SOME PERSONALITY TRAITS
OF ATYPICAL CHILDREN

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L.C.D.
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CHAPTER I

INTRODUCTION

Problem children, a type of atypical children, cause everyone around them grief and discomfort. The old philosophy of education taught that these children teased and tormented their playmates, parents, and teachers because they were mean and vicious. The attitude of many parents and teachers was to beat the meanness out of them until they were submissive to the ways of normal folks. According to Gleish, "Some parents insist that children outgrow their early bad habits."¹ These two methods were most commonly used for the curing of these children. What are the results obtained from these methods?

Baker states that, "Behavior problem children must be considered not as children in need of punishment but rather those worthy of our most careful study and best efforts."² Gleish goes on further to say, "This is untrue,"³ that children do not outgrow their early bad habits.

A doctor does not abandon a patient when he becomes physically sick but instead tries to the best of his ability to make a normal individual out of him again. It is then the problem of the teachers, especially, to do all in their power to make a normal individual out of one that does not behave

This study is for the purpose of finding out some of the personality differences between atypical and normal children. The differences between these two classes of children must be known before scientific treatments can be undertaken or the causes of their divergent behavior can be found. The modern trend is away from the older conception of the problem child as mean and vicious. He is considered rather to be an individual who has assumed the wrong set of responses in his striving for recognition from his fellow-men.

The home, church, and school are the three main agencies that wholesomely influence the child. Of these three the school must assume most of the responsibility for the building of a normal individual out of an atypical child. The children have too short a contact with the church and the parents are usually not sufficiently well-informed to know what to do for the treatment of such cases.

The outbursts of the problem child are merely the symptoms of the underlying causes of his misbehavior. A boy does not steal just to steal, but rather does so for some other underlying and fundamental reason. According to Yoder, "The goal of each individual is to reach happiness and security. In order to reach this goal the child must adjust socially." All children do not adjust to society in the same way because of different backgrounds and different environments. Personal factors also enter into the situation. A handsome, skillful athlete gains social and personal recognition by his ability

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in different games and his strong boyish appearance, while on the other hand a puny boy does not gain much attention and must resort to clownish antics to gain the attention he desires.

It is impossible to determine all the factors that make a problem child. Two children in practically identical situations will react differently, one in wholesome and the other in abnormal fashion. The building of a problem child is a gradual process. In the beginning it would be relatively easier to divert him to the normal path than after he has been conditioned in the ways of abnormality. As more and more is discovered regarding the personality differences between problem and normal children, those conditions that develop abnormal children can be detected and corrected early so that children may adjust more adequately to social conditions.

It is the duty of the parents and teachers to do all in their power to keep children from developing maladjustments to their environments. According to Gleich,

Most cases of misbehavior develop because of a neglect of attention to details. The failure to recognize a bad habit or disregard of its beginning; inability to prevent or cope with situations as they arise; the refusal of parents to concede a personality to their offspring; and the ease with which parental promises are made and broken are causes of misbehavior. 5

Another type of atypical child is the extremely shy child. Most uninformed teachers and parents do not consider a quiet child to be maladjusted. Uger states that atypical children as chosen by the teachers in his study are those "..., found either to violate the teacher's sense of morality and her

authority, or else disturb the school and classroom order." The shy child seldom behaves in this fashion and is therefore often considered to be a normal individual by his teachers and parents.

According to studies made by many psychologists and psychiatrists the child that is in need of help is the extremely shy child. The behavior problem child is usually loud and boisterous. If anything goes wrong, he makes a commotion over it, gets it off his mind and promptly forgets about it. On the other hand, if something untoward happens to a shy child, he accepts it without comment. However, it actually does cause a psychological disturbance within him which is not relieved by "psychological catharsis" as in both the normal and the problem child.

The shy child learns by experiences that one way to avoid defeat is not to participate in the activity. He withdraws from the normal activities of this group and spends his time in reading or other asocial activities. As time goes on he uses this procedure more and more to avoid the harsh realities of life and withdraws into himself and relies on daydreams and fancies to satisfy any longings for success. The constant excitation and repression of these feelings inside the individual may at any time break out in a variety of abnormal behavior.

This type of individual should be lead to enter some activity that he can do better than someone else, or, if this is not possible, to take part in some activity in which he can display a certain amount of skill. At each suc-


ccessful attempt in the activity he should be commended and praised, while on the other hand, all failures to come up to the standard must not be overstressed. The teachers of the younger pupil should take particular care that each pupil is given a chance to have a large measure of success in some activity in order that he can develop normally and not grow older in his shy, withdrawing type of behavior. The older the individual the more this type of behavior is ingrained in the behavior patterns of the individual and the harder it is to bring him back again to the normal response level. Koch says, "Since continued failure is the chief cause of their evasion of people, providing them with opportunities for success tends to bring them back into the fold. Long indulgence in unsocial living may, however, permanently sear them." 3

The differences in the personalities of these types of individuals do not spring up overnight, but are rather the accumulations of the effects of innumerable little incidents. As the nature of the differences between typical and atypical children become known, it will be possible for those interested in normal psychological growth to be on the lookout for these little signs of personal maladjustment so that the bad habits can be corrected before they become firmly ingrained into the individual personality.

Patry indicates that the persons that come in contact with the individual determine his personality.

Every child by nature wishes to win social approval and success; and he will if he is adequately understood and treated in a commonsense way. If he later learns to gain social recognition and satisfaction by unconventional means, it indicates only one thing in ninety-nine children out of one hundred. Some one has blundered. 9

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3 Helen L. Koch, "Readjusting the Unsocial Child," The National Elementary Principal, 16:604, 1936.

CHAPTER II

HISTORICAL BACKGROUND

Healy and Bronner, rather than make a brief study of several thousand problem children, chose a representative group of one hundred forty-three for more intensive study. A comprehensive study was made of all the activities of the delinquent child as well as those of his family. A comparison was made between the delinquent and a non-delinquent child in the same family.

These authors found that an individual who does not secure a sufficient number of primary or substitute satisfactions is prone to succumb to an impulse toward delinquency. The delinquent child can not control these tendencies toward delinquency because he has no emotional attachment to anyone who presents a pattern of satisfactory social behavior. The non-delinquent children in almost all cases were discovered to have influential ties to some person, nearly always a parent, whose esteem was desired and obtained only if the child remained non-delinquent.

The parents of practically all the delinquent group were from the lower socio-economic level. In fifty-four per cent of the homes there was real disharmony between the parents and in forty-one per cent disagreement about the discipline of the child. Physically and mentally the delinquent group varied little from the non-delinquent. Their ideas of right and wrong were essen-

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tially the same as a group of normal young people. In about a third of
the cases delinquency represented an unconscious effort to compensate for
feelings of inferiority. In no less than three-fourths of the cases, lack
of proper social adjustment such as youthful thwarting and dissatisfactions
were shown, thus establishing the contention that emotional life plays a
large part in the beginning of delinquency.

The outstanding difference between the two groups, and one which may
be looked upon as a cause of delinquency, was that in every case the de-
linquent experienced strong emotional dissatisfaction while the non-delinquent
did not.

The following facts were the results of their treatment program: First,
the intelligence level of the delinquent made no difference in the response
experienced. Second, the older the delinquent the better the chance for suc-
cessful recovery. Third, the length of the period of delinquency before treat-
ment began had no effect on the outcome. Fourth, foster home placements are
found to be valuable as a treatment for delinquency.

According to Hardy^ in her study of well adjusted and poorly adjusted
elementary school children, what children do after school hours is not an im-
portant conditioning factor in their personal adjustments. The implications
from the findings are that the value of recreations for wholesome personality
may be found in the nature of the child's reaction to the activity. It is
probable that the greatest benefit comes from the inter-relation of various

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2 Martha Crumpton Hardy, "The Out of School Activities of Well Adjusted
and Poorly Adjusted Elementary School Pupils," Journal of Educational Psy-
chology, 26:458-467, 1935.
intrinsic and extrinsic developmental conditions rather than in the presence or absence of certain contacts.

Durea\textsuperscript{3} used test norms of a large number of non-delinquent children as a basis for comparison with test scores made by juvenile delinquents. The two groups were paired according to chronological age. The delinquent group was found to be emotionally retarded as measured by the total scores on the interest attitude tests and by scores on separate tests. The extent of their emotional retardation was found to grow in magnitude as the delinquent children became older. An insignificant relationship was found to exist between emotional age and the degree of delinquent behavior. The distinctive fact of emotional retardation among delinquent children suggests that maturation of emotional behavior is probably of as much significance as intelligence and other variables in a more complete understanding of the personality of the juvenile delinquent.

Douglass and Wind\textsuperscript{4} made a study of the factors causing pupils to drop out of Junior High School in Minneapolis. The two most important factors were retardation behind their normal grade rank and low socio-economic status. Also closely related, but less important, were the mental ability of the pupil and low school marks.

Ansdon\textsuperscript{5} reports the results obtained from using a summer camp as a behavior clinic. One hundred twenty-seven boys from the Detroit Department of Special Education spent three or more weeks at the camp during the summer of


1935. The techniques used were based primarily on the assumption that when the primary "wants" of the individual are satisfied well adjusted behavior results. Direct and indirect counseling was used on different types of cases. Group approval and disapproval were found to be valuable factors in obtaining normal behavior. During the next school year none of the one hundred twenty-seven boys that attended the camp were in trouble. The author believes that from this experiment the field of camping deserves continued study and experimentation as a means of curing behavior problem children.

Brown in her study of ninety-eight problem children found the following significant differences between the problem children and the normal control group. The problem child possessed fewer desirable habit patterns, showed greater lack of self-control, and poorer mental health; he was less adequately adjusted in his personal and social relationships; and he was found to be less ready to confide. The problem child was found to come from a home of lower socio-economic status. The problem child exhibited fewer interests and poorer judgment than the normal child. The problem child was older for his grade placement, was of lower intelligence, but in general was classified as belonging in the lower ranges of average intelligence.

Johnson in his study of the effect of stuttering on the personality finds the following significant facts. The influence of stuttering has been chiefly that of frustration and discouragement. Stuttering limited the possibilities for adaptation to social situations. Of the two reactions rebellion...  


against it took the forms of aloofness, exclusiveness, envy and resentment toward normal speakers, bitterness, despair, and fatalistic attitudes. The other reaction, acceptance, took the forms of rather serene indifference to stuttering, efforts to acquire an education in order to get along more easily in spite of their handicap, preference for vocations requiring little speech, and curtailed social activities. All the individuals strongly desired to be cured of the disability. Fear of social contact was not the cause of stuttering. The fear arose whenever stuttering existed and disappeared whenever the stuttering no longer existed. Stutterers as a group represent relatively normal emotional and social adjustment. Their problems tend to become more extreme with increasing age, as stuttering becomes a greater burden in the face of greater social and vocational responsibilities.

Fisher in her study of three hundred sixty problem and three hundred sixty non-problem school children chosen from the South Orange Maplewood School District arrived at the following conclusions. The non-problem group was consistently favored over the problem group in terms of desirable intellectual traits, in desirable social traits and background, in emotional adjustment, in socio-economic status, and in physical fitness and vigor. The non-problem group participated in a greater number of and more diversified group of extra-curricular activities than did the problem group. The problem group was found to be less popular with the other children than was the normal group.

Snyder's study of eight hundred twenty-nine problem children of the


Jersey City elementary schools indicated the following outstanding differences between the normal and problem groups. The problem group exhibited much poorer department in the school room. The problem group showed less emotional stability than the control group. The problem child was found to be less well adjusted to his family than was the normal child. The problem group was older for its grade placement and was of lower average intelligence than the normal group.

Hidencourt\(^\text{10}\) in a study of thirty withdrawing children as compared with thirty normal children, found that although the percentage of children who came from broken homes was about the same in both groups, the withdrawing group's homes were more often broken by divorce, desertion, or separation. A larger percentage of the withdrawing children had poor health or a history of poor health. In a large number of the homes of the withdrawing children the parents were non-social, neurotic, psychotic, or immoral. Six children of the normal group were said to be very well adjusted to their environment. None of these six came from a home that was broken by divorce, desertion, or separation and only one had bad poor health. The withdrawing children were about equally divided among homes of superior cultural advantages and those of poverty while none of the six very well adjusted normal children came from either extreme. Three times as many withdrawing children as normal children were from two children families and most of them were the older of the two children.

Yourman\(^\text{11}\) found the children designated as problems by their teachers

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to be a dull and backward group and that seventy per cent of them were retarded in grade placement. The problem children were found to be inattentive, indifferent, lazy, overactive and overtalkative, self-assertive, rude, defiant, dishonest, impatient, excitable, negativistic, and moody. The problem children were from homes of lower socio-economic status and with less desirable parent-child relationships. The results of the study tend to show that teachers are making problems out of dull slow pupils. Almost without exception no teacher reports as a problem a child who does not display some aggressive, disturbing sort of behavior in the classroom, and few children are reported as merely shy, unsocial, sensitive, withdrawing nervous, fearful, over-suggestive, or unhappy. A group of mental hygienists, rating behavior on the same scale, scored these traits as grave problems or as making for considerable difficulty.

Lotz\(^{12}\) reversed the usual order and conducted a study on the parents of problem and psychopathic children. One hundred twelve cases were chosen, only those problem children that were normal physically and of average intelligence were selected. About forty per cent of the cases were psychopathic as the child's difficulties could be traced directly to neurotic and diseased heredity. The homes of the majority of the remaining sixty per cent had a major part of the following qualifications. The father and mother were both living, were separated, divorced or constantly quarreled among themselves and with the children. They found fault with the school, city, and their places of employment. The parents generally refused to recognize the right of the school to discipline their children, or that their neighbors had any rights of

property, frequently proceeding to the point of sending the child to steal and receiving property brought by him. In sixty-two out of sixty-four cases studied the child's instability of behavior could be traced to parental maladjustment. Of forty-eight cases of psychopathy forty-seven were traceable directly to parents who were psychologically inadequate.

Laycock\textsuperscript{13} for his study chose fifty-one children with an I.Q. of 110 or more and fifty-one children with an I.Q. below 90, from one grade school of Saskatoon, Saskatchewan. The median ages of the two groups were about the same with that of the inferior group slightly higher. The superior group was rated decidedly higher than the inferior group in general moral standards, such as honesty, trustworthiness, freedom from profanity, smoking, etc. The inferior group was involved more frequently than the superior group in such transgressions against authority as disobedience, impertinence, and resentmentfulness. With respect to violations of school standards such as truancy, tardiness, lack of interest in school work and others, the intellectually inferior group was rated lower than the superior group. Both parents and teachers rated the inferior group to be more unsocial, meddlesome, lacking in group spirit, and to be more frequently in difficulties with other children. On the last division of the study regarding undesirable personality traits, the inferior group rated higher in oversensitiveness, daydreaming, stubbornness, sullenness, aggressiveness, evasive behavior and temper tantrums. The inferior child showed signs of defense mechanisms in swaggering, domination of younger children, conceit, boastfulness and apparent overconfidence.

In Fortenier's study\textsuperscript{14} two hundred thirty-eight children ranging in age from three months to six years were tested in the Pre-School Child Health Clinic at Laramie, Wyoming. One hundred twenty-nine of these cases were found to be lower than normal in mental development. One hundred seventy-two children exhibited at least one behavior problem and of these, seventy cases has improper habits of which the most serious was poor eating habits. Forty-nine cases were checked for forms of misconduct. Serious temper tantrums were indicated in forty-three per cent of the cases, the ages of greatest frequency being from one year and six months to four years and six months. This study is brief, and was not reported for the findings alone, but rather for the purpose of suggesting procedures for the diagnosis of the potential or would-be problem child at the pre-school level.

Eighty-seven boys convicted of theft by the Juvenile Court of Wayne County Detroit were chosen for study by Baker.\textsuperscript{15} They were paired with eighty-seven normal boys chosen from the same age, grade level, nationality, and neighborhood groups. The size of the families of the two groups was approximately the same as were the weekly family incomes, but the homes of the normal group were rated better in appearance. Forty-seven per cent of the homes of the experimental group were broken as compared with twenty-four per cent of the normal group. The parents of the normal group were rated 80 in good traits and 6 in poor traits as against ratings of 57 in good traits and 20 in bad traits for the experimental group. Thirty-nine members of the ex-


perimential group were truant from school as compared with seven of the normal group. In intelligence the experimental group was noticeably lower. The church affiliations and attendance for the two groups was approximately the same. When their teachers were asked to rate the two groups with respect to desirable and undesirable traits the experimental group received forty-four per cent of desirable and fifty-six of undesirable ratings, while the control group received seventy-eight per cent desirable and twenty-two undesirable ratings.

Brown16 made a study of one thousand six hundred sixty-three unselected children from nine to fourteen years of age. No correlation was found between chronological age and neurotic tendency. There was found to be no difference between the mean neurotic scores of the boys and girls. The neurotic score had an insignificant correlation with both mental age and I.Q. Neuroticism does not predominate in any particular social or cultural group. The children of the fourth grade were found to have higher neurotic scores than those of higher grade levels. Children with high neurotic scores show reliable differences from normal children with regard to dreams, home situations, physical symptoms, school adjustment, and general social adaptation.

Bender17 studied four hundred students to determine the relationship between scores on the Allport A-S Reaction Study with certain other physical and personality traits. He found the trait of Ascendancy-Submission to be entirely independent of height and weight. No significant correlation was found between


ascendence—submission and intelligence and scholarship. The only child and the oldest child were found to be slightly above the mean for the group in ascendence. The youngest child or the intermediate child was slightly below the mean for the group in ascendant behavior. A tendency for positive correlation was found between ascendence scores and extroversion scores.

Ackerson 18 compiled the results of material gathered from five thousand children who had had complete psychiatric, psychological, physical, and social examinations at the Illinois Institute for Juvenile Research. Most of the children were below eighteen years of age and still were under the supervision of their parents or guardians. The greater majority were referred by their parents, the school, or because of their neighborhood behavior. Only seventeen per cent of the boys and eleven per cent of the girls had court records. They were therefore classified as potential rather than actual delinquent children. The average number of behavior problems per child increased up to about the age of twelve years, beyond which there was a decrease, followed by a further rise at the seventeen-year level. Among children from thirteen to eighteen years the average number of behavior difficulties increased with the I.Q. level up to about the 70–90 I.Q., beyond which there was a decrease, especially among conduct problems.

According to Baker and Traphagen 19 there are four fundamental differences between behavior-problem children and other types of handicapped chil-


dren. These differences are:

First, they tend to arouse anger and resentment toward their actions in the minds of parents, classmates, playmates, and teachers... It requires great patience and self-control on the part of those dealing with them to keep from reflecting, as in a mirror, the very attitudes and actions which they have manifested...

A second characteristic, which is contrary to a popular but fallacious belief, is that behavior manifestations are rarely deliberate meanness. Whenever a child hurts another, he is often described as doing it to be vicious; but many such acts are done by children who are the victims of emotional tangles and blockings...

A third characteristic is that the child carries over his attitudes, feelings, and emotions from his home to school or from school to home, whereas unfortunately he too often sheds his arithmetic, reading, and spelling as soon as he leaves the school...

The fourth characteristic of extremely aggravated cases is the subtle and misunderstood relationship between causes and behavior manifestations. When a child or adult is suffering from some unusual worry, fear, or shock, he may respond by lying, stealing, truancy, or other antisocial behavior. In making a tentative and informal diagnosis, the teacher or parent attempts to treat these obvious symptoms, whereas they are really only symptoms of deep underlying causes. Naturally the treatment fails, and a further accusation of meanness and antisocial behavior is made. The child develops a vague and indefinite feeling of injustice, of not being understood, of resolving to do even worse instead of better...
CHAPTER XIV

PURPOSE

There are varying statements in the psychological literature regarding the personality differences between typical and atypical children. According to one study the atypical children have lower I.Q.s, lower socio-economic status, exhibit poorer self-control, and poorer social and personal adjustment; other sources reveal that there is little or no difference between the two groups in some of these traits. The following study was planned to further investigate the psychological differences between typical and atypical children to help clarify some of these conflicting results. Specifically the problem has been, first, to determine the personality differences of children considered by their teachers to be extremely shy in relation to a control group considered by their teachers to be normal children; second, to determine the personality differences between a group of atypical children exclusive of the shy children and the normal group as chosen by their teachers; and third, to determine the personality differences between the combined atypical group, inclusive of the extremely shy children, and the normal group.
CHAPTER IV

PROCEDURE

The atypical and normal children for this study were selected from the Topeka High School, Topeka, Kansas, and the Burlingame High School, Burlingame, Kansas. Following is the instructional part of the letter sent to the individual teachers:

Will you list for us the names of your pupils whom you consider to be exhibiting distinct behavior problems? The following will give you some idea as to the type of behavior problem children I would like for you to designate:

1. Please designate the pupils in your classes whom you consider to be problem children—those boys and girls who do not show the proper attitude toward their school work, those who tend generally to fail in their adjustments to the social schoolroom environment, and those who tend to be disciplinary problems.

2. Also designate pupils who show the most pronounced withdrawal (shyness) tendencies. I am making this group a special unit as many persons fail to recognize as problems those children whose behavior is of a withdrawing, evasive sort, even though this group is viewed with concern by mental hygienists.

3. Pair with each problem child a nonproblem child of the same grade placement, sex, and chronological age. This will be my control group. Please be sure that this group is average in every way (notably in intelligence and social characteristics).
TABLE I

PROBLEMS AS DIAGNOSED BY REFERRING TEACHERS

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cases</th>
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<tr>
<td>Behavior problem</td>
<td>48</td>
</tr>
<tr>
<td>Withdrawing</td>
<td>34</td>
</tr>
<tr>
<td>Poor social adjustment</td>
<td>26</td>
</tr>
<tr>
<td>Poor school work</td>
<td>17</td>
</tr>
<tr>
<td>Improper attitude</td>
<td>12</td>
</tr>
<tr>
<td>Sullen and resentful</td>
<td>10</td>
</tr>
<tr>
<td>Nervous</td>
<td>5</td>
</tr>
<tr>
<td>Immature</td>
<td>2</td>
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Total 152 cases

The number of problem children classified by the referring teachers into the several categories of behavior difficulty are listed in Table I.

There were one hundred one atypical children reported as the result of the above letter. Thirty-four of the atypical children were designated as extremely shy and the remaining sixty-seven were classified under one or more of the following groupings: behavior problem, poor social adjustment, bad attitude toward school, bad disposition, and poor school work. The teacher at the same time paired with each atypical pupil a student of the same sex, grade placement, as near as possible the same age, and in the teacher’s judgment normal in every way.

The following group tests were administered to the atypical and normal pupils at the same time; the Schrammel-Bramnan Revision Army Group Examination Alpha, Form B, the J. B. Miller Character Sketches, Form A and B, the A-S Reaction Study by Gordon W. Allport and Floyd H. Allport, the Cowan Adolescent Personality Schedule, the Bernreuter Personality Inventory, and the Test for Developmental Age, Form B 3 by Paul H. Fursey.

The results of the Army Alpha Test were treated in two ways. First,
the average I.Q.'s of the normal and abnormal groups were compared.
Second, the average raw scores were studied irrespective of the ages to see if there was a significant difference between the two groups. The Schrammell-Bramman Revision of the Army Group Examination Alpha is a revision of the original Army Alpha test. The revision is equated item for item with the original and all of the more valid items of the original examination were used. The coefficients of validity between the Schrammell-Bramman Revision and the following tests as compared with the Stanford Revision of the Binet Scale, 1916 Revision, are .91 and as compared with the Otis Group Intelligence Examination, Advanced, Form E, .95. An average coefficient of reliability of .90 was found between the odd and even items of the test for all of the groups for which the test is designated.\(^1\)

The Maller Character Sketches measure the following traits: Habit Pattern, Self-control, Social Adjustment, Personal Adjustment, Mental Health, and Readiness to Confide. The Maller test is in two parts—I and II, each of which consists of one hundred questions. A personal trait is described and the subject is to write \(\textit{S}\) if he is the same as this person or \(\textit{D}\) if different. Corresponding items of Parts I and II describe the same traits, but the direction of the question is reversed. This type of indirect questioning was found to indicate annoyance in a much smaller percentage of the cases studied than did the direct form. The reliability based on the correlation between odd and even items is .95. The correlation between the Character Sketches and the Woodworth-Mathews Questionnaire for three hundred eighty pupils was

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\(^1\) H. E. Schrammell and O. V. Bramman, Manual of Directions Schrammell-Bramman Revision Army Alpha Intelligence Examination, Bureau of Educational Measurements, Kansas State Teachers College of Emporia, Emporia, Kansas, 1935. 8 pp.
.62, and as compared with Thurstone's Personality Schedule for one hundred thirteen college students was .58.2

The Allport A-S Reaction Study is a measure of ascendance and submission in personality traits. This test is divided into two parts, one for women and one for men. The reliability of the Form for Women is .78 and the Form for Men is .74. Concerning their validity, there is a greater question owing to the lack of a suitable criterion for validation. Using ratings, a criterion notably subject to error, various correlations have yielded coefficients ranging from .29 to .79. The ultimate validity of the test will in all probability be established in terms of its practical success in vocational guidance, clinical and personnel work, and other forms of personality study.5

Cowan's Adolescent Personality Schedule includes tests for Fear, Family Emotion, Family Authority, Inferiority, Non-Family Authority, Responsibility, Escapes, Neurotic Symptoms, and Compensation. The Cowan test4 is printed with two columns for each page. To obtain the coefficient of correlation for purposes of computing the reliability of this test the four left-hand columns were counted as against the four right-hand columns. These two sets of scores were correlated by the Pearson "product moment" method. The correlation was .79, When the Spearman "prophecy" formula was applied to this correlation the reliability coefficient was found to be .84. The scores


are found to correlate positively to a high degree with those of the Thurstone Neurotic Inventory.

Bernreuter's Personality Inventory measures the following traits:

Neurotic Tendency, Self Sufficiency, Intro-Extroversion, Dominance-Submission, Confidence in Ones-self (high self-consciousness), and Sociability. The coefficients of reliability were determined by the split half method for each of the six separate tests. The average coefficient was .87 with the highest .92 and the lowest .76. To determine the validity of the test each division of it was compared with a similar, established, standardized test. The coefficients of validity between the test of Neurotic Tendency and Thurstone's Neurotic Inventory was .99, between the Self-Sufficiency and the Bernreuter Self Sufficiency Test was 1.00, between the Intro-Extroversion and the Laird C 2 Introversion Test was .95, between the Dominance-Submission and the Allport Ascendance-Submission Reaction Study was found to be .92 for the men and .99 for the women.5

The Developmental Age test by Furfey is applicable to boys only. Developmental Age is a term introduced by Dr. Furfey and defined as the progressively increasing and non-intellectual maturity of general behavior which shows itself in growing child's play preferences, in his fantasy life, in his choice of books and movies, in his ambitions, and, in general, in his whole behavior type. This test comprising one hundred ninety-six pair of items is divided into six divisions including: Things to Do, Things to Be When You Grow Up, Books to Read, Things to Have, Things to See, Things to Think About. The subject is to choose the one of each pair of items that he prefers. The

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reliability of the test was computed for each age group from eight to eighteen years, eliminating any error due to the effect of chronological age, and the mean coefficient was .91 and the range was from .86 to .96. There is no criterion with which to determine the validity of the test. When correlated with chronological age a coefficient of validity of .82 was obtained showing a wide spread of developmental age in each age group. A correlation of .23 was found between Developmental Age and the results of the Haggerty Delta-2 Group Intelligence Test showing that the Developmental Age is not greatly affected by differences in intelligence.\(^6\)

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CHAPTER V

DISCUSSION OF RESULTS

Table II is the comparison of the results obtained by the shy and normal groups. The first test of Maller's Character Sketches is a measure of the individual's estimate of his own goodness of character. The shy average is 24.88, the normal average is 26.75, and the difference is 1.85. The critical ratio of 2.11 indicates that the members of the normal group tend to rate their characters more highly than does the other group.

The second part of this test again shows the normal group tends to have slightly better self-control and is freer from feelings of conflict than the shy group. The normal average is 25.11, the shy average is 23.47, the difference is 1.64, and the critical ratio is 1.59.

The Maller test on Social Adjustment with a critical ratio of 6.46 shows an outstanding difference between the shy and normal groups. The normal average of 24.31 and shy average of 19.06 is a difference of 5.75. The critical ratio indicates definitely that the normal group is much better adjusted socially.

A very slight difference was found in Personal Adjustment for the two groups. The normal group average of 50.18 and shy group average of 29.88 is a difference of 1.50. The critical ratio of 1.16 indicates that the normal and shy groups have approximately the same feelings of happiness, security and freedom from worry and anxiety.

The next part of the Maller test indicates the mental health of the
### TABLE II

AVERAGE DIFFERENCES BETWEEN THE SCORES OF TYPICAL AND WITHDRAWING CHILDREN ON MALLER'S CHARACTER SKETCHES AND GOWAN'S ADOLESCENT PERSONALITY SCHEDULE

<table>
<thead>
<tr>
<th>Test</th>
<th>Typical Average Scores</th>
<th>Withdrawing Average Scores</th>
<th>Diff. Typical</th>
<th>P. E.</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maller's Character Sketches</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Habit Pattern</td>
<td>26.73 ± .46</td>
<td>24.88 ± .75</td>
<td>1.85</td>
<td>.83</td>
<td>2.11</td>
</tr>
<tr>
<td>2. Self-Control</td>
<td>25.11 ± .48</td>
<td>23.47 ± .91</td>
<td>1.64</td>
<td>1.05</td>
<td>1.59</td>
</tr>
<tr>
<td>4. Personal Adjustment</td>
<td>30.18 ± .56</td>
<td>28.88 ± .98</td>
<td>1.30</td>
<td>1.12</td>
<td>1.18</td>
</tr>
<tr>
<td>5. Mental Health</td>
<td>9.72 ± .54</td>
<td>9.12 ± .71</td>
<td>.60</td>
<td>.79</td>
<td>.76</td>
</tr>
<tr>
<td>6. Readiness to Confide</td>
<td>4.46 ± .14</td>
<td>4.59 ± .24</td>
<td>.13</td>
<td>.23</td>
<td>.47</td>
</tr>
<tr>
<td>Gowen's Adolescent Personality Schedule</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Fear</td>
<td>4.43 ± .18</td>
<td>5.79 ± .46</td>
<td>1.36</td>
<td>.48</td>
<td>2.85</td>
</tr>
<tr>
<td>2. Family Emotion</td>
<td>4.97 ± .25</td>
<td>4.85 ± .32</td>
<td>.12</td>
<td>.41</td>
<td>.23</td>
</tr>
<tr>
<td>3. Family Authority</td>
<td>2.26 ± .16</td>
<td>2.50 ± .22</td>
<td>.24</td>
<td>.27</td>
<td>1.22</td>
</tr>
<tr>
<td>4. Inferiority</td>
<td>6.26 ± .22</td>
<td>7.23 ± .43</td>
<td>.98</td>
<td>.49</td>
<td>2.02</td>
</tr>
<tr>
<td>5. Non-Family Authority</td>
<td>1.50 ± .07</td>
<td>1.44 ± .14</td>
<td>.06</td>
<td>.15</td>
<td>.04</td>
</tr>
<tr>
<td>6. Responsibility</td>
<td>4.89 ± .15</td>
<td>6.05 ± .26</td>
<td>1.16</td>
<td>.30</td>
<td>4.49</td>
</tr>
<tr>
<td>7. Escapes</td>
<td>4.68 ± .18</td>
<td>4.95 ± .29</td>
<td>.27</td>
<td>.34</td>
<td>.16</td>
</tr>
<tr>
<td>9. Compensation</td>
<td>6.07 ± .22</td>
<td>6.00 ± .31</td>
<td>.07</td>
<td>.38</td>
<td>.18</td>
</tr>
</tbody>
</table>

---

Read Table thus: On the first section of Maller's test, the typical group made an average score of 26.73 while the problem group made an average score of 24.88. The probable error of the typical group is ± .46 and for the problem group ± .75. The difference of the averages is 1.85 and the probable error of the difference is .83. The critical ratio of 2.11 is obtained by dividing the differences between the average scores of the two groups compared, by the probable error of the difference; thus, 1.85 divided by .83 equals 2.11. The higher the numerical value of the critical ratio, the greater the probability that the direction of the observed difference will be the same under repeated testing. A critical ratio of 4.00 is, for all practical purposes, an certainty that the observed difference is a true difference.
individual. The score is the number of symptoms the subject does not
ascribe to himself. The normal group average is 9.72, shy average is 9.12,
and the difference is .60. The critical ratio of .76 indicates the two
groups are approximately the same in this regard.

The last section of Maller deals with the subject’s readiness to con-
fide his troubles and problems with his friends. The averages of 4.45, 4.59,
and the difference of .13 give a critical ratio of .47, which indicates the
two groups are not significantly different in this trait.

Brown’s\(^1\) results for the Maller Tests showed the same directional dif-
fferences as the above, but her differences tend to be larger.

The first section of Cowan’s Adolescent Personality Schedule shows
that shy children tend to feel more insecure, unstable, and internally dis-
organized than the normal group. The shy group average is 6.79, normal aver-
age is 4.45, difference is 1.36, and the critical ratio is 2.86.

With averages of 4.97, 4.85, difference of .12, and critical ratio of
.28 there is no difference between the two groups in sibling and parental
strife.

The third section of Cowan’s test is concerning Family Authority, lack
of understanding in the family and the difference in goals of the subject and
those in authority. The normal average of 2.66, shy average of 2.50, and dif-
ference of .16 gives a critical ratio of 1.32. This result, which is the same
as found by Snyder,\(^2\) and also Yourman,\(^3\) indicates that the normal child is

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1 Frances R. Brown, Some of the Psychological Differences of So-Called
Behavior-Problem Children, Unpublished Thesis, Kansas State Teachers College

2 Louise M. Snyder, "The Problem Child in the Jersey City Elementary

3 Julius Yourman, "Children Identified by Their Teachers as Problems,"
Journal of Educational Sociology, 6:357, 1932.
slightly more in accord with his family than the shy subject.

The section on Inferiority shows that the shy child has a considerably greater feeling of inferiority than the average normal child. The shy average is 7.25 and the normal average is 6.25. The difference is .98 and the critical ratio is 2.02.

A critical ratio of .04 indicates that the two groups react much the same in their relationships to Non-Family Authority. The averages are 1.50, 1.44, and the difference is .06.

The Cowan test of Responsibility shows a decided difference between the two groups in emotional immaturity, self-centeredness, and childishness. The normal group average of 4.69 and shy group average of 6.03 give a difference of 1.34. The critical ratio of 4.49 indicates a statistically reliable difference and the larger shy score means the shy group is poorer in emotional development. This is substantiated by the results of the study of Healy and Bronner. 4

The seventh part of the Cowan test is entitled Escapes. A high score indicates the subject is unable to solve his problems and is trying to run away from them. The shy group average is slightly lower than the normal group average. The normal average is 4.68, the shy average is 4.59, and the difference is .09. The critical ratio of .16 shows no difference between the two groups.

The next section of the Cowan Schedule deals with Neurotic Symptoms. A high score indicates frustration of some fundamental need. Averages of

FIGURE 1. COWAN ADOLESCENT PERSONALITY SCHEDULE (PROFILE SHEET)

Explanatory Note: On the horizontal axis are plotted the nine separate tests of the Cowan Adolescent Personality Schedule. On the vertical axis is plotted the average number of maladjusted responses that were made to these individual tests. The higher the group average above the norm the more maladjusted is the group.
7.23 and 3.26 with a difference of .55 give a critical ratio of .56, which indicates the two groups are approximately alike in this respect.

The last section of the Cowan test deals with Compensation and shows the shy child to be as free from social maladjustment as the average normal child. The normal group average is 6.07, the shy group average is 6.00 and the difference is .07. The critical ratio of .18 shows the shy group to be no more socially maladjusted than the normal group.

Table III is a continued comparison of the results obtained by the shy and normal groups. The first section of Bernreuter's Personality Inventory shows an average score of -46.35 for the normal group and an average of -7.35 for the shy group. The difference of 40.99 points and the critical ratio of 3.32 shows the normals to be decidedly better balanced emotionally than the shy children. Durea\textsuperscript{5} also found his experimental group to be less well adjusted emotionally than a comparable control group.

The section on Self-Sufficiency shows very little difference between the two groups. The normal average is 5.42, the shy average is -2.76, and the critical ratio is .36.

The third Bernreuter test on Introversion-Extroversion shows the shy group to be considerably more introverted than the normals. The shy average of -6.94 and normal average of -27.82 show a difference of 20.88, and the critical ratio is 2.97.

The next part of the test reveals that the shy group is decidedly more submissive than the normal group. The shy group average is -3.32 and the normal group average is 35.77 which gives a difference of 37.09. The critical

### TABLE III

**AVERAGE DIFFERENCES BETWEEN THE TYPICAL AND THE WITHDRAWING CHILDREN ON A NUMBER OF VARIABLES**

<table>
<thead>
<tr>
<th>Test</th>
<th>Typical Average Scores</th>
<th>Withdrawing Average Scores</th>
<th>Diff. Typical - Withdrawing</th>
<th>P.E.</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bernreuter's Personality Inventory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Neurotic Tendency</td>
<td>-43.35 ± 4.82</td>
<td>-7.35 ± 9.60</td>
<td>40.99</td>
<td>10.74</td>
<td>3.82</td>
</tr>
<tr>
<td>2. Self-Sufficiency</td>
<td>5.42 ± 3.02</td>
<td>-2.76 ± 5.52</td>
<td>6.18</td>
<td>6.29</td>
<td>0.96</td>
</tr>
<tr>
<td>3. Intro-Extroversion</td>
<td>-27.32 ± 3.22</td>
<td>-6.94 ± 6.25</td>
<td>20.88</td>
<td>7.03</td>
<td>2.97</td>
</tr>
<tr>
<td>4. Dominance-Submission</td>
<td>33.77 ± 5.55</td>
<td>-3.32 ± 6.85</td>
<td>37.09</td>
<td>7.70</td>
<td>4.82</td>
</tr>
<tr>
<td>5. Confidence in Oneself</td>
<td>-12.88 ± 5.66</td>
<td>41.15 ± 9.78</td>
<td>54.03</td>
<td>11.29</td>
<td>4.78</td>
</tr>
<tr>
<td>6. Sociability</td>
<td>-29.96 ± 3.76</td>
<td>-22.21 ± 6.36</td>
<td>7.75</td>
<td>7.45</td>
<td>1.04</td>
</tr>
<tr>
<td>Fursey's Developmental Age</td>
<td>99.44 ± .80</td>
<td>88.40 ± 2.10</td>
<td>11.04</td>
<td>2.24</td>
<td>4.95</td>
</tr>
<tr>
<td>Allport's A-S Reaction Study</td>
<td>.15 ± 1.18</td>
<td>-7.62 ± 1.51</td>
<td>7.77</td>
<td>1.91</td>
<td>4.06</td>
</tr>
<tr>
<td>I. Q.</td>
<td>105.78 ± .90</td>
<td>105.18 ± 1.00</td>
<td>3.60</td>
<td>1.16</td>
<td>3.11</td>
</tr>
<tr>
<td>Intelligence Test Score</td>
<td>162.62 ± 1.55</td>
<td>154.41 ± 2.44</td>
<td>8.21</td>
<td>2.78</td>
<td>2.96</td>
</tr>
<tr>
<td>Chronological Age (Months)</td>
<td>198.55 ± .37</td>
<td>207.06 ± 1.51</td>
<td>8.51</td>
<td>1.57</td>
<td>5.39</td>
</tr>
<tr>
<td>Weight</td>
<td>134.55 ± 1.62</td>
<td>122.88 ± 2.39</td>
<td>11.67</td>
<td>2.85</td>
<td>4.12</td>
</tr>
<tr>
<td>Height</td>
<td>67.05 ± .26</td>
<td>65.76 ± .46</td>
<td>1.29</td>
<td>.52</td>
<td>2.45</td>
</tr>
</tbody>
</table>

*Read Table III same as Table II.*
ratio is 4.62.

The results of the fifth section of Bernreuter's test shows the shy group to be poorly adjusted to their environment and self-conscious to a hampering degree. The normal group average is -12.88 as compared with an average of 41.15 for the shy group. The difference of 54.03 is a statistically reliable difference in the light of the critical ratio of 4.78. This is consistent with the findings of Fisher.6

The last section of this test is a measure of Sociability. The normal average of -29.96 and shy average of -32.21 is a difference of 7.75. The critical ratio of 1.04 proves that the shy children are very slightly lower in sociability and tend to be slightly more solitary and independent.

The Furley Developmental Age test was given to the five shy and thirty-nine normal boys that were sixteen years of age or younger. The normal average of 99.44, shy average of 88.40 give a difference of 11.04. Even with the small number of shy subjects the critical ratio of 4.95 shows statistically an absolute difference. This difference indicates that the shy child is retarded in the non-intellectual maturity of his behavior, and possesses an unusually large number of childish emotional patterns.

The Allport A-8 Reaction Study is a measurement of the factor of Ascendance-Submission in personal behavior. The shy group average of -7.62 and normal group average of .15 is a difference of 7.77. The critical ratio of 4.06 indicates the shy group is decidedly more submissive than the normal group. From the results of the Bernreuter B3-I and B4-D sections, and the A-8 Reaction Study the shy group was found to be more introverted and sub-

missive than the normal group.

The Schrammel-Braman Revision Army Group Examination Alpha shows a difference of 5.60 points in I.Q. with the normal average of 108.78 and sky average of 106.18. The critical ratio of 3.11 shows the difference is almost decisive. Treating the same test by the raw score, disregarding the ages of the subjects, the normal average is 162.62, the sky average is 154.41, the difference is 8.21, and the critical ratio is 2.95. The difference in the two groups is slightly more when the factor of age is considered.

With respect to age, a comparison of the normal average of 106.59 months and the sky group average of 207.06 months shows the average sky pupil to be 8.47 months older than the normal pupil. The sky child on the average weighs 122.88 pounds and the normal child 154.55 pounds. The normal child is distinctly superior to the sky child in weight as well as being decidedly younger in chronological age. The average normal child is 11.87 pounds heavier than the sky child. The difference of 1.29 inches between the heights of the two groups takes on some significance in the light of the critical ratio of 2.45.

Table IV contains the results obtained by the atypical behavior group exclusive of the sky group. The first part of Haller's Character Sketches reveals the individuals estimate concerning his own goodness of character. The normal average is 26.75, atypical average is 25.01, and the difference is 1.72. The critical ratio of 2.25, although it is not statistically reliable, shows considerable difference and indicates that in general the normal group believe they have better characters.
### TABLE IV

**AVERAGE DIFFERENCES BETWEEN THE TYPICAL AND ATYPICAL BEHAVIOR GROUPS EXCLUSIVE OF WITHDRAWING CHILDREN ON MALLER'S CHARACTER SKETCHES AND COWAN'S ADOLESCENT PERSONALITY SCHEDULE**

<table>
<thead>
<tr>
<th>Test</th>
<th>Typical Average Scores</th>
<th>Atypical Average Scores</th>
<th>Diff. Typical-Atypical</th>
<th>P.E. Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maller's Character Sketches</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Habit Pattern</td>
<td>26.73 ± .46</td>
<td>25.01 ± .61</td>
<td>1.72</td>
<td>.78</td>
</tr>
<tr>
<td>2. Self-Control</td>
<td>25.11 ± .48</td>
<td>25.25 ± .62</td>
<td>.14</td>
<td>.79</td>
</tr>
<tr>
<td>3. Social Adjustment</td>
<td>24.81 ± .43</td>
<td>23.82 ± .63</td>
<td>.99</td>
<td>.80</td>
</tr>
<tr>
<td>4. Personal Adjustment</td>
<td>30.10 ± .56</td>
<td>31.51 ± .65</td>
<td>1.15</td>
<td>.86</td>
</tr>
<tr>
<td>5. Mental Health</td>
<td>9.72 ± .34</td>
<td>9.94 ± .49</td>
<td>.22</td>
<td>.60</td>
</tr>
<tr>
<td>6. Readiness to Confide</td>
<td>4.46 ± .14</td>
<td>4.27 ± .16</td>
<td>.19</td>
<td>.21</td>
</tr>
<tr>
<td>Cowan's Adolescent Personality Schedule</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Fear</td>
<td>4.43 ± .18</td>
<td>4.00 ± .29</td>
<td>.43</td>
<td>.34</td>
</tr>
<tr>
<td>2. Family Emotion</td>
<td>4.97 ± .26</td>
<td>5.16 ± .22</td>
<td>.19</td>
<td>.54</td>
</tr>
<tr>
<td>3. Family Authority</td>
<td>2.86 ± .16</td>
<td>3.40 ± .21</td>
<td>.54</td>
<td>.28</td>
</tr>
<tr>
<td>4. Inferiority</td>
<td>6.25 ± .22</td>
<td>6.03 ± .32</td>
<td>.22</td>
<td>.39</td>
</tr>
<tr>
<td>5. Non-Family Authority</td>
<td>1.50 ± .07</td>
<td>1.94 ± .12</td>
<td>.44</td>
<td>.14</td>
</tr>
<tr>
<td>6. Responsibility</td>
<td>4.59 ± .15</td>
<td>4.84 ± .20</td>
<td>.25</td>
<td>.24</td>
</tr>
<tr>
<td>7. Escapes</td>
<td>4.68 ± .18</td>
<td>4.21 ± .19</td>
<td>.47</td>
<td>.26</td>
</tr>
<tr>
<td>8. Neurotic Symptoms</td>
<td>7.95 ± .26</td>
<td>7.51 ± .36</td>
<td>.42</td>
<td>.24</td>
</tr>
<tr>
<td>9. Compensation</td>
<td>6.97 ± .22</td>
<td>6.27 ± .24</td>
<td>.20</td>
<td>.33</td>
</tr>
</tbody>
</table>

Read Table IV as Table II.
The second section of Naller shows no difference between the two groups in self-control, integration of interests, individual ability to do what he wishes to do, and absence of feelings of conflict. The averages are 23.11, 25.25, the difference .14, and the critical ratio .18.

The next section of the Naller test deals with Social Adjustment. Although the critical ratio of 1.35 is not reliable, it shows some tendency towards a difference between the two groups. The normal average of 24.81 indicates they are slightly better adjusted socially than the atypical group with its average of 23.82. The difference is .99.

The degree of Personal Adjustment is shown in the next division of the Naller test. The atypical average of 31.31, normal average of 30.13, and difference of 1.18 gives a critical ratio of 1.32. This would indicate a slight difference between the two groups with the atypical group happier and freer from worries.

The next section of Naller shows no difference between the two groups in Mental Health and symptoms of psychosis and neurotic tendencies. The averages are 9.72 and 9.64 with a difference between them of .08 and a critical ratio of .36.

The last Naller test is a measurement of readiness to confide in other people. The normal group average of 4.46 and atypical average of 4.27 is a difference of .19. The critical ratio of .88 does not indicate a measurable difference.

Naller's first section agrees with Brown's study, but the remainder shows a much smaller difference than she obtained.\footnote{Frances R. Brown, Some of the Psychological Differences of So-called Behavior-Problem Children. Unpublished Master's Thesis, Kansas State Teachers College of Emporia, Emporia, Kansas, 1926, pp. 25-28.}
The first test of Cowan's Adolescent Personality Schedule shows a
critical ratio of 1.24 which indicates a slight difference in the two
groups. The normal group average of 4.43 and the atypical average of 4.00
shows a difference of .43. This indicates that the atypical group has
slightly less intense feelings of insecurity, instability, and internal
disorganization.

The next section of Cowan reveals no difference between the two groups
in family emotion, sibling and parental strife, unresolved tension connected
with death of a parent or in the feeling of being an unloved child. The
averages are 4.97 and 5.16 respectively with a difference of .19 and a criti-
cal ratio of .37.

The third Cowan test concerns family authority. The higher the score
the greater the lack of understanding in the family and the more pronounced
the indication that the subject has different goals from those in authority.
The atypical average of 3.40 is .54 points higher than the normal average
of 2.86. The critical ratio of 3.10 indicates a tendency towards a difference
between the two groups as found by Snyder and also by Yourman.

The Cowan test of Inferiority shows no appreciable difference between
the two groups in social integration, self-centeredness, and social insecurity.
The averages are 6.23 and 6.93 respectively and the difference is .22. The
critical ratio is .58.

The next Cowan test deals with Non-Family Authority. The higher the
score the more the individual is out of harmony with the out-of-home sources

---

8 Louise M. Snyder, "The Problem Child in the Jersey City Elementary

9 Julius Yourman, "Children Identified by Their Teachers as Problems,"
of authority. The average of the atypical or behavior problem group is higher with 1.94. The normal average is 1.50 and the difference is .44. The critical ratio of 3.18 indicates a probable difference in the two groups. This is in harmony with the results found by Laycock.10

The sixth Cowan test is a measure of the Responsibility of the individual. The averages of 4.99 and 4.34, and the difference of .65, giving a critical ratio of .63, indicate no difference in the groups on emotional immaturity, self-centeredness, and childishness.

The next section of Cowan deals with the problem of Escapes. A high score indicates the group is unable to solve its problems and is trying to run away from them. The normal average of 4.86 compared with the atypical average of 4.21 gives a difference of .67 and a critical ratio of 1.61, which indicates the normal group is slightly less able to solve its problems than the atypical group.

The eighth Cowan test indicates the atypical group show very slightly less neurotic symptoms than the normal group. The critical ratio of .90 is obtained from the normal average of 7.23, atypical average of 7.51 and a difference between the two of .42.

The last Cowan test on Compensation shows the atypical behavior group to be no more socially maladjusted than the normal group. The critical ratio of .61 shows no difference between the two groups. The normal average is 6.07, the atypical average is 6.27, and the difference is .20.

Table V continues the comparison of the same typical and atypical be-

### TABLE V

**AVERAGE DIFFERENCES BETWEEN THE TYPICAL AND ATYPICAL GROUPS**

**EXCLUSIVE OF WITHDRAWING CHILDREN ON A NUMBER OF VARIABLES**

<table>
<thead>
<tr>
<th>Test</th>
<th>Typical Average Scores</th>
<th>Atypical Average Scores</th>
<th>Diff. Typical - Atypical</th>
<th>P. E. Diff.</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bernreuter's Personality Inventory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Self-Sufficiency</td>
<td>9.42 ± 5.52</td>
<td>13.51 ± 4.46</td>
<td>4.09</td>
<td>5.53</td>
<td>1.64</td>
</tr>
<tr>
<td>3. Intro-Extroversion</td>
<td>-27.22 ± 5.22</td>
<td>-27.60 ± 4.45</td>
<td>.38</td>
<td>5.43</td>
<td>.04</td>
</tr>
<tr>
<td>4. Dominance-Submission</td>
<td>33.77 ± 5.53</td>
<td>40.16 ± 5.19</td>
<td>6.41</td>
<td>5.47</td>
<td>1.17</td>
</tr>
<tr>
<td>6. Sociability</td>
<td>-29.96 ± 3.76</td>
<td>-19.52 ± 3.87</td>
<td>10.44</td>
<td>5.39</td>
<td>1.93</td>
</tr>
<tr>
<td>Furfey's Developmental Age</td>
<td>99.44 ± 5.80</td>
<td>96.50 ± 1.53</td>
<td>2.94</td>
<td>1.55</td>
<td>1.69</td>
</tr>
<tr>
<td>Allport's A-S Reaction Study</td>
<td>1.15 ± 1.18</td>
<td>-5.03 ± 1.38</td>
<td>6.18</td>
<td>1.81</td>
<td>2.36</td>
</tr>
<tr>
<td>I. Q.</td>
<td>106.78 ± 6.00</td>
<td>101.10 ± 1.03</td>
<td>5.68</td>
<td>1.19</td>
<td>6.45</td>
</tr>
<tr>
<td>Intelligence Test Score</td>
<td>162.62 ± 1.35</td>
<td>145.25 ± 2.21</td>
<td>17.37</td>
<td>2.77</td>
<td>6.99</td>
</tr>
<tr>
<td>Chronological Age (Months)</td>
<td>198.59 ± 1.37</td>
<td>203.36 ± 1.44</td>
<td>4.76</td>
<td>1.60</td>
<td>2.83</td>
</tr>
<tr>
<td>Weight</td>
<td>134.55 ± 1.52</td>
<td>138.62 ± 2.20</td>
<td>4.07</td>
<td>2.67</td>
<td>1.59</td>
</tr>
<tr>
<td>Height</td>
<td>67.05 ± 9.56</td>
<td>67.15 ± 1.55</td>
<td>.10</td>
<td>.42</td>
<td>.24</td>
</tr>
</tbody>
</table>

Read Table V as Table II.
behavior groups. The first section of Bernreuter's Personality Inventory indicates no particular difference between the atypical and normal group in neurotic tendencies. A critical ratio of 4.47 is obtained from the atypical average of 33.60 and normal average of 45.35. The difference is 4.25 points.

The results of the Bernreuter's B2-3 test indicate that the atypical group tends towards a lesser degree of self-sufficiency than the normal group. The atypical average is 13.51 and the normal average is 5.42. The difference of 8.09 and critical ratio of 1.84 shows the atypical group to have considerably more preference for being alone and tending more to ignore the advice of others.

The next section of Bernreuter shows no difference between the two groups in Introversion-Extroversion. The averages are -27.82 and -27.60 and the difference is .22. The critical ratio is .04.

The Bernreuter test for Dominance-Submission yields a critical ratio of 1.17 which indicates the atypical group is slightly more dominating than the normal group. The atypical average of 40.16 and normal average of 33.77 is a difference of 6.41.

Bernreuter's F1-C is a measurement of Confidence in Oneself. The atypical average of -24.53, normal average of -12.86, and difference of 11.76 give a critical ratio of 1.24; although this is not a statistically reliable difference, it shows that the atypical students are slightly more self-confident and less self-conscious.

The last section of Bernreuter with a critical ratio of 1.93 shows the greatest difference between the two groups compared than on any other
section, although the difference is not statistically reliable. The normal average is -23.96, the atypical average is -19.62, and the difference is 10.44. The normal group is more sociable and gregarious than the atypical group.

In the Developmental Age Test by Furfey the average normal developmental age quotient is 99.44 as compared with the atypical average of 96.50. The critical ratio of 1.88 indicates the normal group to be tending towards a higher developmental age than the atypical group.

The Ascendance-Submission test by the Allports in this division indicates that the atypical group is more submissive than the normal group. The atypical average is -5.03, the normal average is -1.15, the difference is 5.16 and the critical ratio is 2.86. This tendency towards submission is contrary to the personality trait of self-assertion which is usually believed to be characteristic of the problem child.

The average I.Q. for the normal group is 108.78, the atypical average is 101.10, which yields a difference of 7.68. The critical ratio of 6.45 is statistically reliable and indicates a significant difference. This is substantiated by Baker, Decker and Hill and also Brown.11

The Mental Test Score is the treatment of the raw scores of the same test. The normal average of 162.62, atypical average of 145.25, difference of 19.37, and critical ratio of 6.99 indicates, as would be expected, a difference between the two groups.

Although normal children of approximately the same age were paired with the atypical children, the atypical average group age of 203.36 months


was 4.76 months higher than the normal group average of 198.99 months. Although the critical ratio of 2.84 is not statistically reliable, it indicates a strong tendency in the direction of a difference between the two groups compared in this respect.

The average weight of the atypical group is 4.27 pounds higher than the normal group. The atypical group average weight is 138.92 pounds, the normal group average is 134.55 pounds. The critical ratio of 1.59 indicates a tendency towards a difference. This superiority of the atypical group is expected because of its greater chronological age.

Averages of 67.06 inches and 67.15 inches with a difference of .10 and a critical ratio of .24 indicates no difference in the statures of the two groups. These results are in accord with the age, height, and weight correlations reported by Baldwin.13 "The relations between the yearly measurements of growth in height and weight . . . reaches a maximum correlation of .877 at fourteen years. The coefficient is at the minimum .688 at sixteen years and is .680 at seventeen years." Due to the high correlation between body height and weight, small differences between the two groups on one variable should be repeated in the other one as occurred in this study. By way of contrast it will be recalled that the comparison of the withdrawing and typical groups showed the typical group to exceed the withdrawing group in height and weight even though the withdrawing group was older by 3.47 months.

Table VI contains the results obtained when the atypical group, inclusive of the shy children, is compared with the normal group.

13 Bird T. Baldwin, The Physical Growth of Children from Birth to Maturity. Iowa City: Published by the University, 1921, p. 118.
<table>
<thead>
<tr>
<th>Test</th>
<th>Typical Average Scores</th>
<th>Atypical Average Scores</th>
<th>Diff. Typical-Atypical</th>
<th>P. E. Diff.</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maller's Character Sketches</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Habit Pattern</td>
<td>26.73 ± .46</td>
<td>24.97 ± .48</td>
<td>1.76</td>
<td>.66</td>
<td>2.87</td>
</tr>
<tr>
<td>2. Self-Control</td>
<td>25.11 ± .49</td>
<td>24.65 ± .51</td>
<td>.46</td>
<td>.71</td>
<td>.65</td>
</tr>
<tr>
<td>3. Social Adjustment</td>
<td>24.81 ± .43</td>
<td>22.52 ± .54</td>
<td>2.29</td>
<td>.69</td>
<td>3.61</td>
</tr>
<tr>
<td>4. Personal Adjustment</td>
<td>30.18 ± .56</td>
<td>30.41 ± .56</td>
<td>.23</td>
<td>.79</td>
<td>.29</td>
</tr>
<tr>
<td>5. Mental Health</td>
<td>9.72 ± .54</td>
<td>9.66 ± .40</td>
<td>.06</td>
<td>.53</td>
<td>.11</td>
</tr>
<tr>
<td>6. Readiness to Confide</td>
<td>4.45 ± .14</td>
<td>4.33 ± .13</td>
<td>.08</td>
<td>.20</td>
<td>.40</td>
</tr>
<tr>
<td><strong>Cowan's Adolescent Personality Schedule</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Fear</td>
<td>4.45 ± .18</td>
<td>4.60 ± .24</td>
<td>.15</td>
<td>.30</td>
<td>.59</td>
</tr>
<tr>
<td>2. Family Emotion</td>
<td>4.37 ± .22</td>
<td>5.06 ± .19</td>
<td>.69</td>
<td>.52</td>
<td>.23</td>
</tr>
<tr>
<td>3. Family Authority</td>
<td>2.56 ± .16</td>
<td>3.10 ± .18</td>
<td>.24</td>
<td>.22</td>
<td>1.10</td>
</tr>
<tr>
<td>4. Inferiority</td>
<td>6.25 ± .22</td>
<td>6.44 ± .26</td>
<td>.19</td>
<td>.34</td>
<td>.55</td>
</tr>
<tr>
<td>5. Non-Family Authority</td>
<td>1.50 ± .07</td>
<td>1.77 ± .09</td>
<td>.27</td>
<td>.12</td>
<td>2.30</td>
</tr>
<tr>
<td>6. Responsibility</td>
<td>4.69 ± .15</td>
<td>5.24 ± .16</td>
<td>.55</td>
<td>.22</td>
<td>2.50</td>
</tr>
<tr>
<td>7. Escapes</td>
<td>4.68 ± .16</td>
<td>4.34 ± .16</td>
<td>.34</td>
<td>.24</td>
<td>1.43</td>
</tr>
<tr>
<td>8. Neurotic Symptoms</td>
<td>7.93 ± .26</td>
<td>7.78 ± .29</td>
<td>.17</td>
<td>.39</td>
<td>.43</td>
</tr>
<tr>
<td>9. Compensation</td>
<td>6.07 ± .22</td>
<td>6.18 ± .19</td>
<td>.11</td>
<td>.29</td>
<td>.37</td>
</tr>
</tbody>
</table>
On only two parts of Character Sketches by Maller are the differences between the two groups great enough to warrant mention. These are the sections on Habit Pattern and Social Adjustment. A critical ratio of 2.67 indicates the normal group tends to assign better characters to themselves than does the atypical group on the Habit Pattern section. The difference between the two groups is 1.76 with the normal group average 26.75 and the atypical group average 24.97.

The second Maller test to show differences of appreciable degree is the measure of the Social Adjustment of the individual. Those scoring high are better adjusted in matters of social contact and its enjoyment. The critical ratio of 3.61 indicates the normal group is much freer from tendencies of withdrawal and isolation than the atypical group. The normal average is 24.81, atypical average is 22.32, and the difference is 2.49.

Only two sections of the Cowan Scale show large enough differences to warrant discussion. These are sections five and six concerning reactions to non-family authority and to responsibility.

The fifth Cowan test is a measure of Non-Family Authority. The higher the score the greater becomes the lack of harmony between the individual and the out-of-the-family authorities. The critical ratio of 2.50 reveals a trend towards a difference between the two groups. The normal group with an average of 1.50 is more in harmony with these authorities than the atypical group whose average is 1.77. The difference is .27.

The critical ratio of 2.60 in the next Cowan Test on Responsibility shows the normal group to be more emotionally mature and less self-centered and childish than the atypical group. The normal average is 4.69, the atypical average is 5.24 and the difference is .55. This difference was also
noted by Kealy and Bronner. 14

The scores of the atypical group were found to indicate somewhat more maladjustment than those of the typical group on all of the Bernreuter tests. The critical ratios however are not indicative of reliable differences on any of the six sections of the test. However, they are indicative of a trend in the data. The normal group tends toward being more sociable, possessing more confidence in itself, being less submissive, less introverted, more self-sufficient and less neurotic, than the atypical group.

The Developmental Age Test by Fursey was given to thirty-three atypical boys and thirty-nine normal boys sixteen years of age or under. The critical ratio of 2.66 indicates considerable difference between the two groups. The normal developmental age quotient average of 99.44 is 4.17 points higher than the atypical average of 95.27. This shows the normal group to be nearer to maturity in non-intellectual general behavior than the atypical group.

In the Ascendance-Submission test by Allport and Allport, the normal average of .15, the atypical average of -5.90, the difference of 6.05, and the critical ratio of 3.80 show the atypical group to be decidedly more submissive than the control group.

The average I.Q., as determined by the Schramm-Branman Revision, with a critical ratio of 6.42, shows the normal group to possess a higher degree of intelligence than the atypical group. The normal average is 108.78, the atypical average is 102.48, and the difference is 6.30. The average of

# Table VII

AVERAGE DIFFERENCES BETWEEN THE TYPICAL AND ATYPICAL BEHAVIOR GROUPS INCLUSIVE OF THE WITHDRAWING CHILDREN ON A NUMBER OF VARIABLES

<table>
<thead>
<tr>
<th>Test</th>
<th>Typical Average Scores</th>
<th>Atypical Average Scores</th>
<th>Diff.</th>
<th>P. E.</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bernreuter's Personality Inventory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Neurotic Tendency</td>
<td>-48.35 ± 4.82</td>
<td>-37.37 ± 5.73</td>
<td>10.98</td>
<td>7.48</td>
<td>1.47</td>
</tr>
<tr>
<td>2. Self-Sufficiency</td>
<td>3.42 ± 3.02</td>
<td>7.90 ± 3.02</td>
<td>4.48</td>
<td>4.04</td>
<td>.97</td>
</tr>
<tr>
<td>3. Intro-Extroversion</td>
<td>-27.92 ± 3.22</td>
<td>-20.64 ± 3.70</td>
<td>7.18</td>
<td>5.19</td>
<td>1.38</td>
</tr>
<tr>
<td>4. Dominance-Submission</td>
<td>33.77 ± 3.53</td>
<td>25.63 ± 4.07</td>
<td>8.24</td>
<td>5.38</td>
<td>1.55</td>
</tr>
<tr>
<td>5. Confidence in Oneself</td>
<td>-12.88 ± 5.65</td>
<td>-2.48 ± 6.56</td>
<td>10.40</td>
<td>8.50</td>
<td>1.22</td>
</tr>
<tr>
<td>6. Sociability</td>
<td>-29.96 ± 3.76</td>
<td>-20.43 ± 3.34</td>
<td>9.53</td>
<td>5.02</td>
<td>1.90</td>
</tr>
<tr>
<td>Furfey's Developmental Age</td>
<td>99.44 ± .30</td>
<td>95.27 ± 1.22</td>
<td>4.17</td>
<td>1.46</td>
<td>2.85</td>
</tr>
<tr>
<td>Allport's A-S Reaction Study</td>
<td>.15 ± 1.18</td>
<td>-5.90 ± 1.07</td>
<td>6.05</td>
<td>1.59</td>
<td>3.80</td>
</tr>
<tr>
<td>1. Q.</td>
<td>108.78 ± .60</td>
<td>102.48 ± .77</td>
<td>6.30</td>
<td>.98</td>
<td>6.43</td>
</tr>
<tr>
<td>Intelligence Test Score</td>
<td>162.62 ± 1.55</td>
<td>147.01 ± 1.61</td>
<td>15.61</td>
<td>2.25</td>
<td>6.94</td>
</tr>
<tr>
<td>Chronological Age (Months)</td>
<td>198.59 ± .37</td>
<td>204.50 ± 1.17</td>
<td>5.91</td>
<td>1.46</td>
<td>4.05</td>
</tr>
<tr>
<td>Weight</td>
<td>134.55 ± 1.52</td>
<td>133.46 ± 1.69</td>
<td>1.09</td>
<td>2.27</td>
<td>.43</td>
</tr>
<tr>
<td>Height</td>
<td>67.06 ± .26</td>
<td>66.68 ± .27</td>
<td>.37</td>
<td>.37</td>
<td>.97</td>
</tr>
</tbody>
</table>

Read Table VII as Table II.
the Intelligence Test raw scores shows the same directional difference with a slightly higher critical ratio of 6.94. The normal average is 182.62, the atypical average is 147.01, and the difference is 15.61.

The average age of the normal group is 188.59 months and that of the atypical group 204.59. The difference of 5.91 months and the critical ratio of 4.26 shows a statistically reliable difference between the average ages of the two groups. With critical ratios of .97 and .48 there is practically no stable difference between the two groups in height nor weight.
CHAPTER VI

CONCLUSIONS

The following tests,—Bemrouter's Personality Inventory, Maller's Character Sketches, Cowan's Adolescent Personality Schedule, the Allport Ascendancy-Submission Scale, Ficrey's Developmental Age and the Schrammel-Braman Revision of the Army Group Examination, Alpha,—were given to the aforementioned typical and atypical groups of high school children.

1. In the comparison of the performances of the groups of shy (withdrawing) children and normal children the following results are secured. The statistically reliable differences found, as indicated by a critical ratio of four or more, between these two groups are as follows: the shy child is not as well adjusted socially as the normal child; the shy child is more emotionally immature, self-centered, and childish in his reactions than the normal child; the shy child is more submissive; he is more self-conscious and possesses more feelings of inferiority; the shy boy does not have as high an index of maturity in non-intellectual traits as the normal boy; the shy child is older for his grade placement but is lighter in weight than is the normal child.

The probable differences between the two groups, as indicated by a critical ratio of from two to four are: the shy child does not estimate his character to be as good as the normal child's character; the shy child is more insecure, unstable, and internally disorganized than the normal child; the shy child has poorer social integration, is more self-centered, and feels
socially less secure; he is more emotionally unstable than the normal child; he is more introverted; the shy child has a lower I.Q. than the normal child; and the shy child is shorter in stature than the normal child.

There is little or no difference between the two groups, as indicated by a critical ratio of less than two, in the following: the individual's ability to do what he wishes, that is, the absence of feelings of conflict; personal adjustment; neurotic tendencies; readiness to confide in others; sibling or parental strife and lack of family understanding; harmony with outside-the-family authorities; inability to solve his problems and running away from them; social maladjustment; self-sufficiency; and sociability.

2. The only reliable difference, as indicated by a critical ratio of four or more, between the atypical group, exclusive of the shy group, and the normal group is as follows: the atypical child has a lower I.Q. than the normal child.

The probable differences between the atypical and normal groups are: the atypical child does not estimate his character to be as good as the normal child's character; the atypical child is not as well adjusted to the members of his family as is the normal child; he is more out of harmony with all non-family authorities; the atypical child is more submissive than the normal child; the atypical child is older for his grade placement than the normal child.

The traits in which there is statistically little or no difference between these two groups are as follows: social and personal adjustment, self-control, neurotic tendencies, readiness to confide, insecurity and internal disorganization, sibling and parental strife, social integration.
emotional immaturity, inability to solve his problems and trying to run away from them, self-sufficiency, intro-extroversion, confidence in oneself, sociability, non-intellectual maturity, height and weight.

3. The reliable differences between the atypical group, inclusive of the shy group, and the normal group are as follows: the atypical child is older for his grade placement than the normal child; the atypical child has a lower I.Q. than the normal child.

The probable differences between this latter atypical group and the normal group, as indicated by a critical ratio of from two to four are as follows: the atypical child does not estimate his character to be as good as the normal child's character; the atypical child is not socially adjusted as well as the normal child; the atypical child is more out of harmony with all non-family authority than the normal child; he is more emotionally immature, self-centered and childish; the atypical child does not have as high an index of maturity in non-intellectual traits; and the atypical child tends to be more submissive than the normal child.

There is little or no difference between the combined atypical and the normal groups in the following traits: self-control, personal adjustment, neurotic tendencies, readiness to confide, insecurity, sibling and parental strife, family authority, social integration, running away from problems, social trouble, self-sufficiency, intro-extroversion, dominance-submission, confidence in oneself, sociability, height and weight.

The results obtained, when the withdrawing and the remainder of the atypical children are grouped together, for the most part are not as conclusive as when they are considered separately. These two groups are composed of entirely different types of individuals, and in a majority of the traits
measured in this study, the shy group is on one side of the normal group and the remainder of the atypical group is on the other side. For example, the shy child is much lighter in weight than the normal child, while the group composed of the remainder of the atypical children is heavier than the normal group. When the atypical group includes the withdrawing group these differences cancel each other and the result is no appreciable difference between the combined atypical groups and the normal group. Nevertheless, it is interesting to find to what degree the combined atypical group does differ from the normal group.
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Correlations between height and weight at the different age levels.


The psychological differences between ninety-eight behavior-problem children and a like number of normal children.


A complete comprehensive study of one hundred forty-three problem children.

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Fear of social contacts does not cause stuttering, but is a result of stuttering.


Handbook of all types of behavior problem children with the causes and recommendations for corrections.


Discussion of the tests with correlations of reliability and validity.

Tracing the development of the child's personality and examining the social experience through which his personality develops.


Emotional satisfactions which parents and children seek in one another and also mistaken ideas which influence parent-child relationships.

B. Periodical Articles


Discussion of the test with coefficients of reliability and validity.


How to treat your sick child so he will not become a problem child.


Detroit saves her problem boys through a summer camp.


Problem children among the Oklahoma Indians due mostly to lack of opportunity.


Individual differences as the basis for personality and education.


Development of the thesis that specificity of behavior is a result of external necessity, rather than of internal constitution.


Behavior problem children must be considered not as children in need of punishment but rather those worthy of our most careful study and best efforts.

A comparison of eighty-seven juvenile delinquents with eighty-seven normal boys the same age, grade level, nationality, and from the same neighborhood.


Relationships between Ascendance-Submission and height, weight, intelligence and scholarship, introversion-extroversion, order of birth, and academic status.


Discussion of the tests with correlations of reliability and validity.


A study of one thousand six hundred sixty-three unselected children to determine correlations between neurotic tendencies and other personality factors.


Positive relationships found between maladjustment in Sacramento and crowded living conditions, age, economic level, and disorganization of the family.


A survey of the literature concerning the maladjustments of only children.


Special schools and classes for the physically and mentally handicapped.


Home conditions and health of the pupil affect behavior and accomplishment in school.


Helps for an over age normally intelligent boy in the eighth grade.

Treatment suggested for a problem girl suffering from bad home conditions.


Most important factors of withdrawal are retardation and socio-economic status.


Maturation of emotional behavior is probably of as much significance as intelligence and other variables.


Comparison of Mental Hygienists and teacher's attitudes toward pupils' behavior.


A study of twenty-five accelerated and fifty non-accelerated elementary school children and after effects.


The administrative technique of the child-guidance conference.


A study of three hundred sixty problem and three hundred sixty non-problem school children.


Symptoms and types of behavior maladjustment.

Discussion of the test with coefficients of reliability and validity.


Measuring conditions under which conduct occurs, rather than conduct regardless of conditions.


How problem children originate and develop.


Relationship of out-of-school activities with the development of personality.


Prevention of maladjustment needs more emphasis than the cure.


Psychopathic boys given a chance in a special class.


Demonstrates the inability of untrained teachers to recognise and pick a group of seriously mal-adjusted students.


Outstanding academic and emotional causes of maladjustment with diagnostic and remedial chart.


Permanent records should be kept of all unusual actions of children to provide clues for later maladjustments.

Companionship as the means of socialisation.


Discussion of the influence of teachers and parent induced inferiority feelings on sociability.


A study of the differences between fifty-one children with an I.Q. of one hundred ten or more and fifty-one children with an I.Q. of ninety or less.


The socio-psychological study of one hundred fifty pupils who withdrew from elementary school, chiefly because of behavior problems.


Guidance in adjustment accomplished through extra-curricular activities.


A study of the parents and environment difficulties of one hundred twelve problem and psychopathic children.


Interesting the loafer in school work.


Maladjustment helped by individualizing the pupils.


A pupil is an individual out of school and if treated as such in school his adjustment will be more wholesome.

A study of two hundred sixty-nine boys with endocrine disorders.

Fenley, Frederick L., "Problem Child—or Problem Parents?" Hygeia, 15:1106-1107, 1957.

Children learn good behavior from the examples of others.


Children from high socio-economic homes show more problems based on submissive traits, and more school maladjustment.


Determining the degree of maladjustment of children from three months to six years.


Comparison of the home environment of thirty withdrawing children and a like number of normal children.


Discussion of the test with coefficients of reliability and validity.


A study of eight hundred twenty-nine problem children in the Jersey City Elementary Schools.


How emotional instability can affect reading ability; four cases cited.


Teachers should develop wholesome personalities rather than just teach subject matter.

The goal of each individual is to reach happiness and security. In order to reach this goal the child must adjust socially.


Types of children identified by their teachers as problem children.