 21 | 12.1 |
| 5 | 14 | 8.1 |
| 6 | 16 | 9.2 |
| 7 | 7 | 4.0 |
| 8 | 2 | 1.2 |
| 9 | 4 | 2.3 |
| NA | 3 | 1.7 |
|  | $\overline{173}$ | $\overline{100.0}$ |

Table B-4.--Demographic Data for Grand Rapids Citizens (Reservists).

| $\mathrm{N} \quad$ Percentage |
| :--- |

## AGE

25 or less 27
26-33
34-41
26
8
42-49
50 and over
NA

SEX

| Male | 59 | 83.1 |
| :--- | ---: | ---: |
| Female | 9 | 12.7 |
| NA | $\frac{3}{4.2}$ | $\underline{100.0}$ |

## EDUCATION

8th grade
9th - 11th grade
High School Graduate
1

Vocational school 1
Some college 24
College graduate 13
Professional or graduate school
12
NA

COMMUNITY TYPE
Farm or Open Country 13
Suburban Town or City 19
Non-Suburban Town or City 32 NA

COMMUNITY SIZE

| Less than 20,000 | 30 | 42.2 |
| :--- | ---: | ---: |
| $20,000-99,000$ | 7 | 9.9 |
| $100,000-499,000$ | 23 | 32.4 |
| $500,000-1$ million | 4 | 5.6 |
| Over 1 million | 1 | 1.4 |
| NA | 6 | 8.5 |
|  | 71 | 100.0 |

Table B-4.--Continued.

|  | N | Percentage |
| :---: | :---: | :---: |
| MENTAL HEALTH EXPERIENCE |  |  |
| "Number of Yes Answers" |  |  |
| INSTITUTIONALIZED? |  |  |
| Friends | 21 | 29.6 |
| Family | 14 | 63.4 |
| TREATED? |  |  |
| Friends | 27 | 38.0 |
| Family | 19 | 26.7 |
| VIEWED AS ILL? |  |  |
| Friends | 17 | 23.9 |
| Family | 14 | 19.7 |
| VISITED? |  |  |
| Mental Hospital | 33 | 46.5 |
| Psychiatric Ward | 24 | 33.9 |
| Community Mental Health Clinic | 18 | 25.4 |
| MENTAL HEALTH EXPERIENCE INDEX |  |  |
| "Number of Yes Answers" |  |  |
| Friends |  |  |
| 0 | 43 | 60.6 |
| 1 | 5 | 7.0 |
| 2 | 11 | 15.5 |
| 3 | 11 | 15.5 |
| NA | 1 | 1.4 |
|  | 71 | $\overline{100.0}$ |
| Family |  |  |
| 0 | 47 | 60.2 |
| 1 | 4 | 5.6 |
| 2 | 11 | 15.5 |
| 3 | 8 | 11.3 |
| NA | $\frac{1}{71}$ | $\frac{1.4}{100.0}$ |

Table B-4.--Continued.

|  | N | Percentage |
| :---: | ---: | :---: |
| Visits |  |  |
| 0 | 31 | 43.7 |
| 1 | 16 | 22.5 |
| 2 | 13 | 18.3 |
| 3 | 11 | 15.5 |
|  | 71 | 100.0 |
| Combined |  |  |
| 0 |  | 28.2 |
| 1 | 6 | 8.5 |
| 2 | 14 | 19.7 |
| 3 | 6 | 8.5 |
| 4 | 10 | 14.0 |
| 5 | 6 | 8.5 |
| 6 | 3 | 4.2 |
| 7 | 3 | 4.2 |
| 8 | 1 | 1.4 |
| 9 | 2 | 2.8 |
|  | 71 | 100.0 |

## APPENDIX C

## MEANS OF MENTAL HEALTH OPINION ITEMS, HIGH SCHOOL TEACHERS AND GRAND RAPIDS CITIZENS

Figure 7.--Means of Mental Health Opinion Items, High School Teachers and Grand Rapids Citizens.


## APPENDIX D

A STUDY OF WORD MEANINGS AND OPINIONS ABOUT MENTAL HEALTH (RESEARCH STUDY QUESTIONNAIRE)

## Departnent of Sceioing:y

 Hichigan State University
## A STUDY OF WORD :IEANINGS

The object of this study is to find out how you would describe various kinds of people. On cach of the following pages there is a diferent kinis of person for you to describe. You are asked to do so by puting a ci:eck: biark between each pair of descriptive words, winch form a scale.

If you feel that the kind of people named at the top of the page are yery closely associated with one end of the scale, you would nl:ce a check marii as follows:

If the kind of people scem only slichtly related to one side as opposed to the other, you might check as follows:

If you are undecided, place your check mark in the middle:
DULL_: :__ $\sqrt{ }:$ ____BIGhT
Remember: Put only one check mark on each scale. Check every item; do not leave any scale blank.

Your first impression is what we would like. Spend no more than a fey seconis marking cach scale. He-suggest you first form a picture in your mind of the kind of people mentioned at the top of the pase, and then check eacin scale rapidly.

## DOCTOR

URPREDICTABLE

## PSYCHIATRIST



## PSYCHOLCGIST





## MOST PEOPTE


STRONG $\qquad$
$\qquad$ : : HEAK

UNPREDICTABLE $\qquad$ $:-$ $\qquad$ PREDICTABLE

DIRTY

$\qquad$ : $\qquad$ CLEAM

SLOH


FAST
$\qquad$ : $\qquad$ : $\qquad$ FOOLISH
 SINCERE $\qquad$ ——: —— — $:$ : $\qquad$ INSINCERE

HORTHLESS $\qquad$
$\qquad$
 $\cdots \mathbf{V}$ VALUABLE


RUGGED $\qquad$
$\qquad$ : $\qquad$ — $\qquad$ DELICATE



## PERSON KITH CANCER





## MEUROTIC PERSON



## CRAZY PERSON

RELAKED
ـ :
 $]^{8}$ TENSE

HEAK $\qquad$ : $\qquad$ $\underbrace{2}$ $:$ $\qquad$ STRONG

PREDICTABLE $\qquad$ : $]_{-}^{2}$ . UNPREDICTABLE CLEAN $\qquad$

$\square$
$\square$ DIRTY

FAST $\qquad$ : $\qquad$ ——: $\ldots$ SLOW


SAFE $\qquad$ : $\qquad$ : $\qquad$ DANGEROUS

COLD $\qquad$ $:-$ $\qquad$ $: \quad$ : HARN


VALUARLE $\qquad$
$\qquad$
$\qquad$ : $\qquad$
$\qquad$ HORTHLESS

COHPLICATED $\qquad$ : - : _ SIMPLE

DETICATE $\qquad$ :

$\qquad$ : $\qquad$ RUGGED

## INSANE PERSON

RELAXED $\square$ : $\qquad$ : $\qquad$ TENSE

HEAK $\qquad$
: $\qquad$ [ ${ }^{\text {: }}$ : $\qquad$ STRONG

PREDICTABLE $\qquad$ : —— ——: : ——: $:$ UNPREDICTABLE

## CLEAN

_ :
 DIRTY


FOOLISH $\qquad$ : $\qquad$ : $\qquad$ : $\qquad$
$\square$ : $\qquad$ WISE

SAFE $\qquad$ : $\qquad$
$\square$ DANGEROUS

COLD $\square$ : $\qquad$
$\square$ HARM


COHPLICATED


SIMPLE

DELICATE $\qquad$ : $\qquad$ : $\qquad$ —— : $\qquad$ —— : $\qquad$ RUGGED

## SCHIZOPHRENIC FERSON



## PARAVOID PPESCN

TENSE $:$ _ : $:$ _
 UNPREDICTASLE $\qquad$ : $\qquad$
$\qquad$ : $:$ ——_早 PREDICTABLE

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

$\qquad$ EAST
$\qquad$

$\qquad$ FOOLISH


RUGOED

$\qquad$
$\qquad$


## OPINIONS ABOUT MENTAL HEALTH

On the following pages are some statements about health problems. We want to know how much you agree or disagree with each statement. To the right of each statement is a rating scale:


The use of the rating scale can be illustrated with this statement:
"Cigarette smoking causes lung cancer."
If you agree completely, you would check box I;
if you agree slightly, you would check box 5;
if you are neutral or undecided, you would check box 4;
if you disagree, you would check box 3, 2, or 1, according to how strongly you disagree.

Please make one check mark for each statemerit.
Don't spend too much time on each one -- if it is difficult to make up your mind, make the best response you can and go on to the next one. .

Mental disorder is one of the most damaging illnesses that a person can have.

Nervous breakdowns seldom have a physical origin.

The seriousness of the mental health problem. in this country has been exaggerated.

Helping the mentally 111 person with his financial and social problems often improves his condition.

Mental patients usually make a good adjustment to society when they are released.

The good psychiatrist acts like a father to his patients.

You can tell a person who is mentally ill from his appearance.

People who become mentally ill have little will power.

Most mental disturbances in adults can be traced to emotional experiences in childhood.

People who keep themselves occupied with pleasant thoughts seldom become mentally 111.

Few people who enter mental hospitals ever leave.

People cannot maintain good mental health without the support of strong persons in their environment.


Will power alone will not cure mental disorders.

Women have no more emotional problems than men do.

Mental illness can usually be helped by a vacation or change of scene.

The insane laugh more than normal people.
Psychiatrists try to show the mental patient where his ideas are incorrect.

Disagree

Mental disorder is not a hopeless condition.
Mental health is one of the most important national problems.

Mental disorder is usually brought on by physical causes.

The main job of the psychiatrist is to recommend hobbies and other ways for the mental patient to occupy his mind.

Psychiatrists try to teach mental patients to hold in their strong emotions.

Almost any disease that attacks the nervous system is likely to bring on insanity.

If a person concentrates on happy memories he will not be bothered by unpleasant things in the present.

Mental health is largely a matter of trying hard to control the emotions.

Most of the people in mental hospitals speak. in words thagt can be understood.

There is not much that can be done for a person who develops a mental disorder.

Most people can recognize the type of person who is likely to have a nervous breakdown.

Most suicides occur because of rejection in love.

Many of the people who go to mental hospitals are able to return to work in society again.


Most of the insanity cases are found in people over fifty years of age.

The eyes of the insane are glassy.
People who go from doctor to doctor with many complaints know that there is nothing really wrong with them.


A person cannot rid himself of unpleasant memories by trying hard to forget them.

## INFORiAATION SHEET - SECORDARY TLACHERS

1. Name
2. Subjects teaching during 1975-76
3. Do you have a bachelor's degroc? Yes No
If yos : (a) please name college or university granting degree:
If no : (b) please name college or university there you have takon most of your college work:
4. Have you taken post-bachelor's college courses? Yes $\qquad$ No $\qquad$ If yes, about how many credits? $\qquad$ (underline one) quarter credits semester credits

Do you have a master's degree? Yes $\qquad$ No $\qquad$
5. During your college work, what was your teaching major? teaching minor(s):. $\qquad$
6. How many years teaching experience have you had?

If any of the above was elementary school teaching experience, please indicate number of years $\qquad$
7. Age $\qquad$ 8. Sex: M $\qquad$ F 9. Marital: Single ._. Married -Separated, Divorced $\qquad$ Widowed $\qquad$
10. In what size community did you live during most of the first 18 years of your life? (Check one, please:)
(a) on. a farm $\qquad$ (b) open country, not a farm $\qquad$
(c) town or city, approximate population of: $\qquad$ ; --If town or city, is it a suburb?

- Yes $\qquad$ No $\qquad$

We would Ilke to find out about your first-hand experience with problems of mental illness or mental disorder.

Some mentally ill people receive professional treatment without being hospitalized. Some peoplo who are regarded as mentally ill or psychologically disordered by friends and family, may or may not receive professional care. This is why we are asking several questions which may seem to be overlapping.

Il. Have any of your friends or members of your fumily ever been acimitted to an institution for mental illness?

Friends: Yes No
Family: Yos_No
12. Have any of your friends or members of your family ever been professionally treated for mental illness or mental disorder?

Friends: Yes _No
Family: Yes _ No ___
13. Have any of your friends or members of your family ever been generally viewed by their acquaintances as mentally ill (whether or not they received professional care)?

$$
\begin{aligned}
& \text { Friends: Yes } \\
& \text { Family: Yes ___ No ___ }
\end{aligned}
$$

14. Have you ever visited: (not as a client)

A mental hospital? Yes No $\qquad$
The psychiatric ward of a general hospital? Yes $\qquad$ No $\qquad$
A community mental health center or clinlic?. Yes $\qquad$ No $\qquad$

## INFORYATION SHBET - SUMMER TEACHERS

Name
MSU Student No.

1. During the coming school year, will you be (check one)s teaching school administrator_ graduate student other (please specify)
2. Level: Elementary_ Middle or Jr.iHigh__ High or Sr.High
3. If teaching, what subjects?
4. Name and address of school
(no. \& Street)
(City)
(2ip)
5.Age__ 6.Sex: M__ F_ 7amarital: Single__ Married__ Sep,Divorced__ Widowed
5. In what size community did you live during most of the first 18 years of your life? (Check one, pleases)
(a) on a farm
(b)open country, not a farm
(c) town or city, approximate population of: --If town or city, is it a suburb? Ies
No $\qquad$
$\qquad$ ;

We would like to find out about your first-hand experience with problems of mental illness or mental disorder.

Some mentally ill people receive professional treatment without being hospitalized. Some people who are regarded as mentally ill or psychologically disordered by friends and family, may or may not receive professional care. This is why we are asking several questions which may seem to be overlapping.
9. Have any of your friends or members of your fanily ever been admitted to an institution for mental illness?

| Friends: | Ies | No |
| :---: | :---: | :---: |
| F.amily | Tes | Ho |

10. Have any of your friends or members of your family ever been professionally treated for mental illness or mental disorder?
Friends: Yes_No
Family : Ne
11. Have any of your friends or members of your family ever been generally viewed by their acquaintances as mentally ill (whether or not they received professional care)?

$$
\begin{array}{lll}
\text { Friends: } & \text { Yes__ } & \text { No } \\
\text { Family : } & \text { Yes__ } & \text { NO__ }
\end{array}
$$

12. Have you ever visited: (not as a client)
A mental hospital?
Ies $\qquad$ No $\qquad$

The paychiatric ward of a general hospital?
4 commuity mentel health center or clinic?


TENIS IOD VETI MUCR.

INFORMATION SHEET - FUTURE TEACHERS

1. If you have had any elementary or secondary teaching experience, please check here: $\qquad$
If you checked above:
(a) How many years teaching experience?
(b) If elementary, what grade(s):
(c) If secondary, subjects taught:
2. Teaching major:
3. Teaching minor(s):
4. Tear in school: Freshman $\square$ Sophomore Junior $\qquad$ Senior $\qquad$ 5.Age__ GeSex: M_T_Tarital: Single__ Married__Sep,Divorced_ Widowed__
5. In uhat size coumunity did you live during most of the first 18 years of your life? (Check one, please:)
(a) on a farm
(b)open country, not a farm
(c) torm or city, approximate population of: $\qquad$ ; - If town or city, is it a suburb? Yes_ No

We would like to find out about your first-hand experience with problems of mental illness or mental disorder.

Some mentally ill reople receive professional treatment without being hospitalized. Some people who are regarded as mentally ill or psychologically disordered by friends and family, may or may not receive professional care. This is why we are asking several questions which ray seem to be overlapping.
9. Have any of your friends or members of your fanily ever been admitted to an insititution for mental illness?

10. Have any of your friends or members of your family ever been professionally treated for mental illness or mental disorder?

11. Have any of your friends or members of your family ever been generally viewed by their acquaintances as mentally ill (whether or not they received professional care)?

22. Have you ever visited: (not as a client)

4 mental hospital? Ies. Io
The psychiatric ward of a general hospital?
A commity mental health center or clinic?




[^0]:    ${ }^{11}$ T.S. Szasz, "Myth of Mental Illness," American Psychologist, 15 (February 1960), pp. 113-118.

[^1]:    12W.K. Bentz, J.W. Edgerton and F.T. Miller, "Attitudes of Teachers and the Genral Public Toward Mental Illness," Mental Hygiene, 85 (1971), p. 329.
    ${ }^{13}$ Leslie Y. Rabkin and Joseph F. Suchoski, Jr., 1967, p. 41.

[^2]:    ${ }^{14}$ Judith G. Rabkin, op. cit., 1974.

[^3]:    ${ }^{1}$ Charles E. Osgood; G.J. Suci; and P.H. Tannenbaum, The Measurement of Meaning (Urbana, Illinois: University of Illinois Press, 1957).
    ${ }^{2}$ James Snider and Charles E. Osgood, (Eds.), Semantic Differential Technique, Chicago, Illinois: Aldine Publishing Company, 1969), p. 34.

[^4]:    *Average deviation, means for five high schools.

[^5]:    *Average deviation, means of five high schools.

[^6]:    Pred．－Unpredictable

