LEE, Stephen Dennis, 1938-
SOCIAL CLASS BIAS IN THE DIAGNOSIS OF MENTAL ILLNESS.

The University of Oklahoma, Ph.D., 1968
Psychology, clinical

University Microfilms, Inc., Ann Arbor, Michigan

THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

SOCIAL CLASS BIAS IN THE DIAGNOSIS OF MENTAL ILLNESS

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF PHILOSOPHY

BY

STEPHEN DENNIS LEE

Norman, Oklahoma

1968

SOCIAL CLASS BIAS IN THE DIAGNOSIS OF MENTAL ILLNESS

APPROVED BY

DISSERTATION COMMITTEE

ACKNOWLEDGMENT

Appreciation is extended to the many people whose interest and cooperative efforts led to the completion of this investigation.

The author is especially grateful to the members of the dissertation committee for their encouragement and assistance, particularly to Dr. Dorothy A. Foster, who assisted in the statistical analysis of the data.

Special appreciation is acknowledged to Dr. Maurice K. Temerlin, the Committee Chairman, whose encouragement, guidance, and critical suggestions throughout every phase of the study were invaluable.

TABLE OF CONTENTS

LIST OF TABLES

SOCIAL CLASS BIAS IN THE DIAGNOSIS OF MENTAL ILLNESS

CHAPTER I

INTRODUCTION

Interest in the etiology, dynamics, and treatment of mental illness is of ancient origin. While references to mental disorder appear in historical records (Lewis, 1951; Selling, 1943; Menninger, 1944; Deutsch, 1949), recent discussions have attributed increasingly greater importance to three significant areas of investigation: the biological, the psychodynamic, and the socio-cultural.

Since the pioneering socio-psychological work of Faris and Dunham (1939), numerous studies have supported the view that the lower the socio-economic class, the higher the rate of mental illness (Tietze, Lemkau and Cooper, 1941; Clark, 1949; Stevens, 1954; Frumkin, 1955; Hollingshead and Redlich, 1953; 1954; 1958).

Several investigators (Faris and Dunham, 1939; Ruesch, Jacobson and Loeb, 1948; Goldhamer and Marshall, 1953; Jaco, 1954; Myers and Roberts, 1959; Srole, Langner, Thomas, Michael, Opler and Rennie, 1962; McDermott, Harrison, Schrager and Wilson, 1965) have implied that socio-cultural

factors and mental illness are causally related.

In contrast, Kahn (1959), Hollingshead and Redlich (1958), and Haase (1965) reported that patients with similar symptoms received different diagnoses depending on their social class status. Similarly, an increasing number have argued that the diagnosis of mental illness may well be partially determined by socio-economic status (Hunt, 1959; Haase, 1965; Miller and Mishler, 1965; Dohrenwend and Dohrenwend, 1967).

Investigations of the relationship between socio-economic status and mental illness either reflect opinions based upon clinical experience or represent conclusions derived from survey research. The present study explores the relationship between socio-economic status and psychiatric diagnosis experimentally, and actually manipulates the social class status of the "patient" so that the effect upon psychiatric diagnosis may be observed.

Review of the Literature

The review of the literature will be limited to research studies concerned with the relationship between various indices of socio-economic status and the diagnosis of mental illness. Generally, these studies are surveys which attempt to correlate social status factors with the incidence or prevalence of treated mental illness. Incidence is traditionally defined as the number of new cases

appearing within a determined period of time, while prevalence refers to all cases active during a specified period of time. Concerning incidence and prevalence rates, Kleiner and Parker (1963) stated:

> Prevalence rates, which include re-entries (or re-admissions), continuations, and first admissions, provide valuable information with regard to the frequency of disease in general. When interest is focused on etiological factors, however, incidence studies are superior because the new case is closer in time to the precipitating conditions (p. 190).

Among the first attempts to explore the relationship between mental illness and environmental factors were the ecological studies. These early studies, concerned with the spatial and economic distributions of populations in urban areas, attempted to relate the incidence of mental disorders to such variables as population density, economic strata, and ethnic heterogeneity. The classical ecological work is the Faris and Dunham (1939) study of mental illness in Chicago in which incidence rates for psychiatric disorders were computed according to residential patterns within the city. Using a sample of 28,000 first admissions to four state hospitals, the authors found differences in the proportion of patients from different sections of the city. The highest rates of mental illness were concentrated in the low status areas. Specifically, the central business district produced the highest psychosis rates, followed by the adjacent "hobo" and rooming house areas. The lowest psychosis rates were associated with the peripheral

residential areas. Rates for schizophrenia followed the same pattern as those found for the total incidence of psychosis. However, rates for manic-depressive psychosis were randomly distributed.

Faris and Dunham (1941) replicated their initial study with first admissions to eight private hospitals in the same area. They found a significantly different distribution of psychosis rates and concluded that the private hospital population, as opposed to the population of public hospitals, represented a selection largely based upon economic factors. Ecological studies modeled after that of Faris and Dunham have reported similar findings (Green, 1939; Schroeder, 1942; Kaplan, Reed and Richardson, 1956).

Similarly, Tietze, Lemkau and Cooper (1941) found that high rates of schizophrenia in Baltimore were associated with lower class status. Clark (1949) also found psychosis to be correlated with low prestige jobs. In a survey of male first admissions to both public and private hospitals in Chicago, he reported that low psychosis rates were associated with high occupational prestige and income. Conversely, high psychosis rates were associated with low occupational prestige and income. Clark also noted that the manic-depressive disorders were slightly more common in the upper status groups. In a more recent study, Frumkin (1955) reported similar results.

These studies have been criticized by reviewers

who believe that first admissions to hospitals may not necessarily be representative samples. Jaco (1960) noted that in the large scale studies, cases in private treatment have been omitted; thus, a serious socio-economic bias may exist. Jaco stated:

> Also, studies using first admissions to hospitals alone have only limited validity for comparative research. The factors affecting such admissions are still largely undetermined, although known to be numerous and perhaps variant in different sections of the country. Thus, differences found between studies based entirely on hospital admissions, especially to state hospitals, might be due to many unknowns not related to incidence itself (Jaco, 1960, p. 326).

In his study, therefore, Jaco attempted to include all Texas residents who sought psychiatric treatment for psychosis over a two-year period. Data were obtained not only from private hospitals, but also from psychiatrists in private practice. Using 11,304 cases, rates were computed for the incidence of all psychoses combined and then for the functional, organic and senile psychoses individually. The results showed a curvilinear relationship between the incidence of psychosis and socio-economic status. Incidence rates were elevated among the lowest and highest occupational and educational groups, but were low among the medium status groups.

To avoid sampling bias, several investigators have employed non-hospitalized and non-treated populations. Rowntree, McGill and Hellman (1945) reviewed the prevalence

and rejection rates for mental and personality disorders among selective service registrants. Psychoneurotic and psychopathic personality disorders accounted for more than eight out of ten rejections. The rejection rates for neuroses were highest for professional and managerial workers and lowest for farm laborers; these trends were reversed in all other classifications of mental and personality disorders.

Hyde and Kingsley (1944) determined rejection rates for 60,000 selectees at the Boston Armed Forces Induction Station. Rejectees were classified on a six-point scale in terms of the socio-economic levels of the communities from which they came. In comparing the rejections for mental disorder with socio-economic status, the authors found an inverse relationship. Although the rates of psychosis increased with declining community status, psychoneurosis showed no consistent variation with socio-economic status.

In the well known Midtown Manhatten Study, Srole, Langner, Thomas, Michael, Opler and Rennie (1962) reported the usual inverse relationship between socio-economic status and mental illness.

Several studies have investigated the relationship between socio-economic status and mental illness in children. McDermott, Harrison, Schrager and Wilson (1965) found a significant relationship between the father's occupation and the psychiatric diagnosis and treatment of the child.

Sewell and Haller (1959) administered a questionnaire to 1,462 elementary school children to reveal the relationship between social position and symptoms of "nervousness and anxiety." Lower status children displayed more nervous symptoms and anxiety than upper status children.

In a comprehensive review of the literature, Auld (1952) noted that most studies showed either a significant inverse relationship or a tendency in that direction. In no study, however, was there a direct positive relationship between socio-economic status and neurosis.

The most significant research effort to date is unquestionably the studies conducted by Hollingshead, Redlich, and their colleagues in New Haven, Connecticut. The Hollingshead and Redlich research is so important to the present study that it will be discussed in detail.

Three hypotheses were investigated:

(1) The prevalence of treated mental illness is related significantly to an individual's position in the class structure.

(2) The types of diagnosed psychiatric disorders are connected significantly to the class structure.

(3) The kind of psychiatric treatment administered is associated with the patient's position in the class structure.

The basic design of the New Haven Study involved the following steps:

(1) The social class composition of the metropolitan area of New Haven, Connecticut was derived from interviews with respondents in a five per cent sample of all households.

(2) A psychiatric census was conducted that enumerated all persons from the New Haven metropolitan area who were in psychiatric treatment, either in private or public institutions, or with a private practitioner between May 31, 1950 and December 1, 1950.

(3) A five per cent sample of the New Haven metropolitan residents was selected for control purposes.

(4) Extensive psychiatric and sociological data on the psychiatric sample, and of important social data on the control sample were collected.

(5) The psychiatric and control samples were divided into five social classes arranged in hierarchal order. The class position was determined by the obtained score of the head of the family on a weighted "Index of Social Position." The "Index" was comprised of three scales which measured social rank, e.g., a) occupation b) education and c) area of residence.

The following social stratification scheme, outlining the class structure of the New Haven, Connecticut population, was derived from this procedure:

Class I - Upper Class: The upper class constituted approximately three per cent of the population and was composed of "old" and "new" families which lived in the exclusive residential areas. The head of the family was a college graduate who was either an executive of a large firm or a professional.

Class II - Upper Middle Class: The upper middle class constituted approximately eight per cent of the population and was composed of managerial and professional groups.

Class III - Lower Middle Class: The lower middle class constituted approximately twenty per cent of the population. Half were in salaried white collar work and the remainder either owned small businesses, were semi-professionals, foremen, or skilled workers.

> Class IV - Working Class: The working class constituted the largest group and accounted for approximately fifty per cent of the population. Half were semi-skilled workers, a third were skilled, and a tenth were white collar employees. The overall educational level was much lower than for the preceding class.
>
> Class V - Lower Class: The lower class constituted approximately eighteen per cent of the New Haven population and was composed of unskilled and semi-skilled workers of low education.

Hollingshead and Redlich (1958) found a systematic relationship between social class and the prevalence of mental illness. Classes I through IV were under-represented in the patient population, while Class V, to which thirty-eight per cent of the patient group was assigned, was over-represented. Accordingly, there were twice as many Class V patients than would be expected on the basis of their number in the community (Miller and Mishler, 1965).

In a more detailed analysis, Hollingshead and Redlich (1958) divided the psychiatric group into specific diagnostic categories and found different prevalence rates for psychoses than for neuroses. The proportion of patients diagnosed psychotic increased as social class decreased, while the proportion diagnosed neurotic decreased with lowered social class.

Interesting findings were reported for the different classes with respect to the specific neurotic disturbance among patients in treatment. In Classes I and II, the modal disturbance was character neuroses; in Classes

III and V anti-social and immaturity reactions; in Class IV the phobic anxiety reactions.

There was far less variation in the specific types of psychoses. Schizophrenia was the predominant psychotic disorder in all classes and the proportion of all psychotics who were classified as schizophrenic ran from a low of fifty-five per cent in Class I to sixty-one percent in Class IV.

The clearest demonstration of an inverse relationship was the percentage of persons from each social class in treatment for a specific psychotic disorder. In every case there was an increase in the rates as one moved from Class I to Class V. Incidence and prevalence data revealed that Classes IV-V comprised seventy-eight per cent of the mental patients in treatment, even though the two classes comprised sixty-eight per cent of the community population. Miller and Mishler concluded:

> Thus, due to the size of these two classes, the high psychotic incidence rates in Class V, and the long duration of illnesses in both classes, psychiatry - whether or not it is aware of it - is largely concerned with Class IV and V patients (Miller and Mishler, 1965; p. 22).

While Hollingshead and Redlich (1958) specifically stated otherwise, they imply that prevalence findings may reflect class differences in the likelihood of developing mental illness. As Miller and Mishler have noted:

> It is also likely that the findings will be discussed in both the lay and professional literature to some

> extent as if the prevalence findings did bear on the question of etiology (Miller and Mishler, 1965, p. 30-31).

The relationship between socio-economic status and mental illness is probably complicated by numerous factors. Nonetheless, the disproportionate number of mental patients from the lower socio-economic levels of society is well documented, even though, as Kleiner and Parker stated:

> . . .the relationship between status and mental disorder is by no means a simple one and may be complicated by varying definitions of mental disorder, different case finding methods, and the nature of the class system in the community being studied (Kleiner and Parker, 1963, p. 193).

Although recent research appears to have overcome many of the earlier methodological problems, difficulties inherent in diagnostic classification remain and have received less research attention. King concluded:

> The inadequacy of present neuropsychiatric diagnostic categories is practically common knowledge. In psychological research, a major trend has been the tremendous increase in studies utilizing neuropsychiatric subjects; and such research, if it is to be effective, must cope with the present diagnostic classifications (King, 1954, p. 383).

Many psychiatrists and psychologists have asserted psychiatric diagnosis to be so unreliable that it is relatively useless in classifying, treating and studying patient behavior (Doering, 1934; Elkins, 1947; Ash, 1949; Mehlman, 1952; Szasz, 1959, 1964, 1965). This dissatisfaction with psychiatric diagnosis is expressed in several studies.

Masserman and Carmichael (1938) reported that forty

per cent of the diagnoses made in a representative clinic had to be revised one year after the discharge of patients on whom they were made.

Mehlman (1952) noted that different psychiatrists used different criteria as a means of distinguishing between major diagnostic groups; this finding was subsequently confirmed by Pasamanick, Dintz and Lefton (1959) who demonstrated that the diagnosis of first admission cases in a psychiatric institution over a two-year period showed extreme variation by ward and equally great variation on the same ward with changes in ward administrator. Differences occurred despite the random assignment of patients to the various wards. Administrator Z classified sixty-seven per cent of the patients as schizophrenic and fifteen per cent as character disorders. Administrator Y classified twenty-two per cent as schizophrenic and fifty-six per cent as character disorders, while Administrator X classified twenty-nine per cent as schizophrenic and forty-seven per cent as character disorders (Pasamanick, Dintz and Lefton, 1959).

Schmidt and Fonda (1956) concluded:

> It is unfortunate, and from the standpoint of actual practice, an even stronger indictment of the present state of psychiatry, that equally competent clinicians as often as not are unable to agree on the specific diagnosis of psychiatric impairment. Inter-clinician reliability on diagnosis has consistently been found to be low (p. 265).

Studying the social-psychological sources of

variability in psychiatric diagnosis, Temerlin and Trousdale (1966) found that the diagnosis of mental illness varied with prestige suggestion. Experimental subjects diagnosed with the expectation, created by prestige suggestion, that they were observing a psychotic. Control subjects diagnosed the same individual under three different conditions: prestige suggestion of mental health; no prestige suggestion; and outside a clinical setting. The diagnoses of mental illness ranged from eighty-four per cent to one hundred per cent in the experimental groups, as compared with zero to forty-seven per cent in the control groups. Temerlin and Trousdale (1966) concluded:

> What these results mean is that the differentiation of normality and health from neurosis and psychosis may be grossly inaccurate when made (a) in a clinical setting, (b) under the influence of prestige suggestion, and (c) in the absence of a generally accepted definition of mental illness and mental health. Unfortunately, these conditions characterize diagnostic practice in many clinics, state hospitals, and courtrooms, as formal diagnoses are usually made without explicit definition of the categories used, on the basis of consensus derived from discussion led by a clinic director, hospital superintendent, expert consultant, or jury foreman (p. 18-19).

In a recent review, community studies of psychological disorder were analyzed according to age, sex and social class for rates of psychosis, neurosis, and personality disorder (Dohrenwend and Dohrenwend, 1967). A consistently high rate of personality disorder in the lowest class was found. The authors suggested that the diagnoses of personality disorder were probably based on different

social definitions of acceptable behavior, rather than on psychiatric criteria. Thus, the authors questioned:

> To what extent does this high rate of "personality disorder" in the lowest class indicate an excess of persons suffering from defective intrapsychic functioning of whatever origin, and to what extent does it represent normal reactions to the pressures of the lower class environment, reactions which appear socially unacceptable when viewed from outside the situation that produces them? (Dohrenwend and Dohrenwend, 1967; p. 377)

Hollingshead and Redlich (1958) have also been concerned with socio-cultural issues and diagnosis. In an excellent discussion of the paths to psychiatric treatment, they asserted that mental illness is a socio-cultural phenomenon as well as a psychological one:

> . . .abnormal acts can be evaluated only in terms of their cultural and psychosocial contexts, and. . . . Whether abnormal behavior is judged to be disturbed, delinquent, or merely idiosyncratic depends upon who sees it and how he appraises what he sees (Miller and Mishler, 1965, p. 22).

A persual of the literature reveals only one study in which socio-economic status was treated as an independent variable. Specifically, Haase (1965) found that nearly identical Rorschach protocols were interpreted by clinical psychologists quite differently, depending upon the designated social class background of the patient. Haase concluded:

> To MacFarlane's (1942) warning that a projective tool may easily degenerate into one that discloses the dynamics of the interpreter rather than the subject, we may now add, and discloses his socio-economic attitudes as well. Our investigation adds a good deal of urgency to Child's (1952) conclusion that the

psychologist is likely to assume a bias in favor of his own social class (Haase, 1965, p. 246-247).

CHAPTER II

STATEMENT OF THE PROBLEM

Numerous authors have studied the relationship between socio-economic factors and the incidence and prevalence of mental illness. The results of these studies demonstrate that the lower class is significantly over-represented in the patient population. Similarly, methods of treatment (and prognosis) appear to be influenced by social class position. That lower class members of society are typically diagnosed mentally ill more frequently than are members of higher socio-economic levels and treated differently, is amenable to two possible interpretations: (1) There is more mental illness among members of the lower classes; or (2) Lower class members are subject to a diagnostic bias.

Although much has been written about the relationship between social status and mental illness from consensus, survey, prevalence and incidence data, little has been written on the subject from an experimental research orientation. Moreover, the literature reveals no rigorous experimental investigations that systematically vary social

class status as an independent variable under sufficient conditions to allow for the parameters of "bias" to be clearly delineated.

One experimental approach to the problem would be to present psychiatrists with a recorded diagnostic interview for their evaluation. In order to manipulate social class status, an interview would be required in which social class referents and pathological content are controlled.

It was hypothesized:

1. The lower the socio-economic status of a patient, the greater the probability of a diagnosis of mental illness; conversely, the higher the socio-economic status, the greater the probability of a diagnosis of mental health.

2. The lower the socio-economic status of a patient, the greater the probability of a poor prognosis; conversely, the higher the socio-economic status the greater the probability of an excellent prognosis.

3. The more severe the diagnosis (created by prestige suggestion), the greater the probability that the patient will be rated as of "lower socio-economic status."

CHAPTER III

METHOD

Subjects

Three psychiatric residency programs within the southwestern region of the United States cooperated in the study; each residency program offered similar training, and each was accredited by the American Psychiatric Association. Sixty psychiatric residents in their first, second and third year of residency training were selected as subjects.

Notified by their respective directors of residency training, subjects were asked to participate in a Doctoral candidates dissertation research. The subjects were not volunteers in the usual sense; in two residency programs participation was encouraged, although not required, by the directors of training. In each of these two programs only a small minority of the total resident population declined. The typical reason for non-participation was the inability of a resident to arrange his schedule to provide sufficient time for the experimental procedure. In the third training program, approximately

half of the resident population did not volunteer until a nominal fee for their services was offered. As a result, virtually all residents in the program participated.

Since each residency program was accredited, sample homogeneity was assumed. Subjects were randomly assigned to the experimental conditions, however, in order to control for the possible variance of three factors: (1) payment, (2) level of residency training and (3) academic institution. Table 1 outlines the number of first, second, and third year residents assigned to each condition.

Materials

Diagnostic Interview: A twenty-five minute diagnostic interview with a patient was written in which the patient was portrayed as a relatively normal person (Appendix A); an attempt was made to exclude statements characteristic of a particular socio-economic class.

The script was a revised version of the one constructed by Temerlin and Trousdale (1966). The original interview is devoid of pathological content, and the authors present theoretical and experimental evidence that the person interviewed is normal. Commenting on the script, Temerlin and Trousdale stated:

> We wrote a script in which the person portrayed met each one of these criteria (Mental health criteria postulated by Freud, Goldstein, Maslow, Rogers, and Jahoda). The behaviors explicitly contraindicated the most common diagnoses: the actor quickly established

TABLE 1

NUMBER OF RESIDENTS IN EACH EXPERIMENTAL CONDITION ACCORDING TO RESIDENCY YEAR

Condition	Year of Residency			Total
Social Class	First	Second	Third	
Upper	3	4	3	10
Middle	4	4	2	10
Lower	2	4	4	10
Prestige Suggestion				
Psychosis	3	3	4	10
Neurosis	4	3	3	10
Control	3	4	3	10
Total	19	22	19	

> a warm interpersonal relationship with the interviewer, cordially verbalizing his inner experience in a coherent and organized fashion, without evasion, defense, withdrawal or guilt (contraindicating psychosis). He did not qualify his statements more than was necessary in the interest of accuracy, he was not obsequious, had no preoccupation with dirt, and was not tortured by sexual or hostile thoughts or driven to repetitive actions (evidence that he was not obessive-compulsive). He remembered his childhood clearly, articulated memories without labile affect, and freely discussed his early sexual experiences without embarrassment, shame or guilt (to contraindicate hysteria). Finally, he had never been in trouble with the law (to exclude juvenile delinquency or psychopathic personality) Temerlin and Trousdale, 1966; p. 3-4).

An advanced graduate student in drama at the University of Oklahoma, with extensive experience in the theater and radio, enacted the script. His age, marital and family status, and place of birth were identical to those of the patient he portrayed, as designated in each of the socio-economic histories.

The actor, who studied the script for several days prior to the actual recording, was instructed to portray a relaxed, effective person who was free from psychological problems.

A clinical psychologist with fifteen years experience in diagnostics, in the practice of psychotherapy, and in the training of graduate students in clinical psychology enacted the role of interviewer.

Socio-economic histories: Several indicies of socio-economic position were used in order to provide the subjects with enough material on which to base inferences

regarding the socio-economic status of the patient. For example, occupation, education and area of residence (Index of Social Position, Hollingshead and Redlich, 1958) were systematically varied to derive three distinct socio-economic histories. The histories were lengthened by the addition of other status variables: source of income, amount of income and type of home. Further, numerous sources provided a clear rationale for the status implications of religion (Packard, 1959; Dynes, 1955; Yinger, 1957). Accordingly, religious preference was included in each history, with the qualification that the patient no longer attended church regularly. The latter qualification was added on the theory that a diagnostician might interpret a fundamentalist religious preference as indicative of psychopathology. The statement of irregular church attendance was included to minimize such a possibility.

Each socio-economic history appears to convey three distinct socio-economic impressions. In other words, each history appears to have "face validity." Still, the histories were numerically evaluated according to the Index of Social Position (Hollingshead and Redlich, 1958), and by the procedure advocated by Packard (1959). The two methods of computation yielded scores which when translated into nomenclature were identical.

Rating Scales: The diagnostic, prognostic, and degree of psychiatric impairment ratings, consisted of

nine-point judgment scales. The diagnostic scale permitted three judgments within one of three categories: normal, neurotic, or psychotic. Similarly, the prognostic scale consisted of three choices within three categories: excellent, fair, or very poor; and the impairment scale was also divided into three categories: none, moderate and severe. Socio-economic status scales were derived from the Index of Social Position (Hollingshead and Redlich, 1958). Occupation, education and area of residence were rated on a seven-point scale. The derived scores were then multiplied by weighted scores in accordance with a scales value as a status indicant. The rating scales used in the present study appear in Appendix B.

Procedure

Subjects were randomly assigned to one of six experimental conditions and participated in groups of either two, three, four, or five. Subjects were thanked for their cooperation and told they would first hear a diagnostic interview with a patient and then be asked to render several judgments. Anonymity was assured and confidential treatment of all information was requested. The experimental design is presented in Table 2, and the procedures are described in detail on the following pages.

There were three social class conditions: (USC) upper social class; (MSC) middle social class; and (LSC)

TABLE 2

OUTLINE OF EXPERIMENTAL PROCEDURE

Group	Stimulus Conditions	Psychiatric Judgments
Socio-Economic Class		
Upper	Upper class socio-economic history; Tape-recorded diagnostic interview	Diagnosis; Prognosis
Middle	Middle class socio-economic history; Tape-recorded diagnositic interview	Diagnosis; Prognosis
Lower	Lower class socio-economic history; Tape-recorded diagnostic interview	Diagnosis; Prognosis
Prestige Suggestion		
Psychosis	Prestige suggestion for psychosis; Tape-recorded diagnostic interview	Degree of psychiatric impairment; Prognosis; Occupation; Education; Area of residence
Neurosis	Prestige suggestion for neurosis; Tape-recorded diagnostic interview	Degree of psychiatric impairment; Prognosis; Occupation; Education; Area of residence
Control	Tape-recorded diagnostic interview	Diagnosis; Degree of psychiatric impairment; Prognosis; Occupation; Education; Area of residence

lower social class. In each condition subjects were read a socio-economic history reflecting either an upper, middle, or lower class status. The specific history for each condition is presented below.

> Upper socio-economic history: The patient is a thirty-year old white male and lives with his wife and six-year-old boy. He lives in Tulsa, Oklahoma, most of the year, but maintains another home in the Piedmont area near San Francisco. He is an executive in his family's industrial concern, which has a patent on a lubrication critical to the aircraft and missile industry. The patient's responsibility is for the Tulsa operation, although the main office is on the west coast. There is considerable family wealth from business interests, securities, and land holdings. He was born in Tulsa and his family spent much time traveling abroad, but he said he's always considered Tulsa his home. He's a member of the Episcopal Church, but no longer attends regularly. He attended private schools for his education and did his graduate work at Stanford University. He was deferred from military service for awhile, but was eventually commissioned in the army. The patient described his wife as a thoughtful person. She attended a women's New England college and majored in languages.
>
> Middle socio-economic history: The patient is a thirty-year-old white male and lives with his wife and six-year-old boy. He owns a home in a relatively new housing addition in Tulsa, Oklahoma, which he bought for about $14,000. He earns his living as a retail salesman with an office supply company and he averages about $8,000 to $9,000 a year, depending on commissions. He was born and reared in Tulsa and is a member of the Methodist Church, although he said he no longer attends church regularly. He attended the Tulsa public schools and is a graduate of a two year college with a degree in business administration. He said he'd like to return to college and get his B.A. in business and industrial management. After his A.A. degree he was drafted into the Army and spent eleven months in Europe. The patient described

> his wife as a good wife and mother. She's several years younger than he and a graduate of secretarial school. Since their marriage she hasn't worked.
>
> Lower socio-economic history: The patient is a thirty-year-old white male and lives with his wife and six-year-old boy in a four room furnished apartment in downtown Oklahoma City. The apartment rents for $65.00 a month. He works at the Oklahoma City Wholesale Market, earning about $85.00 a week. He was born on a farm in southeastern Oklahoma and is a member of the Pentacostal and Holiness Church, although he said he doesn't go to church much anymore. He went to a rural school until the sixth grade when he quit to work on his father's farm. He's worked as a dishwasher and a service station attendant. He was in the Army for two years, stationed at Ft. Chaffee, Arkansas, at which time he worked at the post bowling alley for extra money. When he was discharged he was a private first class. The patient described his wife as a good woman. She's three years younger than he is and sometimes works doing washing and ironing to supplement the family income.

After the socio-economic history was read, subjects listened to the diagnostic interview and were instructed to render their judgments:

> You have just heard a recording of a diagnostic interview, and now I would like you to answer several questions about the patient. On the first scale (diagnostic) indicate your diagnosis by placing a check in the space which best describes the patient. If the patient is neurotic or psychotic, it would be helpful to know what kind of psychosis or neurosis. So, would you write the specific diagnosis in the space provided. On the second scale (prognostic) would you please indicate the prognosis with psychotherapy, regardless of whether or not you would prescribe psychotherapy.

There were two prestige suggestion conditions: (P) prestige suggestion for psychosis, and (N) prestige suggestion for neurosis; in which subjects were told of the

previous diagnoses made by prestige figures. The specific instructions follow:

> Prestige suggestion for psychosis: The patient has already been diagnosed by two board certified psychiatrists and a psychoanalyst as psychotic, but many more judgments are needed for research purposes. Specifically, detailed judgments on a scale of psychiatric impairment are required. Also, it would be helpful to know what kind of psychotic condition the patient has, so would you write a specific diagnosis in the space provided.
>
> Prestige suggestion for neurosis: The patient has already been diagnosed by two board certified psychiatrists and a psychoanalyst as neurotic, but many more judgments are needed for research purposes. Specifically, detailed judgments on a scale of psychiatric impairment are required. Also, it would be helpful to know what kind of neurotic condition the patient has, so would you write a specific diagnosis in the space provided.

As in the social class conditions, subjects listened to the interview and rendered their judgments, with the following instructions:

> You have just heard a recording of a diagnostic interview and now I would like you to answer several questions about the patient. On the first scale please indicate the degree of psychiatric impairment, and in the space provided indicate a specific diagnosis. On the next scale, would you please indicate the prognosis with psychotherapy regardless of whether or not you would prescribe psychotherapy. On the remaining scales estimate the occupation in which you would expect the patient to be employed; the educational level which seems most characteristic of the patient; and the kind of home (area of residence) in which the patient lives.

The (C) control group was read the general instructions previously described, i.e.; they were thanked for their cooperation and told they would hear a diagnostic

interview with a patient. Control subjects rated all the dimensions heretofore described.

CHAPTER IV

RESULTS

The percent of the control group (C) rating each diagnostic, psychiatric impairment, and prognostic category is presented in Table 3.

Table 3

Percent of Control Group Rating Each Diagnostic Impairment and Prognostic Category (N = 10)

Rating	Percent Rating Each Category		
	Psychosis	Neurosis	Normal
Diagnostic	0	20	80
	Severe	Moderate	None
Psychiatric Impairment	0	10	90
	Very Poor	Fair	Excellent
Prognostic	0	10	90

An examination of Table 3 reveals that eight (C) group subjects (80%) diagnosed the patient as normal, while two subjects (20%) diagnosed him as neurotic. There were

no diagnoses of psychosis. Further, nine (C) subjects (90%) rated the patient as an excellent prognostic risk with psychotherapy and without psychiatric impairment. Thus, the majority of the (C) group diagnosed the patient as normal, without impairment psychologically, and considered the patient's chance of recovery to be excellent; it would appear that the assumption of normality was justified.

The next step in the analysis of results was to determine whether there were differential diagnostic and prognostic ratings between the social class groups and the (C) group. For this purpose, the median diagnostic and prognostic scores for the (LSC), (MSC), and (USC) were individually compared with the (C) group median diagnostic and prognostic ratings. Median Test results for each social class group compared with the (C) group are presented in Table 4.

Table 4

Comparison of Median Diagnostic and Prognostic Scores Between The Control Group and Each Social Class Group

Group				
Social Class (N=10)		Control (N=10)	Chi Square (df = 1)	Significance Level
Diagnosis				
Lower	5.50	2.50	9.80	.01
Middle	3.70	2.50	1.87	.20
Upper	2.33	2.50	.00	.99
Prognosis				
Lower	5.50	2.30	5.00	.05
Middle	3.30	2.30	3.23	.10
Upper	1.75	2.30	.80	.50

Table 4 reveals that the (LSC) median diagnostic and prognostic ratings were significantly different ($p < .01$) and ($p < .05$) from the (C) group ratings. The (LSC) group diagnosed the patient as mentally ill with a fair prognosis, while the (C) group diagnosed the patient as normal with an excellent prognosis. There were no significant differences in diagnostic and prognostic ratings between the (C), (MSC), and (USC) groups.

Analyses for Hypothesis I: The first hypothesis predicted more diagnoses of mental illness in the (LSC) condition than in the (MSC) or (USC) conditions.

An extension of the Median Test for independence was used to test the hypothesis for differences in central tendencies. Diagnostic scores for each subject were numerically ranked, and the number of scores in each group which fell above and below the common median were determined. Table 5 shows the frequencies in each cell.

Table 5

Diagnosis in the Social Class Conditions

	(LSC)	(MSC)	(USC)	Totals
No. of diagnoses above the combined median	9	6	2	17
No. of diagnoses below the combined median	1	4	8	13
Totals	10	10	10	30

Chi-square = 10.57; for two degrees of freedom, $p < .01$. Thus, hypothesis I was supported.

Further analysis revealed a significant difference in diagnostic ratings between the (LSC) and (MSC) groups; Chi-square = 9.80 ($p < .01$), and between the (LSC) and (USC) groups; Chi-square = 9.80 ($p < .01$). The difference in diagnostic ratings between the (MSC) and (USC) groups was not significant ($p > .05$). Accordingly, the results in Table 5 and the individual comparisons between the three social class groups clearly indicate that there were significantly more diagnoses of mental illness in the (LSC) group than in the (MSC) or (USC) groups.

Analyses for Hypothesis II: The second hypothesis predicted a significantly greater number of poor prognoses in the (LSC) group than in the (MSC) and (USC) groups. Again, an extension of the Median Test for independence was used to test the hypothesis. Table 6 shows the frequencies in each cell.

Table 6

Prognosis in the Social Class Conditions

	(LSC)	(MSC)	(USC)	Totals
No. of prognoses above the combined median	8.5	6.5	1.5	16.5
No. of prognoses below the combined median	1.5	3.5	8.5	13.5
Totals	10	10	10	30.0

Chi-square = 10.49; for two degrees of freedom, $p < .01$. Table 6 shows that the prognostic ratings were significantly different across the social class groups; thus, hypothesis II was supported.

The prognostic data were analyzed further to determine whether significant differences existed between each social class group. Accordingly, a significant difference in median prognostic scores was found between the (LSC) and (MSC) groups, Chi-square = 5.00 ($p < .05$); between the (LSC) and (USC) groups, Chi-square = 7.27 ($p < .01$); and between the (MSC) and (USC) groups, Chi-square = 5.20 ($p < .05$). These results clearly indicate that the prognostic ratings varied as a function of the socio-economic history of the "patient."

Analyses for Hypothesis III: For the prestige suggestion condition, the third hypothesis predicted significantly more lower socio-economic ratings in the (P) group than in the (N) group.

The third hypothesis presupposed that subjects would agree with the diagnosis made by prestige figures, as previous research has demonstrated the efficacy of such a procedure. As a check, however, subjects rendered a specific diagnosis. Table 7 presents each subjects' diagnosis in the (P) and (N) groups together with the classification of the diagnosis as either neurotic or psychotic.

An examination of Table 7 reveals that all subjects in the (N) condition diagnosed the "patient" as neurotic. Similarly, nine subjects (90%) in the (P) condition diagnosed the "patient" as psychotic. Additional Chi-Square analyses showed that the (N) group rated the "patient" less impaired psychiatrically than the (P) group ($p < .05$). Further, the (N) group rendered more favorable prognoses than did the (P) group ($p < .05$).

Table 7

Diagnostic Classification in Prestige Suggestion Conditions

Neurotic Condition	Classification		Psychotic Condition
Anxiety Neurosis	N	N	Inadequate Personality
Anxiety Neurosis	N	P	Simple Schizophrenia
Phobic reaction	N	P	Schizophrenic Reaction
Anxiety Neurosis	N	P	Acute Psychotic Reaction
Obessive-Compulsive	N	P	Simple Schizophrenia
Anxiety Neurosis	N	P	Borderline Schizophrenia
Pseudo Neurotic		P	Psychotic Depression
Schizophrenia	N	P	Paranoid Schizophrenia - latent homosexuality
Immature and Inadequate Personality	N	P	Psychotic Depression
Anxiety Neurosis	N	P	Paranoid Schizophrenic reaction
Passive Aggressive Personality	N		

Using the Hollingshead and Redlich procedure, mean social status ratings for the (C), (N) and (P) groups were computed; the means and standard deviations are presented in Table 8.

Table 8

Mean Social Status Ratings and Standard Deviations for the Control and Prestige Suggestion Conditions

Group	Mean	S.D.
(C)	58.60	10.50
(N)	70.40	14.53
(P)	105.20	12.56

A summary of the analysis of variance of social status ratings under varying prestige suggestion and control conditions is presented in Table 9.

Table 9

Analysis of Variance of Social Status Ratings for the Control and Prestige Suggestion Conditions

Source	Mean square	df	F
Between Groups	5869.70	2	36.70*
Error	159.90	27	
Total	6029.60		

*$p < .01$

Table 9 clearly shows that significant differences in mean social status ratings existed among the (C), (N) and (P) groups.

The mean social status rating for the (C) group was compared with the (N) group mean, and the means for the (N) and (P) groups were compared using *t* tests (Table 10).

The largest and smallest group variances were compared and found to be not significantly different.

Table 10

Means Standard Deviations and t-Tests of Social Status Ratings Between the Psychotic Neurotic and Control Group

Group			t	p[a]
Control		Neurotic	2.09	.05
Mean	58.60	70.40		
S.D.	10.50	14.53		
Neurotic		Psychotic	6.10	.001
Mean	70.40	105.20		
S.D.	14.53	12.56		

[a]one tailed tests

Table 10 shows a significant difference in mean social status rating between both the (C) and (N) groups and the (N) and (P) groups. The difference between the (C) group and the (P) group is, therefore, also significant. It is clear from Tables 9 and 10 that the prediction of differential social status ratings as a function of prestige suggestion for different degrees of mental illness (Hypothesis IV) was confirmed.

CHAPTER V

DISCUSSION

A rationale was presented for the use of a diagnostic interview in which the "patient" was portrayed as normal. It might be reasoned that an interview in which the patient was portrayed as neurotic or psychotic would have been suitable for testing the hypotheses. All subjects would be exposed to the same stimulus condition (tape-recorded interview); therefore the variance in the dependent variables could be attributable to the manipulation of socio-economic status. However, an interview in which psychopathology is present would result in the contamination of variables. It could not be determined upon what basis a diagnosis of mental illness had been made: Would the diagnosis vary as a function of socio-economic status or the psychopathological nature of the interview? An interview with a patient portrayed as normal precludes the contamination of socio-economic status and pathological variables; if the patient is diagnosed differently across conditions, then the results are attributable to the patient's socio-economic status.

A second important potential stimulus variable was the artificiality of the diagnostic interview. It might be questioned that judgments based upon an artificial interview are suspect because such an interview lacks an integral quality. Further, if psychiatric diagnoses were based upon an unintegrated and inconsistent "stimulus," perhaps the results are artificial and not representative. This line of reasoning simply begs the question: even if the reasoning is valid, why should a bias occur against the lower socio-economic class?

The artificiality of the interview as a source of variance is an empirical question; thus, the behavior of the subjects is the criterion against which such reasoning can be evaluated. No subject in the experiment refused to diagnose the patient because he was not "real." It is noteworthy that two Board Certified psychiatrists responsible for residency training also heard the interview; one psychiatrist diagnosed the "patient" as "obessive-compulsive" and the second said the patient relied on "denial" as a major defense. Both psychiatrists, as their remarks imply, assumed the interview was authentic, and expressed surprise when informed otherwise.

To gain more information regarding the subjects' perception of the interview, the experimenter asked a post-experimental series of questions (Orne, 1962). The first question stated, "How did you feel about the patient?" In

response, residents typically engaged in an extensive discussion about the "patient's" psychodynamics, defenses, thought and perceptual processes, and attempted to render a diagnosis acceptable to the total group. On one occasion subjects argued about the proper form of treatment, and in another instance a resident could not decide upon the appropriate medication best suited for the "patient's" anxiety.

Eventually, after extensive discussion, subjects typically began to ask questions about the patient: (1) What is the real diagnosis? (2) What was the disposition? and in a few instances, (3) Was the patient real? Of the total sample (N=60), six residents asked the latter question. In one condition two residents asked if the patient were real, but one withdrew his question under the influence of group consensus that the patient suffered from "anxiety neurosis."

In summary, during the post-experimental discussion six subjects questioned the authenticity of the interview. One subject withdrew his question under group pressure. Further questioning revealed that while the five subjects questioned the authenticity of the interview during the post-experimental series, they rendered their judgments with the belief that the interview was genuine. Further, their ratings were consistent with the ratings of their respective groups. It seems quite clear that the vast majority, if not the entire sample, rated the interview

with the belief the interview was authentic.

Diagnosis and Socio-economic Status: Perhaps the most significant finding in the present study was the clear difference in diagnoses under three conditions of socio-economic status. There were significantly more diagnoses of mental illness (neurosis) when the subjects received lower socio-economic information than when they received middle or upper socio-economic data (Table 5). These data clearly indicate that prior knowledge of a patient's socio-economic status affected the residents diagnostic judgments.

In the Prestige Suggestion conditions, residents estimated the patient's socio-economic status with the expectation that the patient was either psychotic or neurotic. The "psychotic patient" was ascribed a lower socio-economic status, and the "neurotic patient" was ascribed a middle socio-economic status. These data were statistically compared with the control condition in which residents estimated the socio-economic status of the "patient" without prior information. The "control patient" (diagnosed normal) was ascribed a relatively high middle class status. The data, summarized in Tables 9 and 10, suggest that prior diagnostic information affected the residents' estimates of the socio-economic status of the patient. Accordingly, regardless of the information presented, (socio-economic or diagnosis) the bias was consistent.

Prognosis and Socio-economic Status: Whether psychiatric diagnosis or prognosis is examined, the direction of bias is always the same - it is prejudicial toward the lower socio-economic class and favors the middle and upper social classes. The second hypothesis predicted a significantly greater number of less favorable prognoses for the "lower class patient." A significant difference was found for an overall Chi-Square (10.49 $p < .01$), and significant differences existed between each socio-economic group. The results mean that the "lower class patient" had only a fair prognosis, while the "middle" and "upper class patient" had excellent, but significantly different prognoses. Subjects were explicitly instructed to render their prognoses independent of whether psychotherapy was their recommendation. Thus, a bias again occurred: the judgment of prognosis with psychotherapy was made on the basis of the socio-economic status of the patient, rather than on the basis of the patient's resources for recovery.

The prognostic data assume special meaning when compared with the diagnostic results. There was a significant difference in diagnosis between the "lower class patient" when compared with the "middle" or "upper class patient." There was no difference between the "middle class patient" and the "upper class patient" as they were similarly diagnosed. Accordingly, it is striking that with the

same diagnosis, the subjects considered the "upper class patient" to have a better chance of recovery than the "middle class patient" and both had more favorable prognoses than the "lower class patient." To the data presented by Hollingshead and Redlich (1958), Kahn (1959) and Haase (1965) (patients with the same symptoms were diagnosed differently), it can be added that even with the identical diagnosis patients are likely to be viewed as having dissimilar chances of recovery with the same treatment as a consequence of their socio-economic status. In summary, the results discussed clearly indicate that psychiatric diagnosis and prognosis is biased and prejudicial against the lower socio-economic class.

In speculating about the factors responsible for the bias against the lower class, one can reasonably assume that psychiatrists rely on a "middle class model" as the standard for acceptable behavior and personal experience. Szasz (1958) suggests that mental health and illness are defined in terms of moral and ethical values rather than scientifically.

Similarly, Davis (1938) noted the striking affinity, as reflected in publications dealing with mental hygiene, between the Protestant Ethic and the concept of mental health.

A recent article analyzed content in mass media publications to determine if mental health statements had

a middle class orientation (Gursslin, Hunt and Roach, 1965). An initial survey and a secondary detailed analysis confirmed the hypothesis, and the authors concluded:

> The basic conclusion to be drawn from a sizeable portion of the content under investigation is that the middle-class prototype and the mentally healthy prototype are in many respects equivalent. . . . Like Davis (1938) we must also conclude that the mental health movement is unwittingly propagating a middle class ethic under the guise of science (p. 63).

The findings discussed in the present study do not refute the notion that groups with different values, perceptions, and experiences may be more vulnerable to mental illness, or that psychological conflicts are not more insidious and destructive for members of the lower echelons of society; nor do these results mean that psychiatrists are incompetent or that psychiatric training is poorly suited to the demands placed upon the professional. What these results probably mean is that a person of lower socio-economic status may be diagnosed as mentally ill not on the basis of disordered behavior and intra-psychic conflicts, but as a consequence of his social standing in the community. Conversely, the attainment and maintenance of middle or upper class standing is undoubtedly an important criterion in determining mental health.

The present research provides further evidence that mental illness is defined in terms of middle class moral and ethical values, and that the diagnostic process may well be partially instrumental in maintaining these values.

In view of the present findings of diagnostic bias against the lower class, a thorough re-examination of socio-economic phenomena and their relationship to mental illness would seem warranted. In part, these results provide experimental support for the findings regarding the disproportionate number of mental patients from lower socio-economic echelons of society. The results clearly indicate, however, that mental illness and socio-economic status are not independent; thus, the obtained relationships in previous research are suspect.

Implications for Future Research: The results of this experiment provide clear evidence that the complex relationship between socio-economic status and mental illness is attenuated by the unreliability of diagnostic procedures. For example, it is quite probable that when diagnosis is uncertain, a lower class patient is quite likely to be classified as mentally ill; this diagnosis may be less a function of disordered interpersonal behavior than the person's socio-economic status in the community.

Extensive research should therefore be given to other important variables which may influence diagnosis. For example, the experimental techniques of prestige suggestion and recorded interviews could be used in determining the extent to which minority group status, sex of the patient, etc., . . . are variables which influence diagnosis and classification. Further, little research

attention has been devoted to "diagnostician" variables in an attempt to ferret out those variables which influence, assist, or militate against the understanding of another person's behavior.

Finally, further research is necessary in order to clarify the concepts of diagnosis and mental illness. If, as mounting evidence suggests, mental illness is a meaningless construct and diagnosis is so unreliable as to be virtually useless in understanding behavior, then the concepts should be discarded and replaced by more scientifically meaningful terms.

CHAPTER VI

SUMMARY

This study was designed to evaluate the relationship between socio-economic status and psychiatric diagnosis. The social class status of the "patient" was experimentally varied and the effect upon psychiatric diagnosis observed. It was hypothesized that a "lower class patient" would be diagnosed mentally ill and receive a poor prognosis with psychotherapy more frequently than a "patient" of a higher socio-economic status. It was further hypothesized that prestige suggestion for varying degrees of mental illness would significantly influence ratings of the patient's socio-economic status.

For the hypotheses to be tested a script was written and a professional actor enacted the role of "patient", portraying a normal man without psychological problems. The tape-recorded diagnostic interview was presented to sixty psychiatric residents in their first, second and third year of training, and judgments rendered under six conditions. There were five experimental conditions: prior to hearing the interview subjects were either

read a socio-economic case history reflecting a lower, middle, or upper class standing or told of a previous diagnosis (psychosis/neurosis) agreed upon by three prestige figures. Control subjects rendered their judgments without previous instructions.

The hypotheses were confirmed, and it was concluded that the complex relationship between socio-economic status and mental illness is attenuated by the unreliability of diagnostic procedures and that a diagnosis of mental illness may be less a function of disordered behavior than a reflection of a person's socio-economic standing in the community.

REFERENCES

Ash, P. The reliability of psychiatric diagnoses. J. abnorm. soc. Psychol., 1949, 44, 272-277.

Auld, F. Influence of social class on personality test responses. Psychol. Bull., 1952, 49, 318-332.

Clark, R. E. Psychoses, income and occupational prestige. Amer. J. Soc., 1949, 54, 433-440.

Davis, K. Mental hygiene and the class structure. Psychiat., 1938, 1, 55-65.

Deutsch, A. The mentally ill in america. (2nd ed.) New York: Columbia University Press, 1949.

Doering, C. R. Reliability of observations of psychiatric and related characteristics. Amer. J. Orthopsychiat., 1934, 4, 249-257.

Dohrenwend, B. S., and Dohrenwend, B. P. Field studies of social factors in relation to three types of psychological disorder. J. abnorm. soc. Psychol., 1967, 72, 369-378.

Dynes, R. Church-sect typology and socio-economic status. Amer. Soc. Rev., 1955, 20, 556-560.

Elkins, F. Specialists interpret the case of Harry Holzer. J. abnorm. soc. Psychol., 1947, 42, 99-111.

Faris, R. E. L., and Dunham, H. W. Mental disorder in urban areas. Chicago: Chicago University Press, 1939.

Faris, R. E. L., and Dunham, H. W. Mental disorder in urban areas: an ecological study of schizophrenia and other psychoses. Chicago: Chicago University Press, 1941.

Frumkin, R. M. Occupation and major mental disorder. In A. Rose (ed.), Ment. hlth. & ment. Disorder. New York: Norton, 1955.

Goldhamer, H., and Marshall, A. Psychosis and civilization. Glencoe, Ill: Free Press, 1953.

Green, H. W. Persons admitted to the cleveland state hospital, 1927-1938. Cleveland: Cleveland Hlth. Council, 1939.

Grusslin, O. R., Hunt, R. G., and Roach, J. L. Social class and the mental health movement. In F. Riessman, J. Cohen, and A. Pearl (eds.), Mental health of the poor. (2nd ed.) New York: Free Press, 1965.

Haase, W. The role of socio-economic class in examiner bias. In F. Riessman, J. Cohen, and A. Pearl (eds.), Mental health of the poor. (2nd ed.) New York: Free Press, 1965.

Hollingshead, A. B., and Redlich, F. C. Social stratification and psychotic disorders. Amer. Soc. Rev., 1953, 18, 163-169.

Hollingshead, A. B., and Redlich, F. C. Social stratification and schizophrenia. Amer. Soc. Rev., 1954, 19, 302-306.

Hollingshead, A. B., and Redlich, F. C. Social class and mental illness: a community study. New York: John Wiley, 1958.

Hunt, R. G. Socio-cultural factors in mental disorder. Behav. Sci., 1959, 4, 96-106.

Hyde, R. W., and Kingsley, L. V. The relationship of mental disorders to the community socio-economic level. New eng. J. Med., 1944, 231, 543-548.

Jaco, E. G. The social isolation hypothesis and schizophrenia. Amer. Soc. Rev., 1954, 19, 567-577.

Jaco, E. G. The social epidemiology of mental disorder: a psychiatric survey of texas. New York: Russell Sage Foundation, 1960.

Kahn, R. L., Pollock, M., and Fink, M. Sociopsychologic aspects of psychiatric treatment in a voluntary mental hospital. A. M. A. Arch. gen. Psychiat., 1959, 1, 65-574.

Kaplan, B., Reed, R., and Richardson, W. A comparison of the incidence of hospitalized and non-hospitalized cases of psychosis in two communities. Amer. Soc. Rev., 1956, 21, 472-479.

King, G. F. Research with neuropsychiatric samples. J. Psychol., 1954, 38, 383-387.

Kleiner, R. J., and Parker, S. Goal-striving, social status, and mental disorder: a research review. Amer. Soc. Rev., 1963, 28, 189-203.

Lewis, N. A short history of psychiatric achievement with a forecast for the future. New York: Norton, 1941.

McDermott, J. F., Harrison, S. I., Schrager, J., and Wilson, P. Social class and mental illness in children: observations of blue collar families. Amer. J. Orthopsychiat., 1965, 35, 500-508.

Masserman, J. H., and Carmichael, H. T. Progress and diagnosis in psychiatry. J. ment. Sci., 1938, 84, 893-946.

Mehlman, B. The reliability of psychiatric diagnosis. J. abnorm. soc. Psychol., 1952, 47, 577-578.

Menninger, R. W. The history of psychiatry. Dis. nerv. system., 1944, 5, 52-55.

Myers, J. K., and Roberts, B. H. Family and class dynamics in mental illness. New York: John Wiley, 1959.

Orne, M. T. On the social psychology of the psychological experiment: with particular reference to demand characteristics and their implications. Amer. Psychologist., 1962, 17, 776-783.

Packard, V. The status seekers. New York: David McKay, 1959.

Pasamanick, B., Dintz, S., and Lifton, M. Psychiatric orientation and its relation to diagnosis and treatment in a mental hospital. Amer. J. Psychiat., 1959, 116, 127-132.

Rowntree, L., McGill, K., and Hellman, L. Mental and personality disorders in selective service registrants. J. Amer. Medical Ass., 1945, 128, 1084-1087.

Ruesch, J., Jacobson, A., and Loeb, M. Acculturation and illness. Psychol. Monogr., 1948, 62, (whole no. 287).

Selling, L. S. Men against madness. New York: Garden City, 1943.

Sewell, W. H., and Haller, A. O. Factors in the relationship between social status and the personality adjustment of the child. Amer. Soc. Rev., 1959, 24, 511-520.

Schmidt, H. O., and Fonda, C. P. The reliability of psychiatric diagnosis: a new look. J. abnorm. soc. Psychol., 1956, 52, 262-267.

Schroeder, C. W. Mental disorders in cities. Amer. J. Soc., 1942, 48, 40-47.

Siegel, S. Nonparametric statistics. New York: McGraw-Hill, 1956.

Srole, L., Langner, T., Thomas, S., Michael, S., Opler, M., and Rennie, T. Mental health in the metropolis: the midtown manhatten study. Vol. 1. New York: McGraw-Hill, 1962.

Stevens, S. An ecological study of a child guidance clinic intake. Smith Coll. stud. soc. Wk., 1954, 25, 73-84.

Szasz, T. The myth of mental illness. New York: Macmillan, 1958.

Szasz, T. Psychiatric justice. New York: Macmillan, 1965.

Szasz, T. Law liberty and psychiatry. New York: Macmillan, 1965.

Temerlin, M. K., and Trousdale, W. W. The social psychology of clinical diagnosis. Unpublished manuscript, Dept. of Psychol., Univer. of Oklahoma, 1966.

Tietze, C., Lemkau, P., and Cooper, M. Schizophrenia, manic-depressive psychosis, and socio-economic status. Amer. J. Sociol., 1941, 67, 167-175.

Yinger, J. M. Religion, society and the individual. New York: Macmillan, 1957.

APPENDIX A

SCRIPT OF THE DIAGNOSTIC INTERVIEW

Diagnostic Interview

I: Interviewer
P: Patient

I: Well, what can I do for you?

P: Ah, well, I don't really know; I don't think there's anything wrong with me. I, I've heard a lot about psychology on television; you know those programs, and I've read some, oh, not a lot, but I've read some and maybe psychology can help me; so-I, I guess I really came to, to talk that over with you.

I: Well, tell me more.

P: Well-I'm not really sure I do need any kind of help. I'm not crazy; at least I don't think I am, (laughter). I know what I'm saying and doing. I don't hear voices and see things (laughter) and I'm not a homosexual--nobody's calling me one and I'm not a communist either (laughter).

I: (laughter) No one has it in for you; no one's out to do you harm.

P: No, I guess I get along real well with most people--ah, my wife and I are very happy together, although we, sometimes we argue now and then.

I: What about?

P: Well, we--I wouldn't say a lot, but we fight sometimes. I guess that's true of everybody though. A lot of times I wonder how, about how we're raising our boy. We've been married about eight, I guess about seven years. The boy is six and, you know, things come up about him; sometimes he does things and my wife wants to do one thing and I want to do another, but I'm sure you know much more about this than me.

I: What do you mean?

P: Well, you want to do one thing and your wife wants to do another. You really don't know what's best for the kid. We're raising him as well as we can--not like I was raised or like my wife was raised. (pause)

I: You're trying to do as well by him as you can, better than your parents did by you?

P: Yeah, sometimes when I come home, I'm probably not--I probably don't pay as much attention to him as I ought to, but you can't really say there's anything the matter with that. After work I like to relax--watch T.V. or read, have a drink sometimes, and at these times I don't pay as much attention to the kid as I usually do. (pause) Aren't most people that way?

I: Are they?

P: Well, my wife she loves him; she gives him lots of love and affection, but she doesn't overdo it. We don't punish him either. She, ah, well she found him playing with himself the other day and she didn't say anything about it. He was just sitting on the floor in the living room with some toys and things and he started to play with himself and laughed. She told him, ah, that he shouldn't do that, but didn't hit him or yell at him or anything like that. She probably figured, well, that he didn't know what he was doing. He's too young, but I thought she did all right on that. She didn't tell him she was going to cut it off or anything like that (laughter). We argue over one thing, though.

I: What's that?

P: Well, my wife goes to church and she wants to take him. You know, I was raised in the church and I had religion when I was very young, but I don't go much anymore. I have nothing against religion, but he's only five and a half or six and, well, I think that's too early to start a kid in church; he's not old enough to make up his own mind either. Well, my wife and I go round and round about whether the kid should go; she's not a regular church goer either, but she thinks the kid needs it. Well, we argue about that, and we, we don't see eye to eye on Viet Nam either (laughter).

I: (laughter) I know what you mean.

P: Well, I'm really worried about that; what we're doing over there. It bothers me, I don't mean because I'm involved. I've done my part in the Army, but I just

don't think we ought to be over there really; we should never have gotten involved in the first place, and I sure don't think we ought to be fighting a war that we can't win. And war never solves anything anyhow, but my wife thinks we ought to be there and use more force, even the H bonb, and I guess she thinks I'm softhearted about this whole thing; but I've always been against violence. As a matter of fact, I don't punish my kid if there's any possible way of avoiding it. Violence never leads to anything except more violence, and she considers that a weakness.

I: And she probably thinks this is a weakness and would just incite them to more violence or something like that.

P: Yeah, I don't want to--I don't want you to think I'm crazy on the subject of violence or anything like that. I've seen my share of it and I've had my share of it, too; but, I don't know, I think more along the lines of what's practical, I guess. I don't go along with these different groups either: one says use all the force you need to use to win, while another says turn the other cheek. I guess something has to be done, but I'm just not sure we're doing what should be done.

I: To change the subject slightly here, what were your parents like?

P: Well, I guess my folks were average people in some ways--they were good to me, but I guess like most kids I didn't like all the things they did or everything they wanted me to do either. As I think about it, I guess I was always closer to my father. I liked to, like all boys I guess, be with my dad and tinker with things and to do things with him like fix odds and ends. I know it was always fun to have him around, except when I did something he didn't want me to do (laughter).

I: (laughter) I see.

P: Yeah, (pause) but I suppose he was as good a dad as anybody could ask for. When he had the time, we used to go places and do things, like hunting and fishing, bird hunting sometimes. When I was nine or ten he got me a .22. I remember my mother thought I was too young, but my dad made sure I knew all about firearms before he gave it to me, you know, how the safety worked; and whenever we weren't hunting, I always had to carry the gun without ammunition in it. One time

he caught me going over a fence with the damn thing loaded, and I spent the day at home while he hunted without me. I sure learned my lesson from that.

I: It sounds as though you have some pleasant memories about him. Ah,--

P: Mm,Hmm. We used to fish sometimes, too, in places pretty remote. I remember one time I caught one damn near as big as I was, and my dad tried to help me bring it in and the fish almost won that one because I could hardly get him into the boat (laughter). (pause) I talk about him as though he were still alive, I guess he is, in a way, alive for me. He died some time ago, and--I was really--ah--I took it pretty hard. I guess I'd been pretty close to him, more than anyone else.

I: You-I may be putting words in your mouth, but you seem to feel much differently about your mother than you did about your father.

P: Yes, I do, well, I guess I was closer to my father than I was to my mother. Oh she was all right in her own way, I guess, ah I think she cared a lot about me, loved me, but, well we had a big family, I had three brothers and sisters. It, it was a big family and she was always taking care of us, and I, I always felt that she, I thought she picked at my father a little bit. Oh, she'd always want him to wash, all of us to wash up before dinner. We didn't think of things like that all the time. I remember one time he had some dirt on his hands, and he sat down at, to eat and she said, "You're setting a bad example for the children; wash your hands." She'd just make him go and wash his hands. I always felt about it - I was just a kid, but I felt, hell, my hands are just going to get dirty again anyway.

I: She was a different kind of person than he was?

P: Yea she sure was, well, I mean--he liked to talk and show me things like - we were always tinkering with things. I always talk to him, you know, but I couldn't with her, so, well she, she seemed to be mostly interested in taking care of the kids, cooking, cleaning, and social stuff (laughter).

I: (Laughter)

P: She really could cook, though, the best pies, and cakes, and when she would all of us would have to stay out of

there. There'd be flour and dough everywhere, everything right from scratch. When she'd bake cookies, she'd put them out on baking boards to cool - and we'd - I'd sneak in and grab a handful. Whenever she'd catch us, she'd laugh and tell us to get away from them, but she always let us get some. But, well, most of the I just wanted to sit around and talk to my dad, or watch him - go hunting or fishing or something like that - I wasn't interested in the things my mother did, and besides, well she was kinda nuts - well maybe I shouldn't say nuts (laughter).

I: I'll bet I can guess on what subject - sex, religion, or both.

P: Yeah, sometimes she sure was. (pause) I remember the first time--one time she found me playing with, ah, playing with myself; ah, it was really something. I really didn't, I really didn't know a thing about sex or what it was or anything like that. I, I remember the day; I came out of the bathroom; just as I was leaving the bathroom, I felt this funny feeling--it was really kind of good, it was kind of funny--I don't remember now exactly how it felt, but--so, without thinking too much about it, I was just rubbing myself as I came out of the bathroom instead of putting it back in my pants and mother saw me and--boy, she must have thought there was really something wrong, that I was running amuck or something. (laughter)

I: (laughter)

P: She got this real funny expression on her face and said, "What are you doing?", you know. Well, I, hell, I didn't even know what to tell her. It was so new, but I, I got the idea all right,--that ah, I should never do anything like that. I remember, I was scared --I really didn't know what I was doing wrong, but, I knew from her expression or something, I'd really done something wrong. There were other times though, (laughter) I guess I learned that this, ah, it was private business, and that if I did something like that, I did it when she wasn't around. I know when,--there was this girl about my age that lived near us and sometimes we'd hide and play games and that sort of thing. But that business with my mother, I still remember.

I: What happened?

P: I don't know what happened. Nothing happened, I guess. I probably, I just forgot about sex for awhile. I, I don't think I ever had much to do with it probably then or maybe until I was older. When I was, oh, I don't know, ah, twelve or thirteen, I was watching a movie that starred, ah, maybe somebody like Rita Hayworth (laughter) or somebody like that, you know; every scene is a love scene, and I was just sitting watching and all of a sudden I started feeling--I don't know. This friend of mine was sitting next to me with his girl friend; they were older than me and they were (laughter) really going at it. (pause)

I: Go on.

P: Well, when I saw what they were doing, I--actually they weren't doing that much--but I felt like telling him to leave or something and taking over! (laughter)

I: Did you?

P: No, when I started, really started going with girls, I was still scared of them. I really was. I got so, well, there was this one girl I remember. I thought she was, boy, she was the sweetest, prettiest thing I ever saw. She was just, ah, I remember, I got really interested in her and I liked her but I was scared to ask her out; hell, I couldn't even talk to her without mumbling. Well, she was the first one I went out with, I guess. I didn't ask her for a long time, you know, because I was afraid. I just knew she'd say no. Well, finally, I, I finally screwed up my courage I guess, and I, I took her out and we went together for a long time and that was, really that was my first experience with sex. I remember I was nervous and really anxious about it. She was, too, and, oh, I don't remember now, but we were probably too scared--so scared we couldn't really enjoy it very much.

I: Do you, I wonder if you still feel that way?

P: What way?

I: So anxious about sex that you can't enjoy it.

P: Oh, no, no. This was a long time ago. She and I started, just started having sex regularly. I was pretty anxious for ah, oh, for a time, but it gradually got to where it was much more fun and she and I went together for two or three years, ah, having sex all the time. Oh, we got kind of worried a time or two, about

getting caught, but we never did. It worked out real well. We--the only problem was that we could never get away long enough to have all we wanted. You know--(laughter)

I: (laughter)

P: Well, sometimes, looking at, looking back on this now, it's just a wonder that she didn't get pregnant because, well, most of the time we were careful and sometimes we weren't, and I've thought about it and it's a wonder that she didn't, ah, but I guess maybe we were lucky or too young or something.

I: Is this your wife you're referring to?

P: Oh, no, I didn't get married until later. About that same time I went into the Army.

I: What--how was that?

P: (laughter) Nothing, really nothing. The Army and I didn't get along too well; and, well, as far as I'm concerned, it was a waste of time. I didn't get anything out of it at all and oh, I don't know, I don't suppose they got much from me either. I don't like somebody always telling me what to do; if it's about something, you know, if I don't know anything about it, well, that's different, but when I know exactly what I'm doing and somebody tells me how--it makes me mad. I like to live my own life and do what I want when I want to do it and you just don't have that in the military. I always acted according to the rules or what I was ordered to do, but I sure never liked it much, but I guess that's the way things have to be run when there's that many men involved. One thing was good about it though; I got to meet a lot of people from different parts of the country, and I traveled around and probably saw things I'd never seen otherwise. There were one of two guys I met that I went through the service with, and we had some good times together. Now and then I get a letter from one of them and last year we all got together and, you know, told "war stories," (laughter) and that kind of thing.

I: Well, ah, let me interrupt here. We're almost out of time, at least for today and I don't think we're anywhere near finished.

P: I, I really don't either. You know, I liked ah, I liked talking to you.

I: Well, perhaps we should talk some more. I am free, I think I am free, at this time next week. I don't have my appointment book with me, but let's see the secretary and finalize the appointment.

P: That's fine with me. Thank you.

APPENDIX B

RATING SCALES

DATE_____SEX_____

PROFESSIONAL STATUS_____

PLACE OF BIRTH_____

DIAGNOSTIC RATING

/_____ _____ _____ /_____ _____ _____ /_____ _____ _____/

NORMAL NEUROTIC PSYCHOTIC

Please write in a specific diagnosis in the space below.

_____

PROGNOSIS (<u>with psychotherapy</u>)

Please estimate the prognosis with psychotherapy by placing a check in the appropriate space, regardless of whether or not you would prescribe psychotherapy.

/_____ _____ _____ /_____ _____ _____ /_____ _____ _____/

EXCELLENT FAIR VERY POOR

DEGREE OF PSYCHIATRIC IMPAIRMENT

Please indicate the degree of psychiatric impairment by placing a check in the appropriate space.

/_____ _____ _____ /_____ _____ _____ /_____ _____ _____/

NONE MODERATE SEVERE

Please write in a specific diagnosis in the space below.

_____

Please estimate the occupation in which you would expect the patient to be employed.

1. An executive or proprietor of a large concern; or a major professional._____( )

2. A manager or proprietor of medium sized business; or minor professional._____( )

3. Administrator in large concern; or owner of small independent business; or semi-professional._____( )

4. Owner of a small business; clerk or salesman; technician._____( )

5. Skilled worker._____( )

6. Semi-skilled worker._____( )

7. Unskilled worker._____( )

Please estimate the most likely educational level of the patient.

1. Professional or graduate school training._____( )

2. Graduate of a four year college._____( )

3. Attended college but did not receive degree._____( )

4. High school graduate._____( )

5. Attended high school but did not graduate._____( )

6. Junior high school graduate._____( )

7. Less than seven years of school._____( )

Please estimate the kind of home or residential area in which the patient most likely lives.

1. Owns two homes, both with fashionable addresses.__( )

2. Well-kept home in "nicest" part of town; or lives in a high-status apartment building._____( )

3. A roomy house in one of the better sections of town or country; or lives in a modern apartment building._____( )

4. A small, modern development house; or a house in a non-fashionable neighborhood; adequate but plain apartment building._____( )

5. A small, run-down house or apartment, badly in need of repair, in one of the poorer sections of town._____( )

6. A dilapidated house or apartment in the poorest section of town._____( )

APPENDIX C

RAW DATA

CONTROL GROUP

Subject	Diagnostic Rating	Degree of Psychiatric Impairment Rating	Prognostic Rating	*(9) Occupation	(6) Area of Residence	(5) Education
1	3	2	2	4	4	3
2	3	3	2	3	3	2
3	2	1	1	3	2	2
4	4	3	3	4	3	3
5	2	2	2	3	3	3
6	2	1	2	2	2	2
7	3	3	3	4	2	3
8	2	2	2	3	3	3
9	5	4	4	3	4	3
10	2	2	3	3	2	2

*Weighted scores.

LOWER SOCIAL CLASS CONDITION

Subject	Diagnostic Rating	Prognostic Rating
1	5	6
2	6	6
3	5	4
4	6	5
5	6	2
6	3	3
7	5	5
8	5	5
9	6	7
10	6	5

MIDDLE SOCIAL CLASS CONDITION

Subject	Diagnostic Rating	Prognostic Rating
1	4	3
2	5	4
3	4	4
4	3	3
5	3	4
6	3	2
7	4	3
8	4	3
9	4	4
10	3	3

UPPER SOCIAL CLASS CONDITION

Subject	Diagnostic Rating	Prognostic Rating
1	2	1
2	4	3
3	3	1
4	2	2
5	5	3
6	3	1
7	2	2
8	2	2
9	2	2
10	2	1

PRESTIGE SUGGESTION FOR NEUROSIS

Subject	Degree of Psychiatric Impairment	Prognosis	Occupation	Area	Education
1	4	3	4	4	4
2	5	3	4	4	4
3	2	1	5	4	4
4	4	4	3	2	2
5	6	5	4	4	3
6	4	1	4	3	2
7	5	4	3	4	3
8	3	2	4	4	4
9	4	1	3	4	3
10	3	3	3	3	2

PRESTIGE SUGGESTION FOR PSYCHOSIS

Subject	Degree of Psychiatric Impairment	Prognosis	Occupation	Area	Education
1	6	6	5	6	5
2	5	6	5	6	6
3	4	5	6	4	5
4	8	8	5	6	6
5	6	6	5	6	5
6	4	4	4	4	3
7	7	5	6	7	7
8	4	7	5	5	5
9	6	4	5	4	5
10	7	4	6	6	5