

PERSONALITY ADJUSTMENT AND ACHIEVEMENT
OF SLOW LEARNING CHILDREN

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PERSONALITY ADJUSTMENT AND ACHIEVEMENT
OF SLOW LEARNING CHILDREN

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CHAPTER I

INTRODUCTION

Nature of Problem

In this era of increasingly competitive efforts to win the international races of aerospace, medical science, and technology, much money is being spent (and this amount is increasing) to finance the education of students through loans and scholarships. Grants are being made to establish programs to find talent. "Experts" are writing articles and books which suggest ways of revising school curricula so as to foster the maximum development of each student--especially the intellectually "gifted." Throughout all of these efforts is woven the thought that if we are to meet the employment demands of the future we must utilize every person's capabilities--we cannot afford to lose vital manpower. The national needs demand our best skills and ideas, even of those who function toward the lower end of the intellectual continuum. With that thought in mind, it is logical that increasing concern is being manifested over the "slow learning" children.

Children who are slow to learn begin to show difficulties in the early school years. As the years progress these youngsters fall further behind, with the result that they

become less able to participate with their peers in academic work. The longer these children are in school the more confused they become, the more academic and social failures they face, the more is expected of them, and the more difficult becomes the training task.

One of the clearest definitions of the slow learner has been stated by Monroe G. Gottsegen and Gloria B. Gottsegen, in their book Professional School Psychology:

Since "slow learner" is an educational term, should the IQ, which is a measure of intellectual functioning, be the criterion for the expected academic achievement of this grouping? If so, do we classify the child of normal intelligence who is not achieving at this potential level, because of physical, emotional, social, or psychological difficulties a "slow learner"?

The slow learner is one who cannot function in the regular classroom without some special consideration and concessions from the environment to accommodate his variation from the normal.

Thus, the slow learner is a challenge to the teacher and also a test of the public school concept. For this child, who is essentially normal in other ways, also needs the experiences of being in a school group as part of his socialization and acculturation process. He must learn to accept and be accepted by others.

The above questions are arbitrarily and sometimes satisfactorily settled by accepting the criterion of the IQ, since an objective definition of these youngsters as they really are and a realistic evaluation of the specific school situation is difficult even for teachers and psychologists. It should be emphasized that we are discussing the essentially normal child, who is academically slow. He must be carefully distinguished from the child who is slow by our educational norms because of other factors mentioned previously (13, pp. 197-198).

But the IQ alone is of negligible worth in terms of planning a program for the slow learner. Academic achievement seems to be equally dependent not only upon the level of intellectual functioning, but also upon good personal and social adjustment, as well as upon strong motivation. Evidence of this can be found in studies of the effects of emotional "blocking," negative self-concept, environmental handicaps, and other factors, which are often interpreted as having interfered to some extent with the normal processes of mental growth. It is plausible to assume that the slow learner's responses to learning situations are affected in much the same manner by his personal and social adjustment--his personality.

Our understanding of the phenomenon of the slow learner is of importance if we are to reach these students who are generally said to comprise 15 per cent to 17 per cent of the total school population (13, 18, 19, 23). It is necessary, therefore, that we attempt to be more specific in our characterization of these pupils than research to date permits us to be. An understanding of the student's personality may provide an avenue to this goal. School counselors and teachers are daily involved with youngsters who are attempting to adjust themselves to their world. The more that is understood about their personality, the better able the educators may be to help young people fulfill their roles in society.

Theoretical Background

Of all topics in psychology and the study of the human organism, probably none of those still to be mastered is of more importance than the topic of personality. As indistinctly charted as this area is, enough is now known about it to make its study a productive one for educators and others who are concerned with today's youth.

An orientation is necessary as to what psychologists mean by personality. Since the dawn of recorded history there have been those who have attempted to define personality as it is related to the chemical and/or physical characteristics of the individual. Hippocrates formulated his "doctrine of temperaments" in approximately 400 B.C., based on an excess of body fluids. Gall's phrenology was postulated in the early 1800's and the business of "skull-reading" flourished for a time.

Many theories of personality have been based on the measurement of certain physical characteristics which were usually summarized as types. Thus, each type of personality was thought to be characterized by a certain physical type or "somatotype." Lombroso theorized that it was possible to identify certain "criminal types" by measuring physical traits. Kretschmer developed his theory of personality types in the 1920's. Although he derived his theory from clinical observations, subsequent experiments did not confirm this theory.

Sheldon and Stevens (35) developed a system which classified each individual according to a physical type. Correlations between temperament ratings and the three major somatotypes were thought to be extremely high (in the neighborhood of .80). Nevertheless, it is obvious that in spite of the acknowledged differences in temperament between "ectomorphs," "mesomorphs," and "endomorphs," these differences in morphology will hardly begin to account for differences in personality.

Coming down through the past and until the eighteenth hundreds, the Judeo-Christian theory of personality seemed popular. This theory held that the influences of the family and the church formed the individual's personality, but only through years of teaching and discipline, and only after the "age of accountability" had been reached.

From the position of the nineteenth century scientific-biologic proponents came the theory that one's personality was, for the most part, inherited. Many comprehensive studies were made from family case histories, which led examiners to believe that defects in "adjustive behavior" were inherited. The classic studies of the Jukes and the Kallikak families were said to be evidence that "feeble-mindedness" was inherited. Such a belief is still held by many today and is detrimental to progress in constructive mental health.

These early studies are felt by Shaffer (34) and other modern researchers to have made substantial contributions to

the unscientific popular belief in the powers of heredity. Faulty diagnoses, incomplete and inadequate family case histories, as well as use of data which did not always conform to precise standards of statistical treatment, are among some of the reasons why modern theorists do not feel that hereditary or genetic factors tell the whole story of personality.

This difficulty of defining such a term has been a major handicap to personality theorists. Personality thus would seem to have become a "catch-all" term, having a multitude of definitions which are confusing as well as unscientific, and being used in as many different ways as there are writers who have attempted to define it. Even the "man in the street" has something to say about its definition, as Symonds (40) calls his "Hollywood conception" of personality.

Although investigators with Gestalt leanings have contended that the study of personality traits is fruitless, the major concern of recent investigators has been one of attempting to describe and measure an individual's personality in terms of characteristics or constellations of traits. Among those theoretical positions which are thought to be more psychologically oriented, Guilford's trait theory is believed by many to have made one of the most substantial contributions in the area of personality research. He states

An individual's personality, then, is his unique pattern of traits. . . . This definition of personality emphasizes individual differences. This means that we can best know personalities

by comparing them with one another. There are no absolute standards for personalities; there are only other personalities from which our frames of reference must be derived. Comparisons of personalities must therefore be made (14, p. 5).

Guilford's idea is that "things, including persons, are known by their properties" (14, p. 4). He writes that "properties are abstractions . . . [and that abstractions] . . . come by way of analysis from totalities" (14, p. 5). Guilford holds that to be scientifically useful, a theory of personality will have to be subject to verification by scientific investigation. In his attempt to describe personality in terms of traits, he has utilized the precise mathematical method of factor analysis. According to Guilford it is possible to define these traits as well as to measure them from the "standpoint of basic science of personality" (14, p. 7). Thus, from both personality theory and clinical investigations the importance of a trait concept of personality can be assumed.

Purpose of Study

In spite of the fact that for centuries man has attempted to understand those variables or factors associated with personality development, difficulties are still being encountered. Problems still exist, not only with respect to personality but also with respect to the relationship between personality factors and an individual's achievement. As a consequence, and in an attempt to help resolve a part of

these dilemmas, the purpose of this study is to investigate the relationship between certain personality characteristics and achievement of slow learning children.

Related Research

Before the industrialization of the nineteenth century, rural communities did not place a high premium upon education, and slow learners went largely unnoticed. Along with industry came the move to urban areas, and gradually the private academies were replaced with publicly supported and controlled schools.

With the advent of the twentieth century and the enforcement of compulsory education laws, the problems of educating the slow learners were brought to the forefront, as it became obvious that many children seemed to be unable to learn as quickly as the majority of youngsters. Because the maximum compulsory school age in most of the states was sixteen (and because many slow learners were retained at least twice between completion of grades one through eight), slow learners could, and often did, drop out of school by the end of the eighth grade, at best. Secondary schools, then, were rather "effectively isolated and protected from the problems presented by most slow learners" (19, p. 13).

With the gradual change in the American philosophy of education, improvements in curricula, and a greater degree of "democratization" on the secondary school level, the

problems of educating the slow learners have been compounded. Johnson, in his book, Education for the Slow Learners (19), states that the problem is spread over all school levels, and he calls this a "total school problem." Almost every public school teacher is confronted with slow learners, and among the general school population they provide one of the most intense and continuing problems which the general classroom teacher must face. Johnson states that "in an average community where the school serves children from all cultural, social, and economic levels, a class of thirty unselected children can be expected to contain four or five slow learners" (19, p. 9).

It would seem equally strange and unfortunate, then, that a review of the literature reveals a dearth of empirical research having to do with the relationship of personality factors and achievement of slow learning children, although there is no lack of research in the studies of personality variables and their relationship to underachievers--normal, bright-normal, and gifted (6, 9, 10, 30, 42). Countless books and articles have been published having to do with personality traits and achievement of normal school children (2, 31, 32, 38); Doll (7) and other writers have published studies regarding personality characteristics and achievement of retarded children (4, 39, 41).

There has been no shortage of journal articles and books which deal with curriculum designs and remedial techniques

for instructing the slow learners on all school levels (16, 25, 28, 33, 36, 43). For teachers of slow learning children much attention has been given to language and communication skills (15, 22, 26, 29, 45), mathematics and quantitative concepts and skills (17, 37, 44), along with other subjects such as social studies, art, science and physical education (1, 5, 8, 11, 21). Kephart (23) and others have published innumerable works treating of the visual-motor, gross-motor, and perceptual-motor difficulties which are encountered by many slow learners (12, 20, 24, 27).

Throughout all of these efforts to diagnose, understand, and teach the slow learning child, a generally accepted conclusion seems to emerge. Baller and Charles, in their book The Psychology of Human Growth and Development, describe this trend of thought thus:

If the school practices regular promotion and has only the academic channel, these youngsters (slow learners) are likely to learn little but will drift along serving as a nuisance and a drag on the more able students. If, however, the school system offers appropriate technical and vocational training along with general education courses at their level, both society and the student will profit from their continued presence in school (3, p. 252).

Although countless professional workers have done much to emphasize the importance and magnitude of the problems concerned with educating the slow learning children, no conclusive evidence seems to have been evolved regarding the nature and extent to which a relationship exists between personal and social adjustment and achievement of slow

learners. A tremendous amount of material has been published concerning slow learners, but none of it has been pertinent to the study of personality variables and achievement of these youngsters.

Hypotheses

If the Elementary Form of the California Test of Personality is an adequate or valid test of a child's personality, then it should reflect that child's own personality rather than the concept which others have of his personality. Based on the assumption that the California Test of Personality is a valid measure of a youngster's personality, and working on the assumption that positive educational experiences (such as those derived in special classes for slow learners) give a child feelings of personal success and motivation for achievement, the following hypotheses have been formulated.

Hypothesis I.--There will be a significant difference in a positive direction in degree of personality change (both in terms of total scores as well as personal and social adjustment scores), and this difference is predicted to be greater among children in the experimental group than among those in the control group.

Hypothesis II.--There will be a significant difference in a positive direction in achievement test scores, and this

hypothesized difference will be greater among youngsters in the experimental group than among those in the control group.

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CHAPTER II

METHODS AND PROCEDURES

Subjects

In order to test the hypotheses of this study, the subjects were selected from the regular fifth grade elementary classes in a city of more than 92,000 population. All pupils were screened by their classroom teachers, then approved by the respective principals. The following criteria were used in the selection of the participants: (1) children who were currently enrolled for the fall term of the fifth grade; (2) children to whom were administered group intelligence tests the previous spring semester, and whose IQ's fell within the range of seventy-six to ninety on the Lorge Thorndike Intelligence Tests (2); (3) children who, according to achievement tests administered the previous term, were said to be functioning at least one (but not more than three) grade levels below the regular fifth grade norms; (4) children who had no serious physical handicaps and no apparent severe emotional handicaps; also children who were not found to be "chronic" discipline problems; (5) children whose parents gave permission for them to participate in the study.

Using the above criteria, forty-five pupils were selected for the experimental group. These subjects were enrolled in two classes for slow learning children. The

teachers, arbitrarily chosen by their respective principals, participated in a two week in-service training program prior to the beginning of the fall term. The enrollment for these classes was limited to twenty-five children per class. Teaching and grading was done on the "split level" plan. Few monetary limits were imposed concerning the use of teaching aids, consultants, and supplies. The children were competing academically and socially with peers who functioned within the limits of the "low average" range of intelligence.

Using the same criteria, forty-six children were chosen for the control group. These children were not in special classes with limited enrollment, but rather were attending regular fifth grade classes. There was greater enrollment per class, and there were no extra appropriations allotted for teaching aids. Teaching as well as grading was done on the basis of an "across the board" regular fifth grade level. The children in the control group (who functioned within the "low average" range) were competing academically and socially with classmates who functioned within the "average" or "above average" ranges of intelligence.

Because of the relatively small number of children available on this level, the total population was used rather than a random sample.

The range of IQ's from seventy-six to ninety on the Lorge-Thorndike was in keeping with the generally accepted range of intellectual functioning of slow learning children.

Both groups were reasonably equated with respect to individual abilities. The mean IQ for the experimental group was 83.76, with a standard deviation of 8.39. The mean IQ for the control group was 85.95 with a standard deviation of 8.62. Pre- and post-tests were conducted with all participants in order to measure personality as well as academic achievement.

To eliminate time as a confounding variable it was necessary that all the children be enrolled in the fifth grade at the beginning of the fall term. Make-up tests were given to all participants who were absent for any of the testing sessions. Because of family moves or transfers, a total population of eighty-four remained in the study throughout the year. The final total of eighty-four was divided equally between the experimental and the control groups.

Techniques for Collecting Data

Personality measurement.--The California Test of Personality, 1953 Revision (3), was designed to identify and reveal the status of fifteen important aspects of personality, i.e., twelve components, as well as personal, social, and total adjustment.

As important as they are, tests of aptitudes, capacities, and achievement do not give a total picture of a functioning personality. The authors of the test have written

Personality is not something separate and apart from ability or achievement but includes them; it refers to the manner and effectiveness with which the whole individual meets his personal and social problems, and indirectly the manner in which he impresses his fellows. The individual's ability and past achievement are always an inevitable part of his current attempts to deal with problems intelligently (3, p. 2).

One of the major contributions of the present-day movement in education is this insistence on respect for the "wholeness" of the individual. The California Test of Personality has been used widely as an implement by which the teacher or counselor can more effectively and easily guide the whole "adjusting organism." Its primary purpose is to provide data that can be used in helping individuals develop or maintain a healthy balance between personal and social adjustment--which is the authors' "concept of life adjustment" (3, p. 3).

The first half of the test is comprised of six components which are assumed to measure feelings of personal security. The last half of the test is comprised of six components, assumed to measure feelings of social security. The components are said to be names for "groupings of more or less specific tendencies to feel, think, and act" (3, p. 3). The test covers all levels from kindergarten to adults; one set of norms can be utilized for both forms on all levels. Means and standard deviations are identical for all levels on both forms. Test-retest correlations on the Elementary Forms range from .78 to .97 (2, p. 3). Correlation between the

two sections of the test ranges from .63 to .77. This is felt to be sufficiently low to "emphasize the desirability of studying the individual from the standpoint of both personal and social adjustment" (3, p. 6).

Within the first two weeks of the fall term all children were given Elementary Form AA of the California Test of Personality. Post-tests were administered during the last two weeks of the spring semester using Elementary Form BB.

Achievement.--To determine measures of achievement in the major areas of skill and content of the elementary curriculum, the widely used Metropolitan Achievement Tests Series (1) was given. This comprehensive series was designed to give valid appraisals of the extent to which students in grades one through nine progress toward the attainment of desired educational goals.

Within the first month of the fall semester all pupils were given the Intermediate Battery of the Metropolitan Achievement Tests Series for grades five and six. Each of the ten subtests was timed and, because the entire battery required almost four hours to complete, the series was given over a three- to four-day period. Form C of the Intermediate Battery was used in pre-testing. Post-tests were administered during the last month of the spring term using Form D of the Intermediate Battery.

Statistical treatment.--A t-test of the significance of the differences between the means was selected as the method for analyzing the data on both the California Test of Personality and the Metropolitan Achievement Tests Series. The 5 per cent level of confidence was selected as the critical point of significance.

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CHAPTER III

RESULTS

Presentation of Data

As stated in the previous chapter, the data relative to the hypotheses presented in Chapter I were analyzed statistically using a t test of the significance of the difference between means. The first hypothesis stated that there would be a significant difference in a positive direction in degree of personality change (both in terms of Total Adjustment scores, as well as Personal and Social Adjustment scores). This hypothesized difference would be greater among pupils in the experimental group than among those in the control group. Using the California Test of Personality, 1953 Revision, separate tests of significance were made between the two groups on both sections of the test, as well as on Total Adjustment.

Table I contains the results of Personal Adjustment scores on the California Test of Personality. Mean differences, standard deviations, and t values are shown. As indicated in Table I, the mean difference for the experimental group was 1.10 and the mean difference for the control group was .98. Although the difference between the groups was in the direction predicted, it was not significant at the 5 per

cent level of confidence, and was of too small a magnitude for the hypothesis to be supported.

TABLE I

MEAN DIFFERENCES, STANDARD DEVIATIONS, AND t VALUE OF
PERSONAL ADJUSTMENT SCORES ON THE CALIFORNIA TEST
OF PERSONALITY

Group	N	Mean Difference	S.D.	t
Experimental	42	1.10	8.04	.0580
Control	42	.98	10.38	

Results of Social Adjustment scores, as measured by the California Test of Personality are indicated in Table II. This table contains the mean differences, standard deviations, and t value.

TABLE II .

MEAN DIFFERENCES, STANDARD DEVIATIONS, AND t VALUE OF
SOCIAL ADJUSTMENT SCORES ON THE CALIFORNIA TEST
OF PERSONALITY

Group	N	Mean Difference	S.D.	t
Experimental	42	.50	9.08	2.8442
Control	42	-4.74	7.53	

As indicated in Table II, there was a significant difference ($P < .05$) between the two groups on the Social Adjustment section of the personality test. This difference

was not in the hypothesized direction among children in the experimental group. Rather, there was a significant change, in a negative direction, among participants in the control group. This negative change was of special interest and is treated in "Discussion of Data."

In Table III are contained the results of Total Adjustment scores on the California Test of Personality. Indicated in this table are the mean differences, the standard deviations, and the t value.

TABLE III
MEAN DIFFERENCES, STANDARD DEVIATIONS, AND t VALUE
OF TOTAL ADJUSTMENT SCORES ON THE
CALIFORNIA TEST OF PERSONALITY

Group	N	Mean Difference	S.D.	<u>t</u>
Experimental	42	1.64	13.36	1.76
Control	42	-3.76	14.44	

From the inspection of Table III, once again the difference between the two groups was in the direction predicted, but too small to be considered even a noticeable trend in support of the hypothesis.

In the second hypothesis it was stated that there would be a significant difference in a positive direction in achievement test scores, and that this difference would be greater among children in the experimental group than among

those in the control group. Pupils' achievement was measured as the gained scores between fall and spring testing with the Metropolitan Achievement Tests Series, Intermediate Battery. Mean differences, standard deviations, and t values on ten subtests as well as composite scores are contained in Table IV.

TABLE IV
MEAN DIFFERENCES, STANDARD DEVIATIONS, AND t VALUES
OF SUBTESTS AND COMPOSITE SCORES ON THE
METROPOLITAN ACHIEVEMENT TESTS SERIES

Test Variables	Experimental Group		Control Group		t
	Mean Difference	S.D.	Mean Difference	S.D.	
Word Knowledge	.57	.76	.66	1.03	-.4757
Reading	.72	.99	.53	1.23	.7760
Spelling	.47	.97	.81	1.04	-1.5205
Total Language	.89	.76	.76	1.05	.6706
Language Study Skills	.39	.90	.49	1.12	-.4250
Arithmetic Comp.	.85	.50	1.06	.61	-1.7035
Arith. Problem Solving	.43	.47	.73	.88	-1.9400
Social Studies Info.	.23	.94	.25	.93	-.1289
Social Studies Skills	1.02	1.22	.95	1.39	.2213
Natural Science	.30	.85	.20	1.03	.4758
Composite	.58	.37	.64	.55	-.5466

As indicated in Table IV, these results did not lend support to the second hypothesis. The analysis revealed no apparent significant trends, consequently no further statistical tests were conducted.

Discussion of Data

As mentioned in "Presentation of Data" there was a significant change in a negative direction among children in the control group on Social Adjustment scores, using the California Test of Personality. (A significant positive change among pupils in the experimental group had been hypothesized.) This significant change in a negative direction may be partially accounted for by the fact that these slow learning youngsters were enrolled in regular fifth grade classes. Day after day these children were confronted with their intellectual limitations.

It is generally accepted that slow learners, like all persons, have the same basic need for feeling that they belong and are accepted, that they contribute something of value to their group. While they have the same emotional needs as all children, they often have greater difficulty in making adequate adjustments to those needs because their intellectual capacities are limited. Discipline problems are more common among slow learners than among the rest of the school population. These data are not difficult to account for when it is remembered that in most instances

little, if any, attempt is made to design curricula to their particular frames of reference or to adapt teaching methods to their intellectual levels of learning.

With the exception mentioned above, the results of this study failed to indicate a demonstrable relationship between aspects of personality and achievement of slow-learning children, as defined and measured by the instruments used in the study. Such a relationship was expected on the basis of similar studies having to do with normal, under-achieving, and retarded children. Consequently, some attempt was made to understand and account for the failure to obtain support for hypothesized relationships formulated for the present experiment.

One limitation inherent in any study having to do with personality variables is whether the "wholeness" of an organism can be divided or broken down into characteristics and their sums and interactions. This is still thought by many to be a highly debatable question. Lorge (2) emphasizes this point in his article, "Personality Traits by Fiat." He states

Personality traits cannot be created by the psychologist. If the concept of personality is to have meaning, it must be conceived as an aspect of the individual. . . . Naming a trait does not make it a trait (2, p. 275).

Aside from imprecise definitions of personality traits, confusion still remains in the relationship between personality variables and achievement, due to the use of

heterogeneous samples, the use of a wide variety of measuring implements, and weaknesses inherent in the tests of significance used in many studies.

At present no tests of personality nor of achievement exist which are specifically designed for slow-learning children. With regard to the California Test of Personality, the final norms were based on samplings of cases "which constituted a normal distribution of mental ability and typical age-grade relationships" (3, p. 27). The mean IQ of the population used in compiling the normative data for the test was 100.0, whereas the mean IQ's of the participants in this study were 83.76 for the experimental group and 85.95 for the control group.

It was reported in the manual of the Metropolitan Achievement Tests Series that the final population used in the development of normative data included between 80 per cent and 90 per cent of the total grade groups. The final sample was said by the authors to have been "age-controlled" (1, p. 20). Pupils who scored outside the normal age-grade placement range, therefore, were "eliminated from the norm groups" (1, p. 20). The authors further stated

The majority of pupils eliminated because of this age control were overage; and since overage pupils tend to be dull, their elimination resulted in a norm group that averages slightly above 100 IQ. The norms thus describe the performance of a group of pupils slightly above average in mental ability, setting more challenging goals than total grade norms (1, p. 20).

It is important to note that since the median age of the participants in this study was twelve, there may be some cause to question the validity of the achievement test scores, particularly in view of the "overage" factor which was utilized in developing the norms for the Metropolitan. Moreover, the mean IQ's of the experimental and control groups (83.76 and 85.95, respectively) would give rise to serious questions as to the wisdom of comparing their achievement test scores with those in the national norms where mean IQ is slightly above 100, and where performance is "slightly above average in mental ability" (1, p. 20).

It should also be noted that the average reading level of the participants in this study (as measured by individual reading tests) was on the low second-grade level. The Elementary Forms of the California Test of Personality were designed for children in grades four through eight. The Intermediate Battery of the Metropolitan Achievement Tests Series was designed for pupils in grades five and six. A major criticism made by the teachers of the experimental group was that many of the children could neither read nor comprehend the meaning of test items and would, therefore, often resort to marking the test booklets at random.

It would seem advisable to have used another control group in which only "average" children were enrolled; and perhaps still another control group in which only "above average" children were enrolled, in order to have a broader

sampling and a more adequate basis for comparisons between personality and achievement variables.

Another factor which was not investigated in this study was that of teacher-pupil relationships. It is possible that the teachers of the experimental group had greater degrees of acceptance and understanding of the limitations of their pupils than had the teachers of regular classes. This quality could have been a factor, in that progress in personality adjustment and achievement may be related to the rapport between pupil and teacher.

Teacher ratings, as well as reporting of subjective grades (in addition to the variables already included in this study), could have given more information, if only of a qualitative nature. Also, a self-concept scale may have proved to be of value as an additional aid to understanding the slow learner.

The slow learner is just that--a youngster who learns more slowly than the normal child. It is also possible, therefore, that one academic year is not long enough in which to measure accurately positive changes in achievement and personality. This suggests the need for large-scale longitudinal studies of the slow-learning children.

Efforts are being directed toward producing more reliable and more valid test instruments, but this is, of course, a monumental task. In any case, some of the improvements in personality and achievement cannot be measured by any scale.

Qualitative analysis of accumulative records indicate positive changes among the children in the experimental group; however, these gains are difficult to assess quantitatively.

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CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to investigate the relationship between certain personality variables and achievement of slow-learning children.

The first hypothesis formulated for investigation postulated that slow learners having all of the benefits of special classes (experimental group) would score higher on Personal, Social, and Total Adjustment Scales of the California Test of Personality than slow learners who were enrolled in regular fifth grade classes (control group). The second hypothesis stated that slow learners in the experimental group would show significantly greater gains on the achievement test than slow learners in the control group.

Eighty-four children, whose IQ's ranged from seventy-six to ninety, participated in the study. They entered the fifth grade at the same time, and none had serious physical or emotional handicaps. All of them had scored not less than one, and not more than three grade levels below regular fifth grade norms on previously administered standardized achievement tests.

Forty-two slow-learning children were in the experimental group. Class enrollment was limited to twenty-five, teaching

and grading were on the "split level" plan, and the children competed on the same intellectual level.

Forty-two slow learners were in the control group. They attended regular fifth grade classes where enrollment was greater and where teaching and grading were done on an "across the board" fifth grade level. The slow-learning children competed with youngsters whose intellectual levels were "average" or "above average."

Personality adjustment of the children was measured by pre- and post-test scores on the California Test of Personality, 1953 Revision. Pupils' achievement was measured as the gained scores between fall and spring testing with the Metropolitan Achievement Tests Series, Intermediate Battery.

Conclusions

In view of the fact that only minor differences were apparent between the two groups, neither of the hypotheses of this study was accepted. The data failed to indicate any demonstrable relationship between personality and achievement of slow learning children. There was a significant change in a negative direction among children in the control group. (A significant positive change among children in the experimental group had been hypothesized.)

The lack of support for the hypotheses was considered to be insufficient evidence that no relation exists between personality variables and achievement of slow-learning

children. Failure to find support for the hypotheses of this study may have been due to the following factors: inadequacy of the test instruments, failure to use other control groups for comparison, inability of the pupils to read and to comprehend test items, failure to investigate teacher rating and reporting of grades, faulty diagnoses, failure to assess teacher-pupil relationships, and possible erroneous assumption that sections of the California Test of Personality were truly measuring aspects of personality.

Recommendations

From the results of this investigation it is apparent that further studies are necessary using instruments which are more refined and based on wider collections of data. Beginning with early childhood, longitudinal studies over a period of years are necessary to discover the significance of many factors which may affect the personality and achievement of slow-learning children. Further studies need to be made comparing slow learners with normals on teacher ratings, achievement, and grades. The influence of teacher-pupil relationships (and perhaps parent-child relationships) need to be investigated, and studies which assess the self-concepts of slow-learning children should be made.

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