

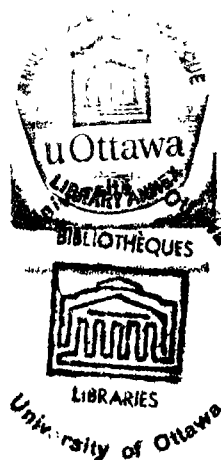
CSP-2
578

A STUDY ON THE TUBERCULOUS PERSONALITY

by Margaret D. Pap

Thesis presented to the Faculty of Arts
of the University of Ottawa through the
Institute of Psychology, and in partial
fulfilment of the requirements for the
degree of Master of Arts.

*Degree conferred
Jan. 10, 1955.
Bene probatis
SD*



Ottawa, Canada, 1954

UMI Number: EC55821

INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

UMI[®]

UMI Microform EC55821
Copyright 2011 by ProQuest LLC
All rights reserved. This microform edition is protected against
unauthorized copying under Title 17, United States Code.

ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

ACKNOWLEDGEMENT

This thesis was prepared under the direction of Maurice Chagnon, Ph.D., whose suggestions and encouragement were greatly appreciated.

Gratitude is also expressed for the interest and co-operation of staff and patients at the Mountain Sanatorium, and St. Peter's Infirmary, Hamilton; St. Mary's Hospital, London; Runnymede Hospital, Toronto; and St. Vincent's Hospital, Ottawa.

CURRICULUM STUDIORUM

Margaret D. Pap was born in Brantford, Ontario, on December 16, 1929. Obtained the B.A., from Ursuline College, University of Western Ontario in 1951, and attended the Institute of Psychology of the University of Ottawa until the spring of 1953.

TABLE OF CONTENTS

Chapter	Page
INTRODUCTION	vi
I.- HISTORICAL REVIEW	1
1. Subjective Impressions	1
2. Objective Studies	6
3. The Hypothesis	9
II.- THE EXPERIMENTAL DESIGN	11
1. The Population	11
2. The Clinical Tool	22
3. The Statistical Tool	25
III.- RESULTS AND DISCUSSION	27
1. Tuberculars from Normals	28
2. Tuberculars from Chronic Controls	31
3. Tuberculars from Normal and Chronic Controls	34
4. Chronic Controls from Tuberculars and Normals	36
5. Conclusions	41
BIBLIOGRAPHY	42
 Appendix	
1. BOOKLET FORM OF THE MMPI	47
2. TABLE WHICH SHOWS SIGNIFICANCE OF DIFFERENCE BETWEEN FREQUENCIES	63
3. ITEMS WHICH SIGNIFICANTLY DIFFERENTIATE TUBERCULARS FROM CHRONICS	65
4. ABSTRACT OF <u>A Study on the Tuberculous Personality</u>	69

LIST OF TABLES

Table	Page
I.- Distribution of age range and mean of experimental and control groups	15
II.- Distribution of chronically ill, non-tuberculous subjects relative to hospitals and localities	19
III.- Diagnostic distribution of chronically ill, non-tuberculous subjects	20
IV.- Range and mean of hospitalization for tuberculars and chronic controls	21
V.- The 550 <u>MMPI</u> statements organized according to subject matter and number of items . . .	23
VI.- Items which differentiate at the 1% level of confidence tuberculars from normals . .	30
VII.- Items which differentiate at the 1% level of confidence tuberculars from normals and chronic controls	35
VIII.- Items which differentiate at the 1% level of confidence chronics from tuberculars and normals	39

INTRODUCTION

This inquiry was an attempt to determine if there is a distinct "tuberculous personality" by means of an item analysis of the Minnesota Multiphasic Personality Inventory, hereinafter referred to as the MMPI. Previous studies on tuberculous patients indicate that an increasing amount of attention is being focused upon the mind-body problem. If one accepts the thesis that there is an intimate relationship between the emotional and physical aspects of a patient's illness, then the reason for attempting to substantiate the original hypothesis is justified.

In this study a review of the literature was presented in order to acquaint the reader with the lack of unanimity among authors regarding the specificity of a tuberculoid constellation.

This was followed by the approach used to delineate the "tuberculous personality". Thus the selection of the experimental and two control populations was outlined. The latter was comprised of a normal group and a chronically ill, non-tuberculous group. Therefore, whatever influences hospitalization might have would be equated by the second control group. An account was

given of the MMPI and statistical tool employed to distinguish tuberculars from the control groups.

In conclusion, the results and their implications were described.

CHAPTER I

HISTORICAL REVIEW

This research was designed to determine whether there was a basis for the clinical impression that there is a distinct "tuberculous" personality pattern. The clinical literature is replete with the psychological aspects concomitant with the disease. However, hardly two authors approximate agreement on all points. Prior to the last thirteen years most comments on the psychology of tuberculosis were based upon subjective impressions rather than systematic studies using psychological measurement tools and attempts at controls¹. Since that time more objective studies than previously have been attempted. A review of the literature dealing with both the subjective and objective papers will be presented below in order to clarify the reasons for the present study.

1. Subjective Impressions

The existence of a personality pattern among tuberculosis patients is propounded by Jelliffe and Evans²,

¹ Shultz, I.T., Psychological Factors in Tuberculous Patients, in the American Review of Tuberculosis, Vol. 43, No. 4, issue of April 1941, p. 557 - 565.

² Jelliffe, S.E., and Elida Evans, Psychotherapy and Tuberculosis, in the American Review of Tuberculosis, Vol. 3, No. 7, issue of September 1919-1920, p. 417 - 432.

Dunbar³ and others. This consists of selfishness, egotism, irritability, hypersensitivity, disregard for others, dependent cravings, passivity and regressive tendencies.

An early study by Mühl⁴ on personality trends in women with tuberculosis pointed to a two-fold, mixed personality comprised of both marked withdrawal tendencies akin to a praecox-like pattern, and extroverted trends with a manic-depressive swing. She felt that the patient might present a varied picture to the casual observer depending on which group of trends was in ascendancy at that time.

Several years later Strecker⁵ classified the mental attitudes of seventy-five tuberculous patients under the headings of fatalistic, depressed, labile and happy. He concluded that depression, anxiety and fatalism, not euphoria, constituted the prevailing moods of the

3 Dunbar, H.F., Emotions and Bodily Changes: A Survey of the Literature on Psychosomatic Interrelationships, New York, Columbia University Press, 1935, xl-601 p.

4 Mühl, Anita M., Fundamental Personality Trends in Tuberculous Women, in the Psychoanalytic Review, Vol. 10, 1923, p. 380 - 430, quoted by D.R. Hodgins, Personality and Tuberculosis, in McGill Medical Journal, Vol. 20, No. 3, issue of October 1951, p. 91 - 103.

5 Strecker, E.A., et al., Mental Attitudes of Tubercular Patients, in Mental Hygiene, Vol. 22, No. 4, issue of October 1938, p. 529 - 543.

tuberculars. Munro⁶, on the other hand, contended there is a psychic state characteristic of tuberculosis, and that this is exaggerated euphoria.

Shultz⁷, in a review of the literature dealt with heightened drive and exaggerated euphoria. A divergence of opinion regarding presence or absence of euphoria or *spes phthisica* was presented. He felt the sanatorium population was more emotionally maladjusted than the general population, but that these emotional deviations differed greatly in kind and degree, consequently they are not specific to tuberculosis.

On the other hand, such characteristics as depression and anxiety, mild mood swings with depressive reactions predominating were also put forth. Daniels and Davidoff⁸ explained these by the limitations imposed by tuberculosis which is a chronic disease.

⁶ Munro, D.G.M., Psycho-pathology of Pulmonary Tuberculosis, in Lancet, Vol. 201, 1921, p. 556 - 557, quoted by I.T. Shultz, The Emotions of the Tubercular: A Review and an Analysis, in the Journal of Abnormal and Social Psychology, Vol. 37, No. 2, issue of April 1942, p. 260 - 263.

⁷ Shultz, I.T., The Emotions of the Tubercular: A Review and an Analysis, in the Journal of Abnormal and Social Psychology, Vol. 37, No. 2, issue of April 1942, p. 260 - 263.

⁸ Daniels, George, and Eugene Davidoff, The Mental Aspects of Tuberculosis. Observations Based on a Veterans Hospital Study, in the American Review of Tuberculosis, Vol. 62, No. 5, issue of November 1950, p. 532 - 538.

Bellack⁹ working with emotionally disturbed tuberculous patients in a casework agency noted undue bodily complaints, persistent self observation, depression and anxiety. A greater need for dependency and passive behaviour was also manifest. Wittkower¹⁰ also found over-dependence which he felt was manifested partially through an inordinate need for affection. This need prevented tuberculars from dealing adequately with their aggressive impulses. Consequently these impulses were directed inward.

Thus far, the studies cited have characterized tuberculous patients as socially and emotionally mal-adjusted people. However, Friedman, et al¹¹ who interviewed one hundred unselected cases of tuberculosis among army men considered most of these men were normally or better adjusted in their social, sexual and economic adjustment. Less acceptable was some display of resentment

9 Bellack, Leopold, Psychiatric Aspects of Tuberculosis, in Social Casework, Vol. 31, No. 5, issue of May 1950, p. 183 - 189.

10 Wittkower, E., and G.S. Todd, The Psychological Aspects of Sanatorium Management, in Lancet, Vol. 1, No. 10, issue of January 1948, p. 49 - 53.

11 Friedman, J.H., G.J. Kastlin, and S.I. Kooperstein, Psychosomatic Factors in Pulmonary Tuberculosis. Study of 100 Consecutive Army Cases, in Diseases of the Chest, Vol. 12, No. 6, Issue of November-December 1946, p. 539 - 549.

toward authority; also obsessive and compulsive traits. Day¹² corroborates the obsessive-compulsive tendencies, but by no means agrees with the normal adjustment mentioned above. He stated that 30% of the patients he observed in an English sanatorium were mentally ill. Further, in an earlier study Forster and Shepard¹³ reported tendencies varying from relatively simple deviations to those definitely neurotic and psychotic.

Demuth¹⁴ found that tuberculosis accentuates dependent, passive and egocentric traits. He attributed this to lengthy bedrest. He implied no specific personality in patients who have pulmonary tuberculosis. Bellack¹⁵ and Shultz¹⁶, while having noted clinical disturbances in tuberculous patients, also disclaim that a specific

12 Day, George, The Psychosomatic Approach to Pulmonary Tuberculosis, in Lancet, Vol. 260, No. 12, issue of May 1951, p. 1025 - 1028.

13 Forster, A.M., and C.E. Shepard, Abnormal Mental States in Tuberculosis, in American Review of Tuberculosis, Vol. 25, 1932, p. 324, quoted by B.B. Berle, Emotional Factors and Tuberculosis, in Psychosomatic Medicine, Vol. 10, No. 6, 1948, p. 368.

14 Demuth, Edwin L., Is There a Specific Personality in Tuberculous Patients, in Archives of Neurology and Psychiatry, Chicago, Vol. 66, No. 1, issue of July 1951, p. 30 - 37.

15 Bellack, Leopold, op. cit., p. 183 - 189.

16 Shultz, I.T., op. cit., p. 260 - 263.

personality pattern appears more frequently than in the general population.

2. Objective Studies

Shultz¹⁷ using the Bernreuter found tuberculars to be introverted, submissive, lacking in self-confidence, gregarious, and neurotic. He contrasted his group against the norms of the Bernreuter. Lee¹⁸ on the basis of his battery reports much the same characteristics.

In a study by Seidenfeld¹⁹ in which he used the Maller Personality Sketches, the tuberculous population exerted less self control, experienced more difficulty in making decisions, were less socially adjusted and more emotionally labile than the college controls. He felt institutional life with its resultant restrictions contributed to these traits.

Uninhibited dependency strivings were exhibited by hospitalized tuberculous patients through the media of

17 Shultz, I.T., op. cit., p. 557 - 565.

18 Lee, E.A., The Social and Vocational Rehabilitation of the Tubercular, in Occupations, Vol. 15, No. 7, issue of April 1937, p. 581 - 633.

19 Seidenfeld, M.A., A Comparative Study of the Responses of Tuberculous and Non-Tuberculous Subjects on the Maller Personality Sketches, in the Journal of Psychology, Vol. 9, second half, issue of April 1940, p. 247 - 258.

the Rorschach and the Thematic Apperception Test by Hodgins²¹.

A Rorschach study by Ellis and Brown²² on differences between declining and recovering tuberculars showed less maladjustment in the experimental group than in the normal controls. Dörken²³, in his study on paraplegics, found no such superiority in a control population of tuberculous patients.

Studies applying the MMPI to hospitalized tuberculous patients have been made. Albee²⁴ found that tuberculous patients were hypomanic and feminine, and less depressed and hypochondriacal than other chronically ill patients. Hand's²⁵ research antithetically states that

21 Hodgins, D.R., Personality and Tuberculosis, in McGill Medical Journal, Vol. 20, No. 3, issue of October 1951, p. 91 - 103.

22 Ellis, Robert W., and Gladys G. Brown, The Nature of Rorschach Responses from Pulmonary Tuberculosis Patients, in the Journal of Clinical Psychology, Vol. 6, No. 3, 1950, p. 298 - 300.

23 Dörken, Herbert Jr., Personality Factors Associated with Paraplegia and Prolonged Hospitalization: A Clinical Note, in the Canadian Journal of Psychology, Vol. 5, No. 3, issue of September 1951, p. 134 - 137.

24 Albee, G.W., Psychological Concomitants of Pulmonary Tuberculosis in the American Review of Tuberculosis, Vol. 58, No. 6, issue of December 1948, p. 650 - 661.

25 Hand, Thomas J., Personality Characteristics of a Tuberculosis Group, in the American Journal of Physical Medicine, Vol. 31, No. 1, issue of February 1952, p. 95 - 101.

his tuberculous group, when compared with Wiener's²⁶ five disability groups, appear more hypochondriacal and basically anxious. He also found preoccupation with sex, autistic behaviour and suggestibility more common in tuberculars.

Wheoley²⁷ found male tuberculosis patients more maladjusted than female. They exhibit many of the aforementioned characteristics such as concern over health, depressive features, sexual maladjustment and others including suspiciousness, introversion and obsessive-compulsive tendencies.

A study by Rorobaugh and Guthrie²⁸ indicated that tuberculous patients scored significantly higher on all clinical scales of the MMPI except the M-F Scale. These patients were tested soon after their first admission, thus the results cannot be accepted at face value. A diagnosis might initially have a sufficiently disturbing effect on the personalities of these patients to produce high scores.

26 Wiener, D.N., Personality Characteristics of Selected Disability Groups, in the Journal of Clinical Psychology, Vol. 4, No. 3, issue of July 1948, p. 285 - 290.

27 Wheoley, John P., The Application of the MMPI to Hospitalized Tuberculous Patients, unpublished Master's thesis, Catholic University of America, Washington D.C., 1952.

28 Rorobaugh, Mildred E., and George Guthrie, The Personality Characteristics of Tuberculous Patients who Leave the Tuberculous Hospital Against Medical Advice, in the American Review of Tuberculosis, Vol. 67, No. 4, issue of April 1953, p. 432 - 439.

Page²⁹, attempting an item analysis, found tuberculosis patients differing from normal controls on 106 items at the 5% level of confidence. His results suggested that patients had many health complaints, were excitable, suffered from feelings of inadequacy, dependency and social ineptness. On the positive side they appeared more honest in reporting their behaviour and attitudes; they were more sociable -- specifically more friendly, understanding of each other, sincere and trustworthy and possessing a group feeling, or, as he expresses it, an "in group-ishness."

3. The Hypothesis

A review of the literature has shown that there may be a personality peculiar to tuberculous patients. However, authors have contradicted each other to the point where specific traits comprising the "tuberculous personality" remain obscure. Friedman³⁰, and Bellack³¹, to mention only a few disclaim that patients with tuberculosis show a characteristic psychopathology.

²⁹ Page, R.B., Application of the MMPI to Tuberculosis Patients, unpublished Ph.D. thesis, University of Minnesota, 1947.

³⁰ Friedman, J.H., et. al., op. cit., p. 539 - 549.

³¹ Bellack, Leopold, op. cit., p. 183 - 189.

Since the aforementioned data were insufficient to prove the hypothesis, an attempt has been made to add a study with better controls.

A portion of Page's³² study included an item analysis of the MMPI. He neglected, as did others, to account for the effects of hospitalization and its resultant concomitants. A group of chronically ill, non-tuberculous patients was therefore added to control effects of hospitalization.

Throughout the survey noted above, the MMPI appears to be a popular and promising tool. In addition, many items in it support the characteristics ascribed to the "tuberculous personality". Consequently this instrument was used in the study.

Because the literature suggests there may be a "tuberculous personality," the following hypothesis was formulated: A diagnostic personality questionnaire to identify tuberculous patients can be designed. This can be accomplished by isolating those MMPI items which differentiate between tuberculous and non-tuberculous persons.

32 Page, R.B., op. cit.

CHAPTER II

THE EXPERIMENTAL DESIGN

This chapter was designed to acquaint the reader with the procedure followed in the present study. First, a description was given of the population which was comprised of an experimental group of tuberculous patients and two control groups. This was followed by an account of the clinical and statistical tools employed.

1. The Population

In order to evaluate the hypothesis that there is a distinct personality pattern characteristic of tuberculous patients, there was a need not only of an experimental group, but also of good control groups. In this study two control samples were employed; a normal control group and a group of chronically ill, non-tuberculous patients. The former provided a distinct basis of comparison with normal personality patterns. The latter was chosen to allow for the effects of hospitalization and to determine if traits ascribed to tuberculous patients by the MMPI are specific to tuberculosis or are only typical of chronic illnesses in general.

a) Selection of the Experimental Sample.

The Hamilton Mountain Sanatorium was selected for this study. The Sanatorium population in this study was chosen from the Empire Building. The patients here were not undergoing or awaiting surgery and were not anticipating immediate discharge from the Sanatorium. The effects of surgery or knowledge of its imminence might have an emotionally disturbing effect on the patients. The second point regarding discharge from sanatoria has been discussed by Ellis¹ who holds that patients awaiting imminent discharge are often superior in their mental adjustment to other sanatoria patients. On the other hand, Dörken's² tuberculous sample, although assured of recovery and imminent discharge showed inferior Rorschach records to the group of "recovering" pulmonary tuberculars of Ellis and Brown³. Because of the contradictory views presented by these studies, patients who were awaiting

1 Ellis, Robert W., and Gladys G. Brown, The Nature of Rorschach Responses from Pulmonary Tuberculosis Patients, in the Journal of Clinical Psychology, Vol. 6, No. 3, issue of July 1950, p. 298 - 300.

2 Dörken, Herbert Jr., Personality Factors Associated with Paraplegia and Prolonged Hospitalization: A Clinical Note, in the Canadian Journal of Psychology, Vol. 5, No. 3, issue of September 1951, p. 134 - 137.

3 Ellis, Robert W., and Gladys G. Brown, op. cit., p. 298 - 300.

immediate discharge were not included. Thus, eighteen tuberculous patients between the ages of 20 and 40 were selected. All were female patients.

The Report of the Hamilton Mountain Sanatorium, 1953 indicated that incidence of tuberculosis was highest in the 20 - 40 age range. The experimental group was chosen according to this criterion so as to be as broadly representative as possible.

The tuberculous patients were homogeneous relative to sex. Whooley⁴ in his dissertation found that male tuberculars were more maladjusted than female patients. Females only were used in order to eliminate this variable.

A later section deals with the difficulties encountered in selecting the chronically ill, non-tuberculous controls within the desired age range. The experimental population was a relatively large one, thus, only those tuberculous patients who agreed to be research subjects were matched for age and sex with the hospitalized control group.

⁴ Whooley, John P., The Application of the MMPI to Hospitalized Tuberculous Patients, unpublished Master's thesis, The Catholic University of America, Washington, D. C., 1952.

b) Selection of the Control Sample.

Eighteen normal controls and eighteen chronically ill, non-tuberculous controls were selected. The experimental sample and the controls were matched for both sex and age. Matching for age was necessary since Appelzweig⁵ found certain scales on the MMPI increased and decreased with age for both sexes. The age range and mean of the three groups has been provided in Table I, page 15.

⁵ Appelzweig, Mortimer H., Educational Levels and Minnesota Multiphasic Profiles, in the Journal of Clinical Psychology, Vol. 9, No. 4, issue of October 1953, p. 340 - 344.

TABLE I.- Distribution of Age, Range and Mean of Experimental and Control Groups.

Group	Range	Mean
Tuberculars	22 - 38 years	31.9 years
Normals	22 - 42 years	31.9 years
Chronically Ill Non-Tuberculars	22 - 44 years	32.2 years

Description of the Normal Controls

The normal control group served to distinguish between a normal group and a tuberculous group, or more specifically, to differentiate between tuberculous items and normal or non-tuberculous items.

Eighteen women not under the immediate care of a physician were selected. Additional to the matching criteria of age and sex previously proposed, care was taken to exclude college graduates or undergraduates, specifically since the educational level of the experimental group did not exceed the high school graduate level. Both Brown⁶ and Appelzweig⁷ found college profiles slightly higher than other groups. Consequently it was felt that inclusion of college graduates or undergraduates might have a distorting effect upon the general picture of the normal controls.

Description of the Chronic Controls

In order to discover whether certain items which appeared to distinguish between the criterion and control

⁶ Brown, H.S., Similarities and Differences in College Population on the Multiphasic, in the Journal of Applied Psychology, Vol. 32, No. 5, issue of October 1948, p. 541 - 549.

⁷ Appelzweig, Mortimer H., op. cit., p. 340 - 344.

groups were typical of tuberculosis, or merely a result of hospitalization and chronicity, an additional control of hospitalized chronically ill, non-tuberculous people was included. Thus traits specific to chronic illnesses would cancel out leaving only those peculiar to tuberculosis.

Difficulty in securing a sufficient number of chronically ill controls within the desired age group and who could complete the MMPI items independently necessitated selection of this group first. Since a sufficiently large number of tuberculous patients within the 20 - 40 age range was available, the voluntary tuberculars were matched with the chronic control group after selection of the latter had been completed. Obstacles encountered in selection of the chronic controls are discussed below.

It was necessary that the chronic controls have sufficient muscular co-ordination that they be able to complete the items on the MMPI independently. An assistant or helper would often elicit the more conventional type response rather than the honest one. Deliberate falsification is always a possibility. However, it was felt that it would be increasingly so in the presence of another person from whom some patients might feel a need to hide true feelings.

Difficulty in securing a sufficient number of chronic controls between the ages 20 - 40 whose muscular control was adequate to complete the MMPI necessitated selection of this group from four different hospitals for the chronically ill. The distribution and localities has been indicated in Table II, page 19.

The diagnoses of this group was varied. However, Albee⁸, whose chronic controls had varied diagnoses, demonstrated negligible differences in personality as measured by the MMPI. The major diagnoses of the chronically ill controls and their distribution have been presented in Table III, page 20.

It was impossible to match the chronically ill, non-tuberculous group and the tuberculous group for duration in hospital. Comparative figures on length of hospitalization of the tuberculars and chronics has been included in Table IV, page 21. However, Ellis and Brown⁹ attribute less importance to duration of hospitalization than to the mental and physical health of the patient.

⁸ Albee, G.W., Psychological Concomitants of Pulmonary Tuberculosis, in the American Review of Tuberculosis, Vol. 58, No. 6, issue of December 1948, p. 650 - 661.

⁹ Ellis, Robert W., and Gladys G. Brown, op. cit., p. 298 - 300.

TABLE II.— Distribution of Chronically Ill, Non-Tuberculous Subjects Relative to Hospitals and Localities.

Name of Hospital	Locality	Number of Patients
St. Peter's Infirmary	Hamilton	3
Runnymede Hospital	Toronto	6
St. Vincent's Hospital for Chronically Ill	Ottawa	6
St. Mary's Hospital for Incurables	London	3
Total		18

TABLE III.- Diagnostic Distribution of Chronically Ill, Non-Tuberculous Subjects.

Diagnosis	Number of Patients
Multiple Sclerosis	8
Arthritis	6
Spastic Paralysis	1
Rheumatic Heart	1
Huntington's Chorea	1
Friedrick's Ataxia	1
Total	18

TABLE IV.- Range and Mean of Hospitalization for Tuberculars and Chronic Controls.

Group	Range	Mean
Tuberculars	2½ months - 1½ years	7.4 months
Chronic Controls	3 months - 20 years	5 yrs. 9.8 mo.

2. The Clinical Tool

a) Description of the Tool

The MMPI designed by Hathaway and McKinley over twelve years ago, is an inventory of 566 statements to which the subject is asked to answer each item in one of three ways; true, false, and cannot say (?). A wide range of subject matter from physical health to social attitudes and habits is covered. The items have been roughly classified by the authors under twenty-six headings for convenience in handling¹⁰. In order to show more clearly the areas covered, the headings have been reproduced in Table V, page 23.

Two forms of the test are available, the card sorting or individual form, and the booklet form which can be used with a large number of individuals in a single administration. In the former type, the individual sorts the cards into chosen categories of true, false, or cannot say (?), while in the latter type the appropriate answer is marked on the I.B.M. scoring sheet.

In both forms responses are counted and yield scores on nine clinical scales and four validity scales.

¹⁰ Hathaway, S.R., and J.C. McKinley, The Minnesota Multiphasic Personality Inventory: The Manual, New York, Psychological Corporation, 1951, p. 5.

TABLE V.- The 550 MMPI statements, organized according to subject matter and number of items¹¹.

Subject Matter	Number of Items
General health	9
General neurologic	19
Cranial nerves	11
Motility and co-ordination	6
Sensibility	5
Vasomotor, trophic, speech, secretory	10
Cardiorespiratory system	5
Gastrointestinal system	11
Genitourinary system	5
Habits	19
Family and marital	26
Occupational	18
Educational	12
Sexual attitudes	16
Religious attitudes	19
Political attitudes - law and order	46
Social attitudes	72
Affect - depressive	32
Affect - manic	24
Obsessive and compulsive states	15
Delusions, hallucinations, illusions	31
Phobias	29
Sadistic-masochistic trends	7
Morale	33
Masculinity-femininity	55
Improbably acceptable light	15

¹¹ Hathaway, S.R., and J.C. McKinley, loc. cit.

The clinical scales were devised through selection of those items which appeared to distinguish between a normal group and a group of clinically diagnosed abnormals showing relatively pure psychopathology¹². The scales are entitled hypochondriasis, depression, hysteria, psychopathic deviate, masculinity-femininity, paranoia, psychosthenia, schizophrenia, hypomania. In addition, new scales have been, or are, in the process of development¹³.

b) Application of the Clinical Tool

Eighteen tuberculous patients were compared with an equal number of normal and chronically ill, non-tuberculous patients on the basis of their responses to 566 items in the MMPI. The items which distinguished between tuberculars and non-tuberculars were found by comparing the responses of the three groups to each item in the following manner:

1. Tuberculars with normal controls
2. Tuberculars with chronic controls
3. Tuberculars with normal and chronic controls

¹² Cottle, William, The MMPI: A Review, in Kansas Studies in Education, Vol. 3, No. 2, issue of March 1953, p. 3.

¹³ Hathaway, S.R., and J.C. McKinley, op. cit., p. 21.

The items which differentiated chronics from normals and tuberculars were found in order to determine what effects prolonged hospitalization had upon the personalities of chronically ill, non-tuberculous patients. The items which distinguished the chronics were found by comparing the responses of the three groups to each item in the following way:

4. Chronic controls with tuberculars and normal controls.

3. The Statistical Tool

Evaluation of the original hypothesis necessitated isolating items which distinguished between tuberculous and non-tuberculous subjects. Only then could a scale of items peculiar to tuberculars be devised.

a) The Formula

The statistic used for intergroup comparison was the formula for the Significance of Difference Between Frequencies*. The formula is as follows:

$$t_{df} = \frac{f_1 - f_2}{\sqrt{N_1 (p_1 q_1) + N_2 (p_2 q_2)}}$$

* Formula devised by Dr. M. Chagnon and Dr. L.T. Dayhaw.

Where f_1 and f_2 equal the frequencies of groups 1 and 2 on a given item. N_1 and N_2 refer to the total number of subjects in groups 1 and 2. p refers to the percentage of subjects in a group answering in a specific way on a given item. q equals the percentage of the subjects in the population who do not answer in that way, i.e., $q = 100 - p$.

This formula, which gives no correction for matching, was chosen to ensure that no unwarranted inferences would be drawn from the data. Thus, greater reliance can be placed on the assumption that differences are real rather than chance.

Only the .01 level of confidence was accepted. This again was selected to ensure highly diagnostic items.

b) The Table

Since N was constant for the three groups, it was not necessary to apply the formula for each response. It was possible to draw up a table to show at what point a d becomes significant for every possible combination of $f_1 - f_2$ ¹⁴.

¹⁴ Appendix 2, page 63.

CHAPTER III

RESULTS AND DISCUSSION

An attempt was made in this inquiry to determine whether or not there is a "tuberculous personality". To this end an item analysis of the MMPI was carried out. Items were tabulated which differentiated at the 1% level:

1. Tuberculars from normals
2. Tuberculars from chronically ill, non-tuberculars
3. Tuberculars from normal and chronic controls
4. Chronic controls from tuberculars and normals

In order to facilitate the handling of the items which distinguished the groups, the items were arbitrarily grouped under the following headings:

Health	Social
Family	Morale
Sex	Phobias
Religion	General Adjustment

The categorization of items may be questionable at times. However, the primary purpose of grouping was merely to minimize confusion which might arise from handling gross numbers of unselected items.

All the categories with the exception of the last, General Adjustment, which was used as a catch basket, are common to the Inventory.

This chapter is a description of the results obtained. The results are presented in the afore-mentioned order.

1. Tuberculars from Normals

The items which differentiated tuberculous patients from normal controls are presented in Table VI, page 30.

An examination of these items showed greater awareness of physical deficiencies and a reasonable acceptance of them by the tuberculars. They indicated also that they have stronger social leanings than the normals.

Tuberculars were inferior in physical health and more preoccupied with physical symptoms than were the normals. This is not unusual in a setting such as a sanatorium where emphasis is placed upon observation of physical ailments.

The experimental group appeared more socially inclined than the normals. They felt less shy and enjoyed such activities as dancing and playing jokes on one another. This group feeling is often found in institutions in which inmates share similar ailments and/or habits. Certainly the tedium of hospital routine makes welcome a break such as a prank or joke played on one of its members. This group feeling is further exemplified by

empathy towards those who tend to hang onto their griefs and troubles. They are not as able, however, to express their feelings, often being hurt because of this inability. However, they appear more likely than are normals to express pent-up feelings when physical discomfort besets them. This might imply they are able to express hostility only when an acceptable excuse such as physical distress presents itself.

Generalized anxiety is manifested by their fear of earthquakes and by their repetitive dreams. Since only two such items appear, however, it is doubtful that much significance can be attached to them.

TABLE VI.- Items which differentiated at the 1% level of confidence tuberculars from normals.

Category	Number	Item	Answer
Health	9	I am about as able to work as I ever was.	F
	51	I am in just as good physical health as most of my friends.	F
	130	I have never vomitted blood or coughed up blood.	F
	155	I am neither gaining nor losing weight.	F
	175	I seldom or never have dizzy spells.	F
Social	201	I wish I were not so shy.	F
	254	I like to be with a crowd who play jokes on one another.	T
	391	I love to go to dances.	T
	408	I am apt to hide my feelings in some things, to the point that people may hurt me without their knowing about it.	T
	489	I feel sympathetic towards people who tend to hang on to their griefs and troubles.	T
General Adjustment	105	Sometimes when I am not feeling well I am cross.	T
	492	I dread the thought of an earthquake.	T
	545	Sometimes I have the same dream over and over.	T
Total			13

Therefore, the tuberculars did not appear to differ greatly from the normal controls. Of the thirteen items which distinguished them, four are characteristic of their physical disability. Socially, tuberculars appeared more gregarious and more empathetic but were less able to express feelings than normals, except under conditions of physical distress.

2. Tuberculars from Chronic Controls

A fairly extensive number of items differentiated the tuberculous population from the chronics as indicated in Appendix 3, page 65.

These indicated that the tuberculous group felt superior to the chronic controls. However, it must be remembered that six of the items related to health (103, 186, 187, 189, 192, 330) are symptomatic of the chronic controls.

Morale, too, appeared higher. They were not as prone to be self critical and hostile toward the world as the chronics. They did not feel useless, helpless and pessimistic about the future. Several months in hospital had not induced the feelings of futility and self-abasement that chronic controls felt. Perhaps the chronics could not resign themselves even after a lengthy period

of time to frustration of activities, necessity of rigid routine, etc. In addition, because of the expectation of a lifetime in hospital, a feeling of futility might be expected to dominate the mood of chronic patients. Thus, prolonged hospitalization might be a cause of the differences described.

The tuberculars seemed more socially responsive than the chronically ill controls. They appeared to be gregarious, companionable people for whom there was little difficulty in socializing. Further, they appeared more trusting of their fellow man and his motives than did the controls. Attitudes toward drink and dress were less rigid. Perhaps the tuberculars are more sophisticated than the chronic controls, whose average stay in hospital was almost six years.

In the familial area the relationship of the tuberculars toward their families was a warmer one. There appeared to be a reciprocal acceptance of tuberculars and their families which did not appear in the chronic controls.

The sexual attitudes of the experimental group were superior to those of the chronics whose fears force them to cling to members of their own sex. Prolonged hospitalization of the chronics may have the effect of producing these naive and somewhat rigid attitudes.

Religious and political attitudes were less strong in the tuberculous population. Closer contact with the world outside hospital may account for this. Their interests are probably more diversified than the controls whose restricted lives preclude greater social participation.

Fears regarding sharp objects and dirt were denied by the tuberculars. Chronics, however, did exhibit phobic reactions regarding the above. Since no reasonable explanation is obvious, this warrants further investigation.

Finally, the general level of adjustment of the experimental group seemed superior to that of the chronic controls. The former appeared more amenable to emotional acceptance of themselves than did the latter. They did not feel unduly nervous nor did they feel the need to hide, or express guilt for, characteristic attitudes or feelings. The chronics were distinguished also, by a greater fear of robbery by others. No reasonable explanation can be offered. However, it has a persecutory flavour and deserves further study.

In summary then, the tuberculars appeared physically, socially, and sexually better adjusted than the chronically ill controls. Morale was higher and fears of others and themselves minimal. Many of the differences

have been attributed to prolonged hospitalization. The resultant restrictions and feelings of futility imposed on the chronic controls by lengthy hospitalization are very likely responsible for the restricted interests and attitudes.

3. Tuberculars from Normal and Chronic Controls.

When tuberculars were compared with the combined control groups, they were distinguished from the control groups by only three items. These are presented in Table VII, page 35.

Tuberculars were more aware of weight gain and loss. However, sanatorium life places particular emphasis upon such observations. Further, there was a suggestion of greater sociability among the experimental population. Socializing is also stressed at sanatoria.

TABLE VII.- Items which appear to differentiate at the 1% level of confidence tuberculars from normals and chronic controls.

Category	Number	Item	Answer
Health	155	I am neither gaining nor losing weight.	F
Social	201	I wish I were not so shy.	F
	391	I love to go to dances.	T
Total			3

In conclusion then, the tuberculars did not appear to differ from the combined control groups. All items which distinguished the tuberculars appear directly attributable to the emphasis and atmosphere of the sanatorium.

4. Chronic Controls from Tuberculars and Normals

This section has been included in an attempt to show the effects of prolonged hospitalization. An examination of the items which distinguish chronic controls from tuberculars and normals are presented in Table VIII, page 39.

These indicated that the chronic controls are physically inferior to both the tuberculars and normal controls. Of the eight items referring to health, seven are symptomatic of the diseases from which the chronics suffer (103, 186, 187, 189, 192, 330, 405).

The morale of this group was much lower than that of the tuberculars and normals. The chronic controls appeared to feel depressed and worthless. However, attempts to assuage feelings are probably made by projecting their misfortunes to the world. Their feelings of futility were probably induced by restriction of activities and increased by knowledge of a lifetime of this restriction.

The chronics appeared less trustful of others. One would expect, however, that community living of this type where symptoms and most interests were similar, would favour group feeling, or a feeling of "oneness". Attitudes regarding drink and dress were more rigid. Perhaps lengthy hospitalization has contributed to inflexible ideas regarding material gratifications. No doubt, hospitals of this type stress non-material satisfactions in order to minimize the feelings of deprivation of former activities and pleasures.

Belief in the second coming of Christ might also be attributable to the need to look at other than material things.

The chronics were resentful of the dependent role thrust upon them. Their families particularly made them feel like children. The routine activities and services which hospital life offers probably exaggerates dependency feelings.

The sexual adjustment of this group appeared poor. Prolonged hospitalization may have the effect of causing them to cling to members of their own sex. Naive attitudes are no doubt products of restricted living and lack of opportunity to exchange ideas with many others outside their own group.

Fear of sharp objects and dirt was affirmed by the chronics. No obvious explanation is evident. However, further investigation is suggested.

Finally, the chronic patients were less able to accept themselves at an emotional level. They felt a need to hide feelings and attitudes. Fantasies are probably often followed by guilt feelings. Fear of robbery also distinguished this group. Again, no reasonable explanation can be offered. The persecutory flavour, however, warrants further investigation.

TABLE VIII.- Items which appear to differentiate at the 1% level of confidence chronics from tuberculars and normals.

Category	Number	Item	Answer
Health	103	I have little or no trouble with my muscles twitching or jumping.	F
	186	I frequently notice my hand shakes when I try to do something.	T
	187	My hands have not become clumsy or awkward.	F
	189	I feel weak all over much of the time.	T
	192	I have had no difficulty in keeping my balance in walking.	F
	330	I have never been paralyzed or had any unusual weakness of any of my muscles.	F
	405	I have no trouble swallowing.	F
	462	I have had no difficulty starting or holding my urine.	F
Morale	16	I am sure I get a raw deal from life.	T
	84	These days I find it hard not to give up hope of amounting to something.	T
	301	Life is a strain for me much of the time.	T
	400	If given the chance I could do something that would be of great benefit to the world.	T
	517	I cannot do anything well.	T

TABLE VIII.- Items which appear to differentiate at the 1% level of confidence chronics from tuberculars and normals.

Category	Number	Item	Answer
Social	265	It is safer to trust nobody.	T
	457	I believe that a person should never taste an alcoholic drink.	T
	529	I would like to wear expensive clothes.	F
Religious	98	I believe in the second coming of Christ.	T
Familial	212	My people treat me more like a child than a grown-up.	T
Sexual	69	I am very strongly attracted by members of my own sex.	T
	470	Sexual things disgust me.	T
Phobia	354	I am afraid of using a knife or anything very sharp or pointed.	T
	510	Dirt frightens or disgusts me.	T
General Adjustment	197	Someone has been trying to rob me.	T
	242	I believe I am no more nervous than most others.	F
	303	I am so touchy on some subjects that I can't talk about them.	T
	413	I deserve severe punishment for my sins.	T
	511	I have a daydream life about which I do not tell other people.	T
Total			27

In summary, the chronically ill, non-tuberculous controls appeared more poorly adjusted in physical, social and personal areas when compared with tuberculars and normal controls. Depression, restriction of interests, rigidity of ideas and dependency were evident. Many of the differences have been attributed to prolonged hospitalization with its concomitant restrictions of activities.

5. Conclusions.

It was not possible to design a diagnostic personality questionnaire characteristic of tuberculous patients. Consequently within the limits of this study, there appears to be no "tuberculous personality" which is amenable to measurement by the MMPI.

Differences between the normal control and the tuberculous sample were minimal. However, there were many items which differentiated tuberculars from the chronically ill controls. A further investigation with better matching for duration in hospital is proposed in order to determine whether or not hospitalization is responsible for the apparent differences between the two chronically ill groups.

BIBLIOGRAPHY

Albee, G.W., Psychological Concomitants of Pulmonary Tuberculosis, in the American Review of Tuberculosis, Vol. 58, No. 6, issue of December 1948, p. 650 - 661.

A study using MMPI profiles to compare personality patterns of tuberculous patients with other chronically ill patients. Chiefly valuable in showing some characteristics of tuberculars.

Bellack, Leopold, Psychiatric Aspects of Tuberculosis, in Social Casework, Vol. 31, No. 5, issue of May 1950, p. 183 - 189.

A subjective report on emotionally disturbed tuberculous patients. It provides further information on characteristics of disturbed tuberculars.

Berle, B.B., Emotional Factors and Tuberculosis, in Psychosomatic Medicine, Vol. 10, No. 6, 1948, p. 368, citing A.M. Forster and C.E. Shepard, Abnormal Mental States in Tuberculosis, in American Review of Tuberculosis, Vol. 25, 1932, p. 324.

Observations of tuberculous patients were presented. Valuable in typifying ideas regarding tuberculous patients over twenty years ago.

Cottle, William, The MMPI: A Review, in Kansas Studies in Education, Vol. 3, No. 2, issue of March 1953, p. 3.

A review of the more important researches with the MMPI. Gives an idea of the scope of the inventory.

Daniels, George, and Eugene Davidoff, The Mental Aspects of Tuberculosis. Observations Based on a Veterans Hospital Study, in the American Review of Tuberculosis, Vol. 62, No. 5, issue of November 1950, p. 532 - 538.

A review and report on moods of tuberculous patients. Invaluable in pointing out contradictions in the literature.

Day, George, The Psychosomatic Approach to Pulmonary Tuberculosis, in Lancet, Vol. 260, No. 12, issue of May 1951, p. 1025 - 1028.

A report dealing with the mind-body problem. Contains some interesting observations concerning tuberculous patients.

Demuth, Edwin L., Is There a Specific Personality In Tuberculous patients, in Archives of Neurology and Psychiatry, Chicago, Vol. 66, No. 1, issue of July 1951, p. 30 - 37.

A report on the divergence of opinion regarding the existence of a specific "tuberculous personality". Helpful in illustrating the confusional viewpoints.

Dörken, Herbert Jr., Personality Factors Associated with Paraplegia and Prolonged Hospitalization: A Clinical Note, in the Canadian Journal of Psychology, Vol. 5, No. 3, issue of September 1951, p. 134 - 137.

An interesting report on personality changes on the Rorschach following disability. Important in showing effects of prolonged hospitalization.

Dunbar, H.F., Emotions and Bodily Changes: A Survey of the Literature on Psychosomatic Interrelationships, New York, Columbia University Press, 1935, xi-601 p.

A text covering the interrelationship of emotional and physical forces. Valuable in pointing to psychological concomitants of tuberculosis.

Ellis, Robert W., and Gladys G. Brown, The Nature of Rorschach Responses from Pulmonary Tuberculosis Patients, in the Journal of Clinical Psychology, Vol. 6, No. 3, issue of July 1950, p. 298 - 300.

A work dealing with the relationship between the emotional and physical aspects of tuberculosis. Contains some interesting observations regarding this hypothesis.

Friedman, J.H., G.J. Kastlin, and S.I. Kooperstein, Psychosomatic Factors in Pulmonary Tuberculosis, Study of 100 Consecutive Army Cases, in Diseases of the Chest, Vol. 12, No. 6, issue of November-December 1946, p. 539 - 549.

A report of interviews with 100 men. It stressed the positive aspects of the tuberculous personality.

Hand, Thomas J., Personality Characteristics of a Tuberculosis Group, in the American Journal of Physical Medicine, Vol. 31, No. 1, issue of February 1952, p. 95 - 101.

A study with the MMPI comparing tuberculous patients with other disabled groups. Useful in indicating differences.

Hathaway, S.R., and J.C. McKinley, The Minnesota Multiphasic Personality Inventory: The Manual, New York, Psychological Corporation, 1951, p. 5.

A revision of the scoring manual of the MMPI. A valuable presentation of the test.

Hodgins, D.R., Personality and Tuberculosis, in McGill Medical Journal, Vol. 20, No. 3, issue of October 1951, p. 91 - 103.

An interesting review of the literature additional to a study of tuberculars using the Rorschach and TAT. It was useful in presenting some characteristics of tuberculous patients.

Jelliffe, S.E., and Elida Evans, Psychotherapy and Tuberculosis, in the American Review of Tuberculosis, Vol. 3, No. 7, issue of September 1919-1920, p. 417 - 432.
Case histories and their implications, thus throwing some light on the physical and emotional aspects of tuberculosis.

Lee, E.A., The Social and Vocational Rehabilitation of the Tubercular, in Occupations, Vol. 15, No. 7, issue of April 1937, p. 581 - 633.

A description of a rehabilitation program for tuberculars. Important in indicating personality traits.

Page, R.B., Application of the MMPI to Tuberculosis Patients, unpublished Ph.D. thesis, University of Minnesota, 1947.

An extensive research using the MMPI. It provided some further characteristics of tuberculous patients.

Rorobaugh, Mildred E., and George Guthrie, The Personality Characteristics of Tuberculous Patients Who Leave the Tuberculous Hospital Against Medical Advice, in the American Review of Tuberculosis, Vol. 67, No. 4, issue of April 1953, p. 432 - 439.

A study with the MMPI to show personality differences between two groups of tuberculous patients. Personality deviations at the time of admission were also measured. Provided some additional information regarding personality deviations of tuberculars.

Seidenfeld, M.A., A Comparative Study of the Responses of Tuberculous and Non-Tuberculous Subjects on the Maller Personality Sketches, in the Journal of Psychology, Vol. 9, second half, issue of April 1940, p. 247 - 258.

A comparison of tuberculous and non-tuberculous subjects on the Maller Personality Sketches. Valuable in pointing out personality differences.

Shultz, I.T., The Emotions of the Tubercular: A Review and an Analysis, in the Journal of Abnormal and Social Psychology, Vol. 37, No. 2, issue of April 1942, p. 260 - 263.

A pertinent review of the literature. An aid in pointing out contradictory views of authors.

Shultz, I.T., Psychological Factors in Tuberculous Patients, in the American Review of Tuberculosis, Vol. 43, No. 4, issue of April 1941, p. 557 - 565.

A review and study on psychological concomitants of tuberculosis. Valuable in delineating some personality characteristics.

Strecker, E.A., et al., Mental Attitudes of Tubercular Patients, in Mental Hygiene, Vol. 22, No. 4, issue of October 1938, p. 529 - 543.

A report on the classification of moods of tuberculous patients. It provided further information regarding the tuberculous personality.

Whooley, John P., The Application of the MMPI to Hospitalized Tuberculous Patients, unpublished Master's thesis, Catholic University of America, Washington D.C., 1952.

A research studying tuberculous patients. It contained personality characteristics concomitant with tuberculosis.

Wittkower, E., and G.S. Todd, The Psychological Aspects of Sanatorium Management, in Lancet, Vol. 1, No. 10, issue of January 1948, p. 49 - 53.

An article dealing with the importance of doctor - patient rapport in sanatoria. Valuable in pointing out mental states of the tuberculous patient.

APPENDIX 1

**BOOKLET FOR THE MINNESOTA
MULTIPHASIC PERSONALITY INVENTORY**

DO NOT OPEN UNTIL TOLD TO DO SO

Booklet for the Minnesota
**MULTIPHASIC PERSONALITY
 INVENTORY**

STARKE R. HATHAWAY, Ph.D., and J. CHARNLEY MCKINLEY, M.D.

This inventory consists of numbered statements. Read each statement and decide whether it is true as applied to you or false as applied to you.

You are to mark your answers on the answer sheet you have. Look at the example of the answer sheet shown at the right. If a statement is TRUE or MOSTLY TRUE, as applied to you, blacken between the lines in the column headed T. (See A at the right.) If a statement is FALSE or NOT USUALLY TRUE, as applied to you, blacken between the lines in the column headed F. (See B at the right.) If a statement does not apply to you or if it is something that you don't know about, make no mark on the answer sheet.

Remember to give YOUR OWN opinion of yourself. Do not leave any blank spaces if you can avoid it.

In marking your answers on the answer sheet, be sure that the number of the statement agrees with the number on the answer sheet. Make your marks heavy and black. Erase completely any answer you wish to change. Do not make any marks on this booklet.

Remember, try to make some answer to every statement.
 NOW OPEN THE BOOKLET AND GO AHEAD.

Section of answer sheet correctly marked	
	T F
A	<input checked="" type="checkbox"/> <input type="checkbox"/>
B	<input type="checkbox"/> <input checked="" type="checkbox"/>

Published by THE PSYCHOLOGICAL CORPORATION, New York

Copyright 1943 by the University of Minnesota

DO NOT MAKE ANY MARKS ON THIS BOOKLET

1. I like mechanics magazines.
2. I have a good appetite.
3. I wake up fresh and rested most mornings.
4. I think I would like the work of a librarian.
5. I am easily awakened by noise.
6. I like to read newspaper articles on crime.
7. My hands and feet are usually warm enough.
8. My daily life is full of things that keep me interested.
9. I am about as able to work as I ever was.
10. There seems to be a lump in my throat much of the time.
11. A person should try to understand his dreams and be guided by or take warning from them.
12. I enjoy detective or mystery stories.
13. I work under a great deal of tension.
14. I have diarrhea once a month or more.
15. Once in a while I think of things too bad to talk about.
16. I am sure I get a raw deal from life.
17. My father was a good man.
18. I am very seldom troubled by constipation.
19. When I take a new job, I like to be tipped off on who should be gotten next to.
20. My sex life is satisfactory.
21. At times I have very much wanted to leave home.
22. At times I have fits of laughing and crying that I cannot control.
23. I am troubled by attacks of nausea and vomiting.
24. No one seems to understand me.
25. I would like to be a singer.
26. I feel that it is certainly best to keep my mouth shut when I'm in trouble.
27. Evil spirits possess me at times.
28. When someone does me a wrong I feel I should pay him back if I can, just for the principle of the thing.
29. I am bothered by acid stomach several times a week.
30. At times I feel like swearing.
31. I have nightmares every few nights.
32. I find it hard to keep my mind on a task or job.
33. I have had very peculiar and strange experiences.
34. I have a cough most of the time.
35. If people had not had it in for me I would have been much more successful.
36. I seldom worry about my health.
37. I have never been in trouble because of my sex behavior.
38. During one period when I was a youngster I engaged in petty thievery.
39. At times I feel like smashing things.
40. Most any time I would rather sit and daydream than to do anything else.
41. I have had periods of days, weeks, or months when I couldn't take care of things because I couldn't "get going."
42. My family does not like the work I have chosen (or the work I intend to choose for my life work).
43. My sleep is fitful and disturbed.
44. Much of the time my head seems to hurt all over.
45. I do not always tell the truth.

GO ON TO THE NEXT PAGE

46. My judgment is better than it ever was.
47. Once a week or oftener I feel suddenly hot all over, without apparent cause.
48. When I am with people I am bothered by hearing very queer things.
49. It would be better if almost all laws were thrown away.
50. My soul sometimes leaves my body.
51. I am in just as good physical health as most of my friends.
52. I prefer to pass by school friends, or people I know but have not seen for a long time, unless they speak to me first.
53. A minister can cure disease by praying and putting his hand on your head.
54. I am liked by most people who know me.
55. I am almost never bothered by pains over the heart or in my chest.
56. As a youngster I was suspended from school one or more times for cutting up.
57. I am a good mixer.
58. Everything is turning out just like the prophets of the Bible said it would.
59. I have often had to take orders from someone who did not know as much as I did.
60. I do not read every editorial in the newspaper every day.
61. I have not lived the right kind of life.
62. Parts of my body often have feelings like burning, tingling, crawling, or like "going to sleep."
63. I have had no difficulty in starting or holding my bowel movement.
64. I sometimes keep on at a thing until others lose their patience with me.
65. I loved my father.
66. I see things or animals or people around me that others do not see.
67. I wish I could be as happy as others seem to be.
68. I hardly ever feel pain in the back of the neck.
69. I am very strongly attracted by members of my own sex.
70. I used to like drop-the-handkerchief.
71. I think a great many people exaggerate their misfortunes in order to gain the sympathy and help of others.
72. I am troubled by discomfort in the pit of my stomach every few days or oftener.
73. I am an important person.
74. I have often wished I were a girl. (Or if you are a girl) I have never been sorry that I am a girl.
75. I get angry sometimes.
76. Most of the time I feel blue.
77. I enjoy reading love stories.
78. I like poetry.
79. My feelings are not easily hurt.
80. I sometimes tease animals.
81. I think I would like the kind of work a forest ranger does.
82. I am easily downed in an argument.
83. Any man who is able and willing to work hard has a good chance of succeeding.
84. These days I find it hard not to give up hope of amounting to something.
85. Sometimes I am strongly attracted by the personal articles of others such as shoes, gloves, etc., so that I want to handle or steal them though I have no use for them.
86. I am certainly lacking in self-confidence.
87. I would like to be a florist.
88. I usually feel that life is worth while.
89. It takes a lot of argument to convince most people of the truth.

GO ON TO THE NEXT PAGE

90. Once in a while I put off until tomorrow what I ought to do today.
91. I do not mind being made fun of.
92. I would like to be a nurse.
93. I think most people would lie to get ahead.
94. I do many things which I regret afterwards (I regret things more or more often than others seem to).
95. I go to church almost every week.
96. I have very few quarrels with members of my family.
97. At times I have a strong urge to do something harmful or shocking.
98. I believe in the second coming of Christ.
99. I like to go to parties and other affairs where there is lots of loud fun.
100. I have met problems so full of possibilities that I have been unable to make up my mind about them.
101. I believe women ought to have as much sexual freedom as men.
102. My hardest battles are with myself.
103. I have little or no trouble with my muscles twitching or jumping.
104. I don't seem to care what happens to me.
105. Sometimes when I am not feeling well I am cross.
106. Much of the time I feel as if I have done something wrong or evil.
107. I am happy most of the time.
108. There seems to be a fullness in my head or nose most of the time.
109. Some people are so bossy that I feel like doing the opposite of what they request, even though I know they are right.
110. Someone has it in for me.
111. I have never done anything dangerous for the thrill of it.
112. I frequently find it necessary to stand up for what I think is right.
113. I believe in law enforcement.
114. Often I feel as if there were a tight band about my head.
115. I believe in a life hereafter.
116. I enjoy a race or game better when I bet on it.
117. Most people are honest chiefly through fear of being caught.
118. In school I was sometimes sent to the principal for cutting up.
119. My speech is the same as always (not faster or slower, or slurring; no hoarseness).
120. My table manners are not quite as good at home as when I am out in company.
121. I believe I am being plotted against.
122. I seem to be about as capable and smart as most others around me.
123. I believe I am being followed.
124. Most people will use somewhat unfair means to gain profit or an advantage rather than to lose it.
125. I have a great deal of stomach trouble.
126. I like dramatics.
127. I know who is responsible for most of my troubles.
128. The sight of blood neither frightens me nor makes me sick.
129. Often I can't understand why I have been so cross and grouchy.
130. I have never vomited blood or coughed up blood.
131. I do not worry about catching diseases.

GO ON TO THE NEXT PAGE

132. I like collecting flowers or growing house plants.
133. I have never indulged in any unusual sex practices.
134. At times my thoughts have raced ahead faster than I could speak them.
135. If I could get into a movie without paying and be sure I was not seen I would probably do it.
136. I commonly wonder what hidden reason another person may have for doing something nice for me.
137. I believe that my home life is as pleasant as that of most people I know.
138. Criticism or scolding hurts me terribly.
139. Sometimes I feel as if I must injure either myself or someone else.
140. I like to cook.
141. My conduct is largely controlled by the customs of those about me.
142. I certainly feel useless at times.
143. When I was a child, I belonged to a crowd or gang that tried to stick together through thick and thin.
144. I would like to be a soldier.
145. At times I feel like picking a fist fight with someone.
146. I have the wanderlust and am never happy unless I am roaming or traveling about.
147. I have often lost out on things because I couldn't make up my mind soon enough.
148. It makes me impatient to have people ask my advice or otherwise interrupt me when I am working on something important.
149. I used to keep a diary.
150. I would rather win than lose in a game.
151. Someone has been trying to poison me.
152. Most nights I go to sleep without thoughts or ideas bothering me.
153. During the past few years I have been well most of the time.
154. I have never had a fit or convulsion.
155. I am neither gaining nor losing weight.
156. I have had periods in which I carried on activities without knowing later what I had been doing.
157. I feel that I have often been punished without cause.
158. I cry easily.
159. I cannot understand what I read as well as I used to.
160. I have never felt better in my life than I do now.
161. The top of my head sometimes feels tender.
162. I resent having anyone take me in so cleverly that I have had to admit that it was one on me.
163. I do not tire quickly.
164. I like to study and read about things that I am working at.
165. I like to know some important people because it makes me feel important.
166. I am afraid when I look down from a high place.
167. It wouldn't make me nervous if any members of my family got into trouble with the law.
168. There is something wrong with my mind.
169. I am not afraid to handle money.
170. What others think of me does not bother me.
171. It makes me uncomfortable to put on a stunt at a party even when others are doing the same sort of things.
172. I frequently have to fight against showing that I am bashful.
173. I liked school.

GO ON TO THE NEXT PAGE

174. I have never had a fainting spell.
175. I seldom or never have dizzy spells.
176. I do not have a great fear of snakes.
177. My mother was a good woman.
178. My memory seems to be all right.
179. I am worried about sex matters.
180. I find it hard to make talk when I meet new people.
181. When I get bored I like to stir up some excitement.
182. I am afraid of losing my mind.
183. I am against giving money to beggars.
184. I commonly hear voices without knowing where they come from.
185. My hearing is apparently as good as that of most people.
186. I frequently notice my hand shakes when I try to do something.
187. My hands have not become clumsy or awkward.
188. I can read a long while without tiring my eyes.
189. I feel weak all over much of the time.
190. I have very few headaches.
191. Sometimes, when embarrassed, I break out in a sweat which annoys me greatly.
192. I have had no difficulty in keeping my balance in walking.
193. I do not have spells of hay fever or asthma.
194. I have had attacks in which I could not control my movements or speech but in which I knew what was going on around me.
195. I do not like everyone I know.
196. I like to visit places where I have never been before.
197. Someone has been trying to rob me.
198. I daydream very little.
199. Children should be taught all the main facts of sex.
200. There are persons who are trying to steal my thoughts and ideas.
201. I wish I were not so shy.
202. I believe I am a condemned person.
203. If I were a reporter I would very much like to report news of the theater.
204. I would like to be a journalist.
205. At times it has been impossible for me to keep from stealing or shoplifting something.
206. I am very religious (more than most people).
207. I enjoy many different kinds of play and recreation.
208. I like to flirt.
209. I believe my sins are unpardonable.
210. Everything tastes the same.
211. I can sleep during the day but not at night.
212. My people treat me more like a child than a grown-up.
213. In walking I am very careful to step over sidewalk cracks.
214. I have never had any breaking out on my skin that has worried me.
215. I have used alcohol excessively.
216. There is very little love and companionship in my family as compared to other homes.
217. I frequently find myself worrying about something.
218. It does not bother me particularly to see animals suffer.
219. I think I would like the work of a building contractor.

GO ON TO THE NEXT PAGE

220. I loved my mother.
221. I like science.
222. It is not hard for me to ask help from my friends even though I cannot return the favor.
223. I very much like hunting.
224. My parents have often objected to the kind of people I went around with.
225. I gossip a little at times.
226. Some of my family have habits that bother and annoy me very much.
227. I have been told that I walk during sleep.
228. At times I feel that I can make up my mind with unusually great ease.
229. I should like to belong to several clubs or lodges.
230. I hardly ever notice my heart pounding and I am seldom short of breath.
231. I like to talk about sex.
232. I have been inspired to a program of life based on duty which I have since carefully followed.
233. I have at times stood in the way of people who were trying to do something, not because it amounted to much but because of the principle of the thing.
234. I get mad easily and then get over it soon.
235. I have been quite independent and free from family rule.
236. I brood a great deal.
237. My relatives are nearly all in sympathy with me.
238. I have periods of such great restlessness that I cannot sit long in a chair.
239. I have been disappointed in love.
240. I never worry about my looks.
241. I dream frequently about things that are best kept to myself.
242. I believe I am no more nervous than most others.
243. I have few or no pains.
244. My way of doing things is apt to be misunderstood by others.
245. My parents and family find more fault with me than they should.
246. My neck spots with red often.
247. I have reason for feeling jealous of one or more members of my family.
248. Sometimes without any reason or even when things are going wrong I feel excitedly happy, "on top of the world."
249. I believe there is a Devil and a Hell in afterlife.
250. I don't blame anyone for trying to grab everything he can get in this world.
251. I have had blank spells in which my activities were interrupted and I did not know what was going on around me.
252. No one cares much what happens to you.
253. I can be friendly with people who do things which I consider wrong.
254. I like to be with a crowd who play jokes on one another.
255. Sometimes at elections I vote for men about whom I know very little.
256. The only interesting part of newspapers is the "funnies."
257. I usually expect to succeed in things I do.
258. I believe there is a God.
259. I have difficulty in starting to do things.
260. I was a slow learner in school.
261. If I were an artist I would like to draw flowers.
262. It does not bother me that I am not better looking.
263. I sweat very easily even on cool days.

GO ON TO THE NEXT PAGE

264. I am entirely self-confident.
265. It is safer to trust nobody.
266. Once a week or oftener I become very excited.
267. When in a group of people I have trouble thinking of the right things to talk about.
268. Something exciting will almost always pull me out of it when I am feeling low.
269. I can easily make other people afraid of me, and sometimes do for the fun of it.
270. When I leave home I do not worry about whether the door is locked and the windows closed.
271. I do not blame a person for taking advantage of someone who lays himself open to it.
272. At times I am all full of energy.
273. I have numbness in one or more regions of my skin.
274. My eyesight is as good as it has been for years.
275. Someone has control over my mind.
276. I enjoy children.
277. At times I have been so entertained by the cleverness of a crook that I have hoped he would get by with it.
278. I have often felt that strangers were looking at me critically.
279. I drink an unusually large amount of water every day.
280. Most people make friends because friends are likely to be useful to them.
281. I do not often notice my ears ringing or buzzing.
282. Once in a while I feel hate toward members of my family whom I usually love.
283. If I were a reporter I would very much like to report sporting news.
284. I am sure I am being talked about.
285. Once in a while I laugh at a dirty joke.
286. I am never happier than when alone.
287. I have very few fears compared to my friends.
288. I am troubled by attacks of nausea and vomiting.
289. I am always disgusted with the law when a criminal is freed through the arguments of a smart lawyer.
290. I work under a great deal of tension.
291. At one or more times in my life I felt that someone was making me do things by hypnotizing me.
292. I am likely not to speak to people until they speak to me.
293. Someone has been trying to influence my mind.
294. I have never been in trouble with the law.
295. I liked "Alice in Wonderland" by Lewis Carroll.
296. I have periods in which I feel unusually cheerful without any special reason.
297. I wish I were not bothered by thoughts about sex.
298. If several people find themselves in trouble, the best thing for them to do is to agree upon a story and stick to it.
299. I think that I feel more intensely than most people do.
300. There never was a time in my life when I liked to play with dolls.
301. Life is a strain for me much of the time.
302. I have never been in trouble because of my sex behavior.
303. I am so touchy on some subjects that I can't talk about them.
304. In school I found it very hard to talk before the class.
305. Even when I am with people I feel lonely much of the time.
306. I get all the sympathy I should.

GO ON TO THE NEXT PAGE

307. I refuse to play some games because I am not good at them.
308. At times I have very much wanted to leave home.
309. I seem to make friends about as quickly as others do.
310. My sex life is satisfactory.
311. During one period when I was a youngster I engaged in petty thievery.
312. I dislike having people about me.
313. The man who provides temptation by leaving valuable property unprotected is about as much to blame for its theft as the one who steals it.
314. Once in a while I think of things too bad to talk about.
315. I am sure I get a raw deal from life.
316. I think nearly anyone would tell a lie to keep out of trouble.
317. I am more sensitive than most other people.
318. My daily life is full of things that keep me interested.
319. Most people inwardly dislike putting themselves out to help other people.
320. Many of my dreams are about sex matters.
321. I am easily embarrassed.
322. I worry over money and business.
323. I have had very peculiar and strange experiences.
324. I have never been in love with anyone.
325. The things that some of my family have done have frightened me.
326. At times I have fits of laughing and crying that I cannot control.
327. My mother or father often made me obey even when I thought that it was unreasonable.
328. I find it hard to keep my mind on a task or job.
329. I almost never dream.
330. I have never been paralyzed or had any unusual weakness of any of my muscles.
331. If people had not had it in for me I would have been much more successful.
332. Sometimes my voice leaves me or changes even though I have no cold.
333. No one seems to understand me.
334. Peculiar odors come to me at times.
335. I cannot keep my mind on one thing.
336. I easily become impatient with people.
337. I feel anxiety about something or someone almost all the time.
338. I have certainly had more than my share of things to worry about.
339. Most of the time I wish I were dead.
340. Sometimes I become so excited that I find it hard to get to sleep.
341. At times I hear so well it bothers me.
342. I forget right away what people say to me.
343. I usually have to stop and think before I act even in trifling matters.
344. Often I cross the street in order not to meet someone I see.
345. I often feel as if things were not real.
346. I have a habit of counting things that are not important such as bulbs on electric signs, and so forth.
347. I have no enemies who really wish to harm me.
348. I tend to be on my guard with people who are somewhat more friendly than I had expected.
349. I have strange and peculiar thoughts.
350. I hear strange things when I am alone.
351. I get anxious and upset when I have to make a short trip away from home.

GO ON TO THE NEXT PAGE

352. I have been afraid of things or people that I knew could not hurt me.
353. I have no dread of going into a room by myself where other people have already gathered and are talking.
354. I am afraid of using a knife or anything very sharp or pointed.
355. Sometimes I enjoy hurting persons I love.
356. I have more trouble concentrating than others seem to have.
357. I have several times given up doing a thing because I thought too little of my ability.
358. Bad words, often terrible words, come into my mind and I cannot get rid of them.
359. Sometimes some unimportant thought will run through my mind and bother me for days.
360. Almost every day something happens to frighten me.
361. I am inclined to take things hard.
362. I am more sensitive than most other people.
363. At times I have enjoyed being hurt by someone I loved.
364. People say insulting and vulgar things about me.
365. I feel uneasy indoors.
366. Even when I am with people I feel lonely much of the time.
367. I am not afraid of fire.
368. I have sometimes stayed away from another person because I feared doing or saying something that I might regret afterwards.
369. Religion gives me no worry.
370. I hate to have to rush when working.
371. I am not unusually self-conscious.
372. I tend to be interested in several different hobbies rather than to stick to one of them for a long time.
373. I feel sure that there is only one true religion.
374. At periods my mind seems to work more slowly than usual.
375. When I am feeling very happy and active, someone who is blue or low will spoil it all.
376. Policemen are usually honest.
377. At parties I am more likely to sit by myself or with just one other person than to join in with the crowd.
378. I do not like to see women smoke.
379. I very seldom have spells of the blues.
380. When someone says silly or ignorant things about something I know about, I try to set him right.
381. I am often said to be hotheaded.
382. I wish I could get over worrying about things I have said that may have injured other people's feelings.
383. People often disappoint me.
384. I feel unable to tell anyone all about myself.
385. Lightning is one of my fears.
386. I like to keep people guessing what I'm going to do next.
387. The only miracles I know of are simply tricks that people play on one another.
388. I am afraid to be alone in the dark.
389. My plans have frequently seemed so full of difficulties that I have had to give them up.
390. I have often felt badly over being misunderstood when trying to keep someone from making a mistake.
391. I love to go to dances.
392. A windstorm terrifies me.
393. Horses that don't pull should be beaten or kicked.
394. I frequently ask people for advice.

GO ON TO THE NEXT PAGE

395. The future is too uncertain for a person to make serious plans.
396. Often, even though everything is going fine for me, I feel that I don't care about anything.
397. I have sometimes felt that difficulties were piling up so high that I could not overcome them.
398. I often think, "I wish I were a child again."
399. I am not easily angered.
400. If given the chance I could do some things that would be of great benefit to the world.
401. I have no fear of water.
402. I often must sleep over a matter before I decide what to do.
403. It is great to be living in these times when so much is going on.
404. People have often misunderstood my intentions when I was trying to put them right and be helpful.
405. I have no trouble swallowing.
406. I have often met people who were supposed to be experts who were no better than I.
407. I am usually calm and not easily upset.
408. I am apt to hide my feelings in some things, to the point that people may hurt me without their knowing about it.
409. At times I have worn myself out by undertaking too much.
410. I would certainly enjoy beating a crook at his own game.
411. It makes me feel like a failure when I hear of the success of someone I know well.
412. I do not dread seeing a doctor about a sickness or injury.
413. I deserve severe punishment for my sins.
414. I am apt to take disappointments so keenly that I can't put them out of my mind.
415. If given the chance I would make a good leader of people.
416. It bothers me to have someone watch me at work even though I know I can do it well.
417. I am often so annoyed when someone tries to get ahead of me in a line of people that I speak to him about it.
418. At times I think I am no good at all.
419. I played hooky from school quite often as a youngster.
420. I have had some very unusual religious experiences.
421. One or more members of my family is very nervous.
422. I have felt embarrassed over the type of work that one or more members of my family have done.
423. I like or have liked fishing very much.
424. I feel hungry almost all the time.
425. I dream frequently.
426. I have at times had to be rough with people who were rude or annoying.
427. I am embarrassed by dirty stories.
428. I like to read newspaper editorials.
429. I like to attend lectures on serious subjects.
430. I am attracted by members of the opposite sex.
431. I worry quite a bit over possible misfortunes.
432. I have strong political opinions.
433. I used to have imaginary companions.
434. I would like to be an auto racer.
435. Usually I would prefer to work with women.
436. People generally demand more respect for their own rights than they are willing to allow for others.

GO ON TO THE NEXT PAGE

437. It is all right to get around the law if you don't actually break it.
438. There are certain people whom I dislike so much that I am inwardly pleased when they are catching it for something they have done.
439. It makes me nervous to have to wait.
440. I try to remember good stories to pass them on to other people.
441. I like tall women.
442. I have had periods in which I lost sleep over worry.
443. I am apt to pass up something I want to do because others feel that I am not going about it in the right way.
444. I do not try to correct people who express an ignorant belief.
445. I was fond of excitement when I was young (or in childhood).
446. I enjoy gambling for small stakes.
447. I am often inclined to go out of my way to win a point with someone who has opposed me.
448. I am bothered by people outside, on streetcars, in stores, etc., watching me.
449. I enjoy social gatherings just to be with people.
450. I enjoy the excitement of a crowd.
451. My worries seem to disappear when I get into a crowd of lively friends.
452. I like to poke fun at people.
453. When I was a child I didn't care to be a member of a crowd or gang.
454. I could be happy living all alone in a cabin in the woods or mountains.
455. I am quite often not in on the gossip and talk of the group I belong to.
456. A person shouldn't be punished for breaking a law that he thinks is unreasonable.
457. I believe that a person should never taste an alcoholic drink.
458. The man who had most to do with me when I was a child (such as my father, stepfather, etc.) was very strict with me.
459. I have one or more bad habits which are so strong that it is no use in fighting against them.
460. I have used alcohol moderately (or not at all).
461. I find it hard to set aside a task that I have undertaken, even for a short time.
462. I have had no difficulty starting or holding my urine.
463. I used to like hopscotch.
464. I have never seen a vision.
465. I have several times had a change of heart about my life work.
466. Except by a doctor's orders I never take drugs or sleeping powders.
467. I often memorize numbers that are not important (such as automobile licenses, etc.).
468. I am often sorry because I am so cross and grouchy.
469. I have often found people jealous of my good ideas, just because they had not thought of them first.
470. Sexual things disgust me.
471. In school my marks in deportment were quite regularly bad.
472. I am fascinated by fire.
473. Whenever possible I avoid being in a crowd.
474. I have to urinate no more often than others.
475. When I am cornered I tell that portion of the truth which is not likely to hurt me.
476. I am a special agent of God.
477. If I were in trouble with several friends who were equally to blame, I would rather take the whole blame than to give them away.

GO ON TO THE NEXT PAGE

478. I have never been made especially nervous over trouble that any members of my family have gotten into.
479. I do not mind meeting strangers.
480. I am often afraid of the dark.
481. I can remember "playing sick" to get out of something.
482. While in trains, busses, etc., I often talk to strangers.
483. Christ performed miracles such as changing water into wine.
484. I have one or more faults which are so big that it seems better to accept them and try to control them rather than to try to get rid of them.
485. When a man is with a woman he is usually thinking about things related to her sex.
486. I have never noticed any blood in my urine.
487. I feel like giving up quickly when things go wrong.
488. I pray several times every week.
489. I feel sympathetic towards people who tend to hang on to their griefs and troubles.
490. I read in the Bible several times a week.
491. I have no patience with people who believe there is only one true religion.
492. I dread the thought of an earthquake.
493. I prefer work which requires close attention, to work which allows me to be careless.
494. I am afraid of finding myself in a closet or small closed place.
495. I usually "lay my cards on the table" with people that I am trying to correct or improve.
496. I have never seen things doubled (that is, an object never looks like two objects to me without my being able to make it look like one object).
497. I enjoy stories of adventure.
498. It is always a good thing to be frank.
499. I must admit that I have at times been worried beyond reason over something that really did not matter.
500. I readily become one hundred per cent sold on a good idea.
501. I usually work things out for myself rather than get someone to show me how.
502. I like to let people know where I stand on things.
503. It is unusual for me to express strong approval or disapproval of the actions of others.
504. I do not try to cover up my poor opinion or pity of a person so that he won't know how I feel.
505. I have had periods when I felt so full of pep that sleep did not seem necessary for days at a time.
506. I am a high-strung person.
507. I have frequently worked under people who seem to have things arranged so that they get credit for good work but are able to pass off mistakes onto those under them.
508. I believe my sense of smell is as good as other people's.
509. I sometimes find it hard to stick up for my rights because I am so reserved.
510. Dirt frightens or disgusts me.
511. I have a daydream life about which I do not tell other people.
512. I dislike to take a bath.
513. I think Lincoln was greater than Washington.
514. I like mannish women.
515. In my home we have always had the ordinary necessities (such as enough food, clothing, etc.).
516. Some of my family have quick tempers.

GO ON TO THE NEXT PAGE

517. I cannot do anything well.
518. I have often felt guilty because I have pretended to feel more sorry about something than I really was.
519. There is something wrong with my sex organs.
520. I strongly defend my own opinions as a rule.
521. In a group of people I would not be embarrassed to be called upon to start a discussion or give an opinion about something I know well.
522. I have no fear of spiders.
523. I practically never blush.
524. I am not afraid of picking up a disease or germs from door knobs.
525. I am made nervous by certain animals.
526. The future seems hopeless to me.
527. The members of my family and my close relatives get along quite well.
528. I blush no more often than others.
529. I would like to wear expensive clothes.
530. I am often afraid that I am going to blush.
531. People can pretty easily change me even though I thought that my mind was already made up on a subject.
532. I can stand as much pain as others can.
533. I am not bothered by a great deal of belching of gas from my stomach.
534. Several times I have been the last to give up trying to do a thing.
535. My mouth feels dry almost all the time.
536. It makes me angry to have people hurry me.
537. I would like to hunt lions in Africa.
538. I think I would like the work of a dressmaker.
539. I am not afraid of mice.
540. My face has never been paralyzed.
541. My skin seems to be unusually sensitive to touch.
542. I have never had any black, tarry-looking bowel movements.
543. Several times a week I feel as if something dreadful is about to happen.
544. I feel tired a good deal of the time.
545. Sometimes I have the same dream over and over.
546. I like to read about history.
547. I like parties and socials.
548. I never attend a sexy show if I can avoid it.
549. I shrink from facing a crisis or difficulty.
550. I like repairing a door latch.
551. Sometimes I am sure that other people can tell what I am thinking.
552. I like to read about science.
553. I am afraid of being alone in a wide-open place.
554. If I were an artist I would like to draw children.
555. I sometimes feel that I am about to go to pieces.

GO ON TO THE NEXT PAGE

556. I am very careful about my manner of dress.
557. I would like to be a private secretary.
558. A large number of people are guilty of bad sexual conduct.
559. I have often been frightened in the middle of the night.
560. I am greatly bothered by forgetting where I put things.
561. I very much like horseback riding.
562. The one to whom I was most attached and whom I most admired as a child was a woman. (Mother, sister, aunt, or other woman.)
563. I like adventure stories better than romantic stories.
564. I am apt to pass up something I want to do when others feel that it isn't worth doing.
565. I feel like jumping off when I am on a high place.
566. I like movie love scenes.

APPENDIX 2

TABLE WHICH SHOWS
SIGNIFICANCE OF DIFFERENCE BETWEEN FREQUENCIES

Table which shows Significance of Difference between Frequencies. (t of d_f is significant at the .01 level)

If highest f is	And other f is at most	So that d is at least
18	12	6
17	10	7
16	9	7
15	8	7
14	6	8
13	5	8
12	4	8
11	3	8
10	2	8
9	2	7
8	1	7
7	1	6
6	0	6

APPENDIX 3

ITEMS WHICH SIGNIFICANTLY
DIFFERENTIATE TUBERCULARS FROM CHRONICS

Items which differentiated at the 1% level of confidence, tuberculars from chronics.

Category	Number	Item	Answer
Health	103	I have little or no trouble with my muscles twitching or jumping.	T
	155	I am neither gaining nor losing weight.	F
	186	I frequently notice my hand shakes when I try to do something.	F
	187	My hands have not become clumsy or awkward.	T
	189	I feel weak all over much of the time.	F
	192	I have had no difficulty in keeping my balance in walking.	T
	330	I have never been paralyzed or had any unusual weakness of any of my muscles.	T
	405	I have no trouble swallowing.	T
	462	I have had no difficulty starting or holding my urine.	T
Morale	16	I am sure I get a raw deal from life.	F
	84	These days I find it hard not to give up hope of amounting to something.	F
	142	I certainly feel useless at times.	F
	301	Life is a strain for me much of the time.	F
	400	If given the chance I could do some things that would be of great benefit to the world.	F
	517	I cannot do anything well.	F

Items which differentiated at the 1% level of confidence, tuberculars from chronics.

Category	Number	Item	Answer
Social	117	Most people are honest chiefly through fear of being caught.	F
	201	I wish I were not so shy.	F
	265	It is safer to trust nobody.	F
	280	Most people make friends because friends are likely to be useful to them.	F
	377	At parties I am more likely to sit by myself or with just one other person than to join in with the crowd.	F
	391	I love to go to dances.	T
	457	I believe that a person should never taste an alcoholic drink.	F
	473	Whenever possible I avoid being in a crowd.	F
	482	While in trains, busses, etc., I often talk to strangers.	T
	529	I would like to wear expensive clothes.	T
Familial	212	My people treat me more like a child than a grown-up.	F
	325	The things that some of my family have done have frightened me.	F
	516	Some of my family have quick Tempers.	F

Items which differentiated at the 1% level of confidence, tuberculars from chronics.

Category	Number	Item	Answer
Sexual	69	I am very strongly attracted by members of my own sex.	F
	231	I like to talk about sex.	T
	470	Sexual things disgust me.	F
Religious	98	I believe in the second coming of Christ.	F
Politics	255	Sometimes at elections I vote for men about whom I know very little.	T
Phobias	354	I am afraid of using a knife or anything very sharp or pointed.	F
	510	Dirt frightens or disgusts me.	F
General Adjustment	145	At times I feel like picking a fist fight with someone.	F
	197	Someone has been trying to rob me.	F
	242	I believe I am no more nervous than most others.	T
	303	I am so touchy on some subjects that I can't talk about them.	F
	413	I deserve severe punishment for my sins.	F
	481	I can remember "playing sick" to get out of something.	T
	511	I have a daydream life about which I do not tell other people.	F
	523	I practically never blush.	T
Total			43

APPENDIX 4

AN ABSTRACT OF

A STUDY ON THE TUBERCULOUS PERSONALITY

APPENDIX 4

ABSTRACT OF

A STUDY ON THE TUBERCULOUS PERSONALITY

The immediate inquiry was designed to determine if there is a personality pattern characteristic of tuberculous patients. A survey of the literature indicated such a possibility. However, no definite pattern has been agreed upon.

The experimental group consisted of eighteen hospitalized tuberculous women in the 20 - 40 age range. Two control groups were used in the study: a group of normal controls and a group of chronically ill, non-tuberculous patients. The latter control was chosen to allow for the effects of hospitalization and to determine if traits ascribed to tuberculous patients by the MMPI are specific to tuberculosis or are only typical of chronic illnesses in general. The three groups were matched for both age and sex.

An item analysis of the MMPI was carried out. Items were tabulated which differentiated at the .01 level of confidence a) tuberculars from normals b) tuberculars from chronically ill, non-tuberculous patients

c) tuberculars from normal and chronic controls. The effects of prolonged hospitalization were found by comparing d) chronic controls from both tuberculars and normal controls. The statistic used for intergroup comparison was the formula for the Significance of Difference Between Frequencies.

In the comparison of tuberculars with normal controls, the tuberculous population did not appear to differ greatly. They appeared more gregarious and empathetic, but were less able to express feelings than normals except under conditions of physical distress.

The second comparison showed the tuberculars appeared physically, socially and sexually better adjusted than the chronic controls. Differences have been attributed to prolonged hospitalization and its resultant restrictions.

Comparison of tuberculous patients with the combined controls showed differences on only three items. These items appeared directly attributable to the emphasis and atmosphere of the sanatorium. Consequently, it was not possible to design a personality questionnaire characteristic of tuberculous patients.

Thus, within the limits of this study there appeared to be no "tuberculous personality" which is amenable to measurement by the MMPI.

The last approach, differentiating the chronic controls from both tuberculars and normal controls pointed to poor adjustment in physical, social and personal areas. Differences have been attributed to prolonged hospitalization.

A further investigation with better matching for duration of hospitalization of tuberculars and chronic controls is proposed in order to more adequately assess effects of hospitalization.