A COMPARATIVE STUDY OF THE PERSONALITY TRAITS OF
HANDICAPPED AND NORMAL CHILDREN

THESIS

Presented to the Graduate Council of the North
Texas State Teachers College in Partial
Fulfillment of the Requirements

For the Degree of

MASTER OF SCIENCE

By

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166377
Gladewater, Texas
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CHAPTER I
INTRODUCTION

The upsurge of interest in the education of the physically handicapped during the last decade has raised many questions as to how the physically handicapped child differs from the normal child. Many of these questions have centered around personality differences. Since personality development consists essentially of the adjustments made by the individual to his environment and to the role he is forced to play by social expectancy, it is assumed by many authorities that physical defects may have a significant part in the development of a personality that may deviate to a marked degree from that which is regarded as normal and well adjusted. Eisonson says:

In the case of physically handicapped persons, the nature of the social participation of the individual is influenced in a profound way by the manner in which society indicates what the role and status of his behavior should be... Physically handicapped individuals are influenced by social stimuli to which they have become accustomed, and which they have finally learned to anticipate. The social group has indicated how it is likely to respond to the handicapped person, and by this indication it has defined the role and status the handicapped person is to assume in the group.

A badly crippled child who becomes the object of pity and maudlin sentiment may develop, despite superficial signs of outward conformity, an intense resentment...
against his environment which may be expressed in a violent phantasy life. The deaf child who cannot readily communicate with his environment and who does not readily call forth sympathetic responses from other persons may develop marked antisocial tendencies. The large and overweight child whose condition may be a result of thyroid or pituitary disturbance may become the butt of jokes and cause much embarrassing comments from his playmates. Withdrawal behavior and indulgence in day-dreaming, or marked aggressive behavior may be the outcome. A child with a weak heart who can not participate fully in the social life which surrounds him may be compelled to live a life which does not include his active environment.1

Burt states that, "Defective physical conditions are, roughly speaking one and a quarter times as frequent among delinquent children as they are among non-delinquent children from the same schools and the same streets."2

Madden reported that the children who were hard of hearing were never rated as leaders and were often shy and solitary.3

Rivlin concedes that the physical defect introduces complications and takes the position that the child does not become a problem child merely because he is physically handicapped, and he cites as proof that a great number of physically handicapped children who fit in beautifully with their


2C. Burt, The Young Delinquent, p. 239.

environment, and are well adjusted to the conditions imposed upon them by their physical limitations.  

In making a study of pre-school children who were partially deafened, Charlotte Avery concluded that, while certain studies indicate that the acoustically handicapped do show more emotional mal-adjustments than their hearing contemporaries, that these mal-adjustments are perhaps more the result of unwise parental and educational guidance, than the impairment of hearing, and that there is no reason to believe that pre-school acoustically handicapped children should be socially inadequate when compared with hearing children.  

There has not been a great number of research studies made of the influence which physical handicaps may have upon personality, and in view of so many diverse opinions, it seems that more research is needed on this problem. The teachers, the parents, and the social group, might be able to utilize knowledge so gained in the understanding of causes and prevention of personality mal-adjustments.

Nature of Problem and Purpose

The purpose of this study is to compare the personality traits of the physically handicapped children with the

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4 Harry N. Rivlin, Educating for Adjustment, p. 159.

personality traits of normal children. An attempt will be made to answer two questions. First, how do physically defective children compare with physically normal children in self-adjustment and social-adjustment? Second, is there an associated emotional or personality pattern which accompanies physical handicaps?

It is possible that handicapped children are better adjusted to their limitations than outsiders think, and that considered in numbers, they have no special pattern of emotional mal-adjustment, or it may be true that they have more inward conflicts than the normal group, and that these conflicts manifest themselves in undesirable phantasies and behavior.

To determine actual and apparent adjustment, two forms of tests are necessary, one in which the subject rates himself, and one in which he is rated by an observer. For this study, the California Test of Personality in which the child is given an opportunity to express his feelings and emotions about himself, his family, his school, and his community, was chosen. It was given in connection with the Haggerty-Olson-Wickman Rating Schedule wherein the teacher rates the child on his emotional and social responses.

Description of Rating Scale Used in Securing Data

The California Test of Personality, Elementary Form A, by Louis P. Thorpe, Ernest W. Tieg, and Willis W. Clark,
used in this study is a measure of self-adjustment and social-adjustment. The components of the self-adjustment test are:

1A. Self-reliance.
1B. Sense of Personal Worth.
1C. Sense of Personal Freedom.
1D. Feeling of Belonging.
1E. Freedom from Withdrawing Tendencies.
1F. Nervous Symptoms.

The components of the social-adjustment test are:

2A. Social Standards.
2B. Social Skills.
2C. Freedom from Antisocial Tendencies.
2D. Family Relations.
2E. School Relations.
2F. Community Relations.

Some sample items from the test are:

Do most of your friends and classmates think you are bright? Are you sometimes cheated when you trade things? (Item 1B)

Do you often feel that nobody likes you? Do you often feel that most of your classmates are glad that you are a member of the class? (Item 1D)

Do you feel that no one at home loves you? Have you often felt that your folks feel you would not amount to anything? (Item 2D)

Does it seem to you that some of the teachers have it in for pupils? Do you think that the boys and girls like you as well as they should? (Item 2E)

The answers to the questions on this test are an index to the child's feeling of security, being loved and wanted in his world, and to his feeling of worth to himself and others.

The Haggerty-Wickman-Olson Rating Scale asks such questions of the observer as:
How does he accept authority?
What tendency has he to criticize others?
Is he shy or bold in social relationships?

These questions taken from Division III of the Rating Scale are designed to measure the child's social reactions.

Questions such as these taken from Division IV are asked in attempt to get a picture of the child's emotional adjustment as it is manifested in his conduct:

Is he even-tempered or moody?
Is he sympathetic?
Is he suspicious of trustful?

All of these questions are provided with an ascending scale of answers and the teacher is asked to answer as objectively as possible. Divisions I and II of this scale, which measure the physical and mental attributes of the subject, were not used.

Subjects Used in This Study

These tests were given to two groups, equal in number, of public school children of Texas, a group of physically handicapped children, and a control group of normal children. All children were chosen at random with no regard for I. Q.'s, except that they have intelligence to comprehend the questions. They were from all types of schools, city schools, rural schools both large and small. The economic range was varied in both groups from very low income, to above average. No
attempt was made to correlate the personality traits with any of these factors. It seems reasonable to suppose that both groups being chosen totally by chance, and in the same manner, that the law of averages would be the same for both groups.

The children taking the tests ranged from the fourth through the ninth grade, and from nine to fifteen years old.

The handicapped group was chosen from those children which have severe enough handicaps to place them under the supervision of the Special Education Department of Texas schools. These children fall into six classes: partially seeing, partially hearing, children with speech disorders, those with nervous disorders, those with orthopedic handicaps, and those with lowered vitality.

Method of Securing Data

The data for this study were collected during the school year of 1948-1949. The public school teachers were asked to administer the tests. The teachers were given specific instructions that the children be encouraged to express their true feelings by their answers, and they were also instructed to answer the questions on the rating scale as objectively as possible.
CHAPTER II

PERSONALITY DEVELOPMENT: ITS BASIC NEEDS AND FRUSTRATIONS

Definition and Development of Personality

In order to understand the role of physical handicaps in shaping personality traits, it is necessary to understand what personality is, the basic needs that must be met in the formation of a normal personality, and some frustrations of these needs which may result from conflict with environment. The term personality is hard to define. Campbell defines it as "the expression of the total forces of the individual; it is the product of their integrated activity; it is the man in action as seen by the outsider and known to himself."1

Personality is the result of interaction of the various traits of the individual, habitual responses to situation in which he finds himself, and his final adjustment to himself, his urges and desires, and to his environment. It can not be said to exist except as an aspect of an organism's behavior in relation to other organisms and to the environment.

The development of personality consists of a long series of adjustments, beginning with the beginning of life itself.

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1 C. M. Campbell, *Human Personality and Environment*, p. 3.
and ending only with death. How these adjustments are made depends upon many complex factors, the individual's physical and intellectual endowment, his environment and the culture in which he lives. From the first moment of life there is thwarting of individual urges and desires, and the measure of adjustment to frustration is the measure of normal personality. Campbell says of the normal personality:

The organism has the task of maintaining its integrity, of establishing a balance between conflicting tendencies, of utilizing its resources to compensate for original or acquired defects. It has the task of attaining satisfaction from the exercise of its varied functions with the external resources at its disposal. In this task of attaining satisfaction the individual is responsive to the attitude of his fellows, covets a feeling of personal value, strives to neutralize any disturbing feeling of personal inferiority.  

Basic Needs of Personality

It is generally recognized that human beings have certain basic needs. If these needs are met in the way of conditions, experiences, and relationships functional effectiveness in society is achieved, a reasonable amount of self-satisfaction and happiness is attained, and an adjusted wholesome personality is the result. Prescott states the case thus:

The structure and dynamic processes of the human organism imply the need for certain things, for certain conditions and for certain activities of the body if physical and mental health are to be maintained. The structure and processes of society

\textsuperscript{2}Ibid, p. 12.
imply certain knowledges, skills, and functional relationships as necessary to the individual if he is to be effective and adjusted. As he grows up, the experiences of life are sure to raise questions in the mind of each individual about his personal role and about the meaning of life; therefore each one needs to arrive at a satisfactory mental organization or assimilation of his experiences. Thus, the structure of the organism, the processes of society, and the nature of a person's experiences contrive to rise to a series of needs or quasi-needs, and of operational concepts which must be met if wholesome personality development is to be achieved.

These needs are the basis of permanent adjustment problems which all of us face. They are more or less continuously with us. Our behavior is patterned in accordance with what experience has shown us to be the most satisfactory means of working them out, but as conditions around us vary and change, we are continuously under the necessity of modifying our behavior. These needs become sources of unpleasant affect and even of serious personality and maladjustments if they are not met adequately. Furthermore, our society is rich in circumstances which deny to individuals the fulfillment of one or several of these needs and quasi-needs for period of varying lengths.3

According to Prescott, the needs of developing children fall naturally into three categories representing three major aspects of the life of a person.

These categories of need can be called: (1) physiological, when describing needs that spring primarily out of structure and dynamic biochemical equilibria; (2) social or status needs, when describing the relationships that it is essential to establish with other persons in our culture; and (3) ego or integrative needs, when describing needs for

experience and for the organization and symbolization of experience through which the individual will discover his role in life and learn to play it in such an effective manner as to develop a sense of worthy selfhood.  

**Physiological needs.**—The human body has certain biological wants and physical needs. The need for air, for food, for water, and for warmth is present at birth. If the organism is deprived of any of these for a considerable period death is threatened and strong motivation for adjustive behavior is present. There is a great need for activity and for rest. The drive to sexual activity is very powerful and is one of the drives most frequently thwarted by society's taboos. The frustration of this need without a satisfaction is often a source of mal-adjustment.

**Social needs.**—Every individual has a fundamental need for security in his relations to others. He needs affection and the feeling that he is loved and wanted. He must have the feeling that he is valuable to others if he is to have a feeling of self-worth. He must feel that he is a valued member of his group, that he belongs. He must receive from his group recognition of his achievements and contributions, and response to his emotions. Every individual craves identification with his kind, a likeness to his group. Unless these social needs are fulfilled, serious and unpleasant emotional

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Ibid, pp. 114-120.
tensions are the result. Efforts to relieve this tension may involve the individual in antisocial or regressive behavior inimical to ordered personality development.

Self needs.--Human beings have a never-ending drive towards growth and towards new experiences. The individual strains toward a goal of achievement and a sense of personal worth. It is only when self-interest is inter-associated with the larger interest of the group that the individual achieves a sense of satisfaction in conduct that is socially useful, and behavior under the varying circumstances of life in a complex society does not arouse internal conflicts. The fulfillment of these needs are necessary to emotional health. Rivlin explains it thus:

Emotional health is a state of equilibrium wherein the individual--his wishes, ambitions and needs--are in harmony with themselves and the stresses of the environment.5

This does not imply that complete adjustment is desirable or even possible. Since environment is constantly changing, adaptation is a continuous process, and it is only when thwarting of basic needs is so severe that the individual is driven to undesirable adjustments that the personality may be characterized as mal-adjusted. Eisonson says:

The environment of the individual may make demands which conflict with his own. It may happen that the environmental requirements are too severe; also it

5Rivlin, op. cit., p. 23.
frequently happens that the individual's requirements of his environment are excessive.\(^6\)

**Frustrations of Personality Needs**

The individual is constantly faced with frustration. His urges conflict with environmental or social needs. His inner needs may even conflict one with another. Prescott says:

> There are so many conditions which may occur to upset the orderly development of a child that the wonder is that children give so little cause for worry.

...\(...\)

Any situation which does violence to the personality needs with which the child is preoccupied at the time can evoke unwholesome behavior.\(^7\)

He continues with a long list of conditions which provoke unacceptable behavior. Among these he cites rejection by parents, playmates or social group, physical peculiarities, as well as peculiarities in speech, dress, or customs, mental deficiency, unrealizable ambitions, family rivalry, economic insecurity and anxiety, and competition.\(^8\)

Rivlin names eleven specific frustrations or causes of maladjustment:

Problem behavior can be understood only as the interaction of forces within the individual and those coming from his environment, resulting in an inability to withstand a serious shock or prolonged strain. Among the factors most frequently found to be conducive

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\(^6\) Pintner, Elisonson, Stanton, *op. cit.*., p. 6.

\(^7\) Prescott, *op. cit.*., pp. 126-134.

\(^8\) Ibid.
to maladjustment among school children are: poverty, undesirable home conditions, mental or physical inferiority, poor habits of eating or sleeping, improper recreational outlets, bad companions, habits of substituting imaginary solutions of difficulties for attempts at overcoming them, a feeling of unworthiness, a feeling of insecurity, conflicting desires or ambitions, and constant thwarting of wishes. None of these factors can be considered the sole and irreducible cause of maladjustment, for one asks why the youngster feels insecure and unworthy. However, it is such traits and forces as these that reduce his emotional stability and lessen his ability to stand shocks and strains.9

Review of Related Studies

In view of the fact that so many conditions may frustrate the basic needs of the individual, there would seem to be some doubt that physical disabilities alone would be an outstanding cause of warped or distorted personalities. A great many studies related to the problem have been made and the results of some are given herewith.

Pintner gave personality tests to 432 partially-sighted children, children whose loss of vision was severe enough to warrant placement in sight conservation classes and to 432 normal children of approximately the same age and educational status. The avowed purpose of the tests was to determine if group tests of an inventory type reveal a difference in emotional adjustment between children in sight-conservation classes and in normal classes, and to answer the question, "Does a minor physical handicap, such as partial loss of vision, result in a change in personality?"

9Rivlin, op. cit., p. 103.
The tests used were "The Aspects of Personality," which measure ascendance-submission, extroversion-introversion and emotional stability, and "Pupil Portraits" tests, which measure home and school adjustment.

The difference between normals and slightly handicapped children seemed to be very slight, and traits seem to vary from child to child as in the normal children. Pintner concludes that: "The slight physical handicap does not seem to result in a distinct personality pattern or in an inability to feel satisfactorily adjusted."^10

The generally accepted theory that there is a fixed typical "epileptic personality" is not proved by Lisansky's study "Convulsive Disorders and Personality". This study was made of ten adult non-institutionalized epileptics with a control group of ten diabetics. There were seven men and three women in each group, and in each group, the subjects were similar in age, education and duration of illness. The Rorschach test was used. The epileptics show more emotional strain and less acceptance of self than the diabetics. The epileptics show a definite trend toward maladjustment in inverse ratio to the length of illness.

Groups show more similarities than differences. On Rorschach both show drive for achievement with limited productivity, tendencies toward constriction without withdrawal,

and conflict between their tendencies to be outgoing and to withdraw.

The group is too small to permit drawing of definite conclusions, but the findings indicate there is no typical epileptic personality to distinguish them from other sick or neurotic groups.11

The Brown Personality Inventory for children was given by Springer to 397 deaf and 327 hearing children to determine if group difference is manifested in maladjusted behavior, as measured by psycho-neurotic responses. It was very difficult to find controls of chronological age as deaf group. Younger deaf children were unable to take this test because of verbal handicap, so, on an average the deaf were more than four years older than controls. Groups were approximately equal on nationality and general status. The deaf girls were inferior in intelligence. The boys were equal.

All groups of the deafened received much higher scores than the controls. No reliable differences were found between sexes of either. Compared with published norms, all received higher neurotic scores. According to Brown's classification the deaf fell into highest or "very poor adjustment." There was a slight tendency for older deaf boys and older hearing girls to receive slightly higher neurotic scores. The

relationship between neurotic scores and intelligence was very low and insignificant. The tendency was for girls who became deaf at a later age to have higher neurotic scores, but the age of onset seemed to have no influence on deaf boys. The scores were not influenced by the amount of residual hearing.  

Madden provided a rating scale to be used by teachers. The teachers rated both the normal-hearing and partially-hearing children in their classes. They were rated on such character traits as withdrawal behavior, social attitude, aggressiveness, obedience, leadership, attentiveness. The groups were matched in intelligence, age, sex and race. He found no difference between the groups in ratings of attentiveness, obedience, and social attitude. The hard-of-hearing made lower scores in leadership and were found to be more shy and less aggressive.

Some interesting conclusions as to the social and personal adjustments of children who are cross-eyed were reached by Lion, O'Neill, and Prager, who made an intensive study of ten such children at an orphanage. In making the study, the child's history was obtained from social workers and social agencies. Continuation notes covering the observations of


13 Madden, op. cit., p. 3.
the child's personality were made monthly, so thoroughly as to give a good idea of the child's intramural adjustments. Frequent reports as to extramural adjustments were obtained from 4-H Club, Scout organization, and other sources; and evaluation was arrived at by group discussion of staff members of a clinic.

Of these children, six were girls and four boys. Ages ranged from five to fifteen. They were all of Northern European stock, American born white children, who came from families of office workers or skilled laborers. All were of average or about average intelligence. All were observed for periods of from one to eight years. Because of the small number no statistical presentation was attempted. The findings were the results of an intensive and thorough clinical evaluation.

These ten children manifested many personality maladjustments. Most of the children were fearful of the present and experienced apprehension and anticipated difficulties in their future vocational and marital possibilities. They developed self-pity, depression, and self-consciousness. Not uncommonly, the older children developed ideas of self-reference. They often became jealous of those who had straight eyes.

Other undesirable developments were over compensation, over-self-assertiveness, disobedience, and temper tantrums.
Not all the children developed undesirable personality traits or unwholesome reactions. In some who had good personality capacities the handicap seemed to enrich and foster the development of an adequate personality.

These children received such correction as science offered, and in every case where the correction was approximately successful, undesirable symptomatic behavior was proportionately reduced. In some cases, the improvement was precipitous, in others gradual and progressive, but, in all cases intrapersonal adjustments became better.

The author concludes that this clinical study of ten cross-eyed children establishes the fact that strabismus definitely and greatly influences their personal and intrapersonal adjustments. Corrections of the condition improves their personality development.14

A group of forty-three crippled girls was given the Thurstone Personality Schedule by Rosenbaum. These girls ranged in age from sixteen to twenty-five, with a mean-age of 18.5. They were spending their third summer in a charity camp for crippled children.

The mean score on the Personality Schedule was sixty-nine. The mean score for college freshmen of like age is forty. Thurstone interprets the scores as follows:

0 - 14 Extremely well adjusted
15 - 20 Well adjusted
30 - 59 Average
60 - 79 Emotionally mal-adjusted
8 - Should have psychiatric advice

Apparently this small group of crippled girls tend, on the average, to be mal-adjusted. The group is too small to justify any general conclusions as to the emotional adjustment of cripples. ¹⁵

A test using the California Personality Tests, and conducted along similar lines to this study, was given by Elizabeth Sullivan to the children in Los Angeles County California Schools. It is interesting to note that thirty-seven per cent of elementary school children tested thought people did not like them. Only seventy-eight per cent of these same elementary children felt that their classmates were glad they are members of their class, and thirty-seven per cent thought some teachers "have it in for their pupils." A high percentage, about ninety-one per cent, thought their folks considered them bright, but about one fifth felt that they were not considered important by their families, and one third wanted to be somewhere else than home. One in five had

a feeling of not being wanted; eighty-seven per cent considered themselves able to do the things they tried, and one half admitted being often cheated in trades.\footnote{Elizabeth Sullivan, "Personality and Personal-Social Adjustment," \textit{Education}, LXIII (June 15, 1943), 609.}
CHAPTER III

A COMPARISON OF THE PERSONALITY DEVELOPMENT OF NORMAL
AND HANDICAPPED STUDENTS AS REVEALED BY THIS STUDY

An examination of the completed profiles for the normal and handicapped students reveals the fact that the need for assistance in improving personality and social adjustment is not restricted to a few; instead, the impact and interaction of environmental factors with individual needs and desires create some adjustment problems for all.¹

In the California Test, the profile, or personality picture, has been divided into twelve aspects or components because these seem to represent the most important identifiable personality and social-adjustment areas. Each component, self-reliance, sense of personal worth, sense of personal freedom, etc. is composed of twelve questions of a personal nature that yield evidences of the presence or absence of an adjustment problem of the particular kind being considered. A comparison of the total number of handicapped and normal students was made from the data found in Table 1. From the profile the examiner first discovers

¹Thorpe, Clark, and Tieg, Manual of Directions, California Test of Personality, Elementary Series, p. 6.
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<th>Percentile Class Intervals</th>
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<td>Self-adjustment</td>
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*"H" represents handicapped students; "N" represents normal students.
TABLE 1--Continued

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</tr>
<tr>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

| Students | H | N | H | N | H | N | H | N | H | N | H | N | H | N | H | N | H | N | H | N | H | N | H | N | H | N |
| 7        | 4 | 4 | 1 | 4 | 3 | 1 | 7 | 4 | 8 | 5 | 5 | 3 | 1 | 100| 100| 46.78| 43.12| 50 | -3.22| -6.78|
|          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 8        | 17| 10| 16| 9 | 9 | 2 | 11| 100| 100| 52.43| 46.25| 50 | -3.43| -3.75|
| 22       | 7 | 7 | 19| 5 | 8 | 6 | 5 | 9 | 9 | 1 | 100| 100| 67.04| 50.33| 50 | -17.04| -3.75|
| 20       | 8 | 10| 12| 31| 1 | 100| 100| 53.87| 55.00| 50 | -16.13| -5.00|
| 1        | 29| 16| 1 | 19| 34| 100| 100| 45.26| 65.31| 50 | -4.74| 15.31|
| 14       | 2 | 6 | 11| 4 | 13| 3 | 2 | 4 | 2 | 5 | 100| 100| 51.92| 51.50| 50 | -1.92| -18.50|
| 2        | 2 | 4 | 1 | 16| 8 | 4 | 7 | 7 | 3 | 3 | 5 | 5 | 1 | 100| 100| 60.23| 42.00| 50 | -10.23| -8.00|
| 30       | 25| 1 | 9 | 1 | 1 | 1 | 2 | 2 | 6 | 5 | 1 | 100| 100| 60.16| 61.20| 50 | -10.16| -11.20|
| 23       | 18| 11| 14| 1 | 2 | 6 | 5 | 1 | 100| 100| 47.95| 50.50| 50 | -2.05| -5.50|
| 22       | 20| 14| 3 | 20| 10| 1| 9 | 1 | 100| 100| 47.86| 52.77| 50 | -2.14| 2.77|
| 9        | 17| 5 | 1 | 4 | 22| 11| 3 | 100| 100| 54.00| 40.00| 50 | -4.00| -10.00|
| 5        | 1 | 5 | 22| 1 | 4 | 100| 100| 55.50| 55.77| 50 | -5.60| 5.77|
| 9        | 2 | 5 | 6 | 7 | 4 | 7 | 10 | 1 | 5 | 5 | 2 | 2 | 100| 100| 47.27| 42.22| 50 | -2.73| -7.78|

Note: The table continues with similar data entries, indicating the distribution of cases, medians, and differences across various percentile classes.
the components, if any, in which the individual deviates seriously from people in general; such components may next be examined to discover specific answers which reveal lack of adjustment.\textsuperscript{2}

The study of the profile will reveal which of the specific items in each of the components of the test is giving difficulty. These difficulties indicate specific adjustment problems.

Table 1 shows the total number of one hundred handicapped students and one hundred normal students who have certain percentile rankings in each item of the personality test, and also shows the median percentile ranking of each group of each item.

In Section I on self-adjustment the handicapped group shows a median percentile rank of 46.78, and the normal group shows a median percentile rank of 43.12. Since the norm for this group test in personal and social adjustment is fifty, the handicapped group is -3.22 percentile points below the norm and the normal group is -6.88 below the norm. In the item self-reliance, the handicapped group's median is found at 58.43, 8.43 percentile points above the norm, while the normal group shows a median percentile score of 46.25, -3.75 below the norm. Sense of personal worth shows a median

\textsuperscript{2}Ibid.
percentile score of 67.04 for the handicapped and 50.83 for the normal students, with deviations of 17.04 above the norm and 0.83 above the norm respectively. In the sense of personal freedom, the handicapped group median score falls on the low point of 33.87, a deviation of -16.13 points below the norm, while the normal group median score is 55.00, or 5.00 points above the norm. Again, the handicapped group's median score is lower in feeling of belonging, registering a median score of 45.26, -4.74 percentile points below the norm as compared to the normal group's median score of 65.31, 15.31 percentile points below the norm.

In freedom from withdrawing tendencies the handicapped group's median percentile score is slightly above the norm, 51.92, a deviation of 1.92 whereas the normal group's score rests on a point far below the norm, registering 31.50, a deviation from the norm of -18.50 percentile points. In both groups, the median score on freedom from nervous symptoms is very low. The handicapped median score in this division is 23.35 while the normal group median score is 22.50, a deviation of -26.65 below the norm for the handicapped group, and of -27.50 for the normal group.

A summary of results of scores on self-adjustment of the two groups shows scores above the norm in self-reliance, personal worth, and withdrawing tendencies, for the handicapped group while the normal group made scores above the norm in sense of personal worth, sense of personal freedom, and feeling
of belonging. The lowest scores made by both groups were made in freedom from nervous symptoms, the difference between the median scores of only 0.85 percentile points favoring the handicapped group. The greatest difference of the two groups in the median scores on any component is found in the scores on sense of personal freedom, a total difference of 21.13 percentile points favoring the normal students.

In Section II on social adjustment the median percentile rank for the handicapped rests on 60.23, that of the normal group on 45.00. The social standards component shows only a small difference in the median percentile rankings of the two groups, 60.16 for the median of the handicapped students, 61.20 for the normal students. The respective deviations from the norm are 10.16 for the handicapped and 11.20 for the normal group. In social skills both groups achieve a median score near the norm, 47.95 for the handicapped students, a deviation below the norm of -2.05 and a score of 50.50 for the normal students, a deviation of .50 above the norm. The median scores of the two groups in the component, freedom from anti-social tendencies, do not show a wide difference. Both approach the norm, although that of the handicapped group is -2.14 points below the norm, 47.86, and that of the normal group is above the norm or 52.77, a total difference between the median scores of the two groups of 4.91 percentile points.

In Section II both groups made their lowest median scores in the component of family relations. The handicapped group
made scores of 45.00 and 44.00, -5.00 and -6.00 points below the norm respectively. The greatest difference in the median scores of Section II in any component is shown in school relations. The median score of handicapped students in this component is 54.00, a deviation of 4.00 percentile points above the norm. The median score for the normal students in this component is 40.00, a deviation of -10.00 points below the norm. The difference between the median scores of the two groups here is 14.00 percentile points. In community relations both groups scored above the norm. The median score for the handicapped rests on 55.50. The median for the normal group rests on 55.77, showing deviations of 5.50 for the handicapped, and 5.77 for the normal group.

A summary of total adjustment shows a median score of 47.27 for the handicapped group, and a median score of 42.22 for the normal group with deviations of -2.73 from the handicapped students and of -7.78 for the normal students, a difference in deviation of 5.05 in favor of the normal students. This summary would indicate slightly unsatisfactory adjustment for both groups, with a slight advantage in adjustment going to the normal group.

Figure 1 is an effort to show a graphic comparison of the median percentile ranks of the handicapped and normal students on each component of the California Test of Personality. Figure 1 shows the profile chart based on the median percentile ranks for each group of students. These median percentile ranks are taken from Table 1.
Self-adjustment............
Self-reliance............
Personal worth...........
Personal freedom........
Belonging feeling........
Withdrawing..............
Nervous symptoms.......... 
Social adjustment.......... 
Social standards...........
Social skills.............
Anti-social tendencies...
Family relations...........
School relations...........
Community relations......
Total adjustment...........

Percentile................ 1 10 20 30 40 50 60 70 80 90 99
Handicapped................
Normal............

Fig. 1.--A comparison of the median percentile ranks of the handicapped and normal students on each item of the Personality Test.

Figure 1 shows that the median percentile ranks of the two groups of students vary with the various items of the test, while at no time are the median percentile ranks of
the two groups identical, that in only three components are there marked differences. These three are personal freedom, belonging feeling, and school relations. It will be seen from the graph that the groups are almost identical in self-adjustment median scores, but that there is a notable difference in social adjustment with the handicapped median score falling just above the norm. Only one extreme swing to the left is noted for both groups on the component of nervous symptoms. In all, only five median percentile of the various components, scores fall below the fortieth percentile which marks the beginning of the first percentile interval below the norm. Of these five, two are normal group ratings on nervous symptoms and with drawing tendencies; three are handicapped group ratings on nervous symptoms, personal freedom and personal worth. The handicapped group surpasses the normal group on only three of the six items on self adjustment, and two of social adjustment, but makes a slightly better median score in total adjustment.

Table 2 is a comparison of the mean percentile and median percentile ranks of each section and of each component in the two sections of the test. A study of the table shows that there is a slight difference in all mean and median scores. In no instance are the two scores identical but that the differences in the mean percentile scores and median percentile scores of self adjustment, social adjustment, and total adjustment are slight for both groups. In the
### TABLE 2

A COMPARISON OF THE MEAN AND MEDIAN PERCENTILE RANKS OF THE HANDICAPPED AND NORMAL STUDENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>Handicapped Group</th>
<th>Normal Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean Raw Score</td>
<td>Mean Percentile Rank</td>
</tr>
<tr>
<td>Self-adjustment</td>
<td>49.34</td>
<td>47.20</td>
</tr>
<tr>
<td>Self-reliance</td>
<td>7.16</td>
<td>49.01</td>
</tr>
<tr>
<td>Personal worth</td>
<td>8.63</td>
<td>59.05</td>
</tr>
<tr>
<td>Personal freedom</td>
<td>8.11</td>
<td>38.38</td>
</tr>
<tr>
<td>Belonging</td>
<td>9.80</td>
<td>47.99</td>
</tr>
<tr>
<td>Withdrawing tendencies</td>
<td>7.44</td>
<td>46.61</td>
</tr>
<tr>
<td>Nervous symptoms</td>
<td>7.34</td>
<td>34.19</td>
</tr>
<tr>
<td>Social adjustment</td>
<td>57.09</td>
<td>56.50</td>
</tr>
<tr>
<td>Standards</td>
<td>10.06</td>
<td>48.24</td>
</tr>
<tr>
<td>Skills</td>
<td>7.96</td>
<td>44.82</td>
</tr>
<tr>
<td>Anti-social tendencies</td>
<td>9.66</td>
<td>48.72</td>
</tr>
<tr>
<td>Family relations</td>
<td>9.62</td>
<td>54.31</td>
</tr>
<tr>
<td>School relations</td>
<td>9.62</td>
<td>53.03</td>
</tr>
<tr>
<td>Community relations</td>
<td>10.03</td>
<td>45.15</td>
</tr>
<tr>
<td>Total adjustment</td>
<td>107.04</td>
<td>48.90</td>
</tr>
</tbody>
</table>
handicapped group there is a difference in the mean percentile score and median percentile score of .42, in the normal group the difference in these two scores is .16. In social adjustment, the handicapped group shows a much greater difference in mean and median percentile scores, 3.73, while the difference in the two scores for the normal group is only .01. The differences for the scores on total adjustment are 1.63 for the handicapped group and 2.73 for the normal group.

There are no startling differences in the mean raw scores. The handicapped group's mean raw scores exceed those of the normal group in Sections 1 and 2 and in the total by a narrow margin. The mean raw scores on self-adjustment rest on 49.34 for the handicapped students, and on 47.08 for the normal group. The difference is even less for social adjustment, the handicapped group showing a mean raw score of 56.50, and the normal group a mean raw score of 56.09. The total adjustment mean raw score for the handicapped students is 107.04 which exceeds the normal group's mean raw score of 102.94 by 4.10.

Figure 2 shows graphically the comparison of the mean percentile ranks of the handicapped and normal students. All items are found in the percentile intervals of 40 to 50 and 50 to 60 except four, the mean percentile score for the normal group on anti-social tendencies, the mean percentile scores for both groups on nervous symptoms, and the mean percentile score on personal freedom for the handicapped group.
Self-adjustment
Self-reliance
Personal worth
Personal freedom
Belonging feeling
Withdrawing
Nervous symptoms
Social adjustment
Social standards
Social skills
Anti-social tendencies
Family relations
School relations
Community relations
Total adjustment

Percentile 1 10 20 30 40 50 60 70 80 90 99

Handicapped
Normal

Fig. 2.—A comparison of the mean percentile ranks of the handicapped and normal students on each item of the Personality Test.

The results of statistical analysis of the mean raw scores of the two groups of students on the California Personality Test are presented in Table 3. A test of
TABLE 3

RESULTS OF STATISTICAL ANALYSIS OF MEAN RAW SCORES
IN SELF-ADJUSTMENT, SOCIAL ADJUSTMENT, AND
TOTAL ADJUSTMENT AREAS OF CALIFORNIA
PERSONALITY TEST

<table>
<thead>
<tr>
<th>Statistical Data</th>
<th>Self Adjustment</th>
<th>Social Adjustment</th>
<th>Total Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Number Students</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Mean-Raw Score</td>
<td>49.34</td>
<td>47.03</td>
<td>56.50</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>7.8</td>
<td>10.9</td>
<td>14.9</td>
</tr>
<tr>
<td>Total Score</td>
<td>1.5</td>
<td></td>
<td>2.2</td>
</tr>
</tbody>
</table>

*"H" represents handicapped students; "N" represents normal students.*

significance based on the differences in the mean raw scores of the two groups in Section I, self adjustment, gives a T score of 1.5 times the standard error of difference. This ratio is so small that we can reject the hypothesis that the difference is the result of the physical defects of the handicapped groups. For Section II, social adjustment, the test of significance yields a T score of 2.2 and for total adjustment the T score ratio is 2.7 times the standard error of difference. The slightly larger ratio in these two areas is not large enough to justify drawing definite
conclusions, but suggests that compensation for physical
defects may have been a factor in the results.

It is an interesting fact that the results of the
Haggerty-Olson-Wickman Behavior-Rating Schedule are, in the
main, in agreement with the results of the California
Personality Test.

These results are presented in Table 4. Only two sec-
tions of this test were used, Section III wherein the teacher
rates the student on social adjustment and Section IV, wherein
the teacher rates the student on his emotional adjustment.
This test differs from the California Personality Test in
presentation of results, in that the low scores indicate
desirable adjustment, the high scores undesirable adjustment.
Table 4 gives the frequencies of scores in the percentile
intervals for handicapped and normal groups. In Section III
social adjustment, six handicapped students' scores and two
normal students' scores fall in the percentile interval of
0 to 9. In the percentile interval 10 to 19 there are five
handicapped students' scores and four normal students' scores.
The handicapped group have 8 in the percentile interval 20
to 29 while the normal have 7. The percentile range of 0 to
29 may be said to include the extremely well socially adjusted
students. The total for these percentile intervals is 19
for the handicapped group and 13 for the normal group. The
three highest percentile intervals show distribution of the
two groups as follows: For the handicapped groups ten in the
TABLE 4
PERCENTILE SCORE DISTRIBUTION HAGGERTY-OLSON-WICKMAN BEHAVIOR SCHEDULE

<table>
<thead>
<tr>
<th>Percentile Score Intervals</th>
<th>Division III Social</th>
<th>Division IV Emotional</th>
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<tbody>
<tr>
<td></td>
<td>Handicapped Students</td>
<td>Normal Students</td>
</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>Frequency</td>
</tr>
<tr>
<td></td>
<td>Handicapped Students</td>
<td>Normal Students</td>
</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>Frequency</td>
</tr>
<tr>
<td>0 to 9</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>10 to 19</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>20 to 29</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>30 to 39</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>40 to 49</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>50 to 59</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>60 to 69</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>70 to 79</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>80 to 89</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>90 to 99</td>
<td>19</td>
<td>26</td>
</tr>
<tr>
<td>Norm</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Mean Percentile Score</td>
<td>55.36</td>
<td>61.92</td>
</tr>
<tr>
<td>Median Percentile Score</td>
<td>64.00</td>
<td>74.70</td>
</tr>
</tbody>
</table>

interval 70 to 79, fourteen in the interval 80 to 89 and
nineteen in the interval 90 to 99, a total of forty-four
students whose social adjustment is definitely unsatisfactory;
for the normal group seventeen in the percentile group 70 to
79, fifteen in the percentile group 80 to 89, and twenty-seven in the percentile group 90 to 99, a total of fifty-eight socially mal-adjusted students. The mean percentile score for the handicapped group in Section III is 55.36, for the normal group, 69.92. The median percentile score for the handicapped students on this section of the test is 64.00 and for the normal students 74.70. The mean percentile scores show a difference of 6.56 percentile points, the normal students making the less desirable score. The median percentile scores differ by 10.70 percentile points again favoring the handicapped group.

In Section IV, emotional adjustment, six handicapped students' scores fall in the percentile interval 0 to 9, six in the interval 10 to 19, and five in the interval 20 to 29, a total of seventeen handicapped students who may be said to have excellent emotional adjustment. In these same intervals a total of only nine normal students' scores fall, divided thus: one in the interval 0 to 9, four in the interval 10 to 19, and four in the interval 20 to 29. The groups are evenly divided, twenty students from each group, in the percentile interval 90 to 99. The handicapped have fifteen in the interval 30 to 69, and the normal group have eighteen. In the interval 70 to 79 there is a total of twenty-seven scores, sixteen handicapped students and eleven normal students. A total of 100 students, or one half of the total number of students taking the test, were considered seriously emotionally maladjusted by their teachers.
The mean percentile score for the handicapped group on Section IV was 67.06, that of the normal group 59.71, a difference of 7.3 percentile points, the normal group having the more favorable score. The median percentile scores for the handicapped and normal students in Section IV are 70.62 and 68.56, a difference of 2.06 percentile points also favoring the normal students.
CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

The purposes of this study have been:

1. To reveal, by means of comparison, the extent to which physical handicaps prevent children from developing normal happy and socially effective personalities.

2. To test the hypothesis that handicapped children inevitably develop a definite personality pattern which is a direct result of their defects.

3. To interpret rightly the data collected from the group studies in order that plans may be made for the prevention of personality maladjustments in handicapped children, and to assist in formulating a working basis for guidance in personality development, of both handicapped and normal children. The aim of this chapter is to summarize the conclusions that can be drawn from the analysis made, and to offer some recommendations which might be a help to the teachers of the children, and the children themselves.

Conclusions

From the data collected the following conclusions have been drawn:

1. The data collected fail to support the hypothesis that the children having physical defects which place them
in special classes in the public schools are more maladjusted socially or emotionally than normal children attending the same schools.

2. The data collected support the hypothesis that there is no definite personality pattern found in the handicapped group, but rather that personality adjustment varies from child to child and seems to depend more upon the manner in which the individual meets his problems than upon the problems themselves.

3. From this study it is apparent that withdrawing tendencies, nervous symptoms, and anti-social tendencies are prevalent among both handicapped and normal children, and that school relations and family relations leave much to be desired, and that some lack of desirable adjustment is to be found in practically all students.

4. The fact that these tests were given to students scattered over a wide geographical area, and within wide ranges of economic and social backgrounds warrants the conclusion that emotional and social maladjustments are widespread enough to be worthy of serious consideration by parents and by teachers in the schools.

Recommendations

A critical analysis of the data presented in the foregoing chapters warrants the following recommendations:
1. There should be developed in all the people a better understanding of mental hygiene. This objective might be reached through study courses and forums for parents, through clubs and Parent-Teacher groups, and through the continued efforts of the press.

2. There should be developed in parents a knowledge of the fundamental needs of personality, their own needs and their children's. Adult education courses concerned with home and family, sex education, psychology, and sociology would help. Such courses offered in high schools will prepare the parents of the future for their responsibilities.

3. The school system should develop more coordinated programs and procedures for advising and guiding all students.

4. Teachers should be encouraged to study the psychology of personality and the techniques of guidance, and they should be urged to try to understand each child under their care, his personality needs, and his emotional frustrations as well as his educational needs.

5. No teacher should be given so many students to teach or supervise that the children cease to be individuals and blend into an indistinguishable mass of bodies which must be pushed down the assembly line to be made to conform to an ideal of mass production.

6. All teachers should give more attention to the child who holds himself aloof from the group, who is an outcast for
any reason, the child who day dreams and refuses to face reality, the unpopular and unhappy child. Care should be taken to develop in everyone interests and hobbies, and every child should be taught to give and accept friendship and affection.
BIBLIOGRAPHY


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