CRITERIA FOR THE REEVALUATION SCREENING OF EDUCABLE MENTALLY RETARDED STUDENTS

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CRITERIA FOR THE REEVALUATION SCREENING OF
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TO EILEEN, KEN AND TOM
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ABSTRACT

This study was concerned with determining whether personality variables as defined and measured by the Children's Personality Questionnaire were better able to predict classroom success than was a Wechsler Intelligence Quotient. The study sampled thirty students all of whom had already been screened from an E.M.R. class into either a regular (eight students) or an E. H. class, (twenty-two students). The data included a CPQ profile of personality scores, verbal, performance and full scale Wechsler I.Q. scores, and the teacher's rating of the student's classroom success.

It was assumed that those variables correlating highest with the teacher's rating of success would be the more valid predictors of classroom performance. It was the hypothesis of this study that the CPQ had more significant correlations with criteria than did the Wechsler IQ scores. Further, the study sought to determine whether any linear combination of these variables could serve as valid predictors of classroom success.

The results determined that, of the seventeen personality and intelligence variables measured, only two personality
variables had significant correlations with the criterion. These were Variables D and F of the CPQ profile. Successful students tended to have placid temperaments and be serious and introspective. In linear combination, personality variables D, F, and J (phlegmatic, desurgency, vigorous) were the three most important predictive variables with a multiple correlation coefficient of .65.

Performance and verbal IQ ranked fourth and fifth as variables predictive of success. The Childrens Personality Questionnaire and Wechsler scores together account for approximately 68% of the variance in success rating scores.
CHAPTER I

Introduction

General Statement of the Problem

This study was concerned with the criteria used in screening students in classes for the educable mentally retarded into regular and educationally handicapped classes. It sought to determine whether IQ scores on the Wechsler Intelligence Tests were better predictors of classroom success than were personality factors, as determined by the Children's Personality Questionnaire. (1963 Revision)

Background and Significance of the Problem.

While it is generally understood that individual tests of intelligence should be supplemented by a determination of the total level of functioning of the whole person, it is frequent that only cursory attention has been paid to factors other than the test of general mental ability. Thus, the class placement of an educable mentally retarded child may be determined by his score on an intelligence test. The evaluation of retarded children might well be improved by a measure of significant personality variables. This is not to say that
a measure of intelligence is not important in the placement decision but that is only one part in a comprehensive evaluative process. The failure to include other pertinent data does the child and the school a disservice.

It is impossible to consider intellectual functioning divorced from intervening factors in the individual personality make up. An IQ score can be regarded as a measure of intellectual potential. What is crucially important to educators is the fulfillment of this intellectual potential. It is known that personality factors can facilitate or impede this attainment.

What tends to happen is that the diagnosis of "educable" or "trainable mentally retarded" fluctuates with the rise and fall of IQ. Since it is generally accepted that IQ is not always a valid measure of educational potential, the proper planning for the educational and vocational needs of the individual on the basis of arbitrary cut off scores on intelligence tests does not seem justified. Typically, the mentally retarded public school child is deficient in academic learning. This deficiency is implicitly associated with a corresponding deficiency in intelligence. While the retarded child may be a slow learner the reverse is not necessarily true. The dangers of the almost singular use of the IQ test can be seen
in such cases as that in San Francisco (1969) with the im-
proper placement of Mexican American students in classes for
the retarded. The IQ test is only a proper diagnostic tool
when used in concert with other measures of the individuals
level of total functioning.

In the cases of other students being screened out of
programs for the retarded the criteria seem to be nebulous.
In Fremont, California, where this study was conducted, students
have for example, been screened out of the EMR class into
successful regular class placements with IQ scores which
qualify them for continued EMR placement. In this case, it
is apparent that while IQ is not the primary concern there is
no systematic provision made for consideration of factors
other than academics and measured intelligence. In light of
screening decisions which disregard IQ and consider the other
personal strengths of the student, it seems important to specify
what these other areas of considerations might be and clarify
the nature of the screening process.

Screening criteria for the educationally mentally retarded
then are incomplete in some cases and unclear in many others.
The scope of this problem cannot help but broaden as many school
districts attempt to reintegrate the EMR students into other
programs.
CHAPTER 2

Review of the Literature

There has been a great deal of research dealing with various facets of mental retardation and special education for the retarded. As special education changes, the areas to be investigated broaden. Since the first classes for the educationally mentally retarded were instituted in 1896, programs for the exceptional child have grown and improved. With this evolution have come new practical, theoretical and programming considerations. In previous years classes for the retarded tended to be the final step in the educational program of the EMR student. Historically, the retarded were placed in separate classes and seldom if ever reintegrated into the regular educational program. In recent years there has been an attempt to place capable EMR students back in regular classrooms. The question now becomes which students appear capable, and which students will be successful. It's the function of screening to make this prediction. The screening committee typically makes use of a standard IQ test and some observational data with little systematic attention paid to personality factors.
There is a scarcity of research regarding the personality of the EMR as it relates to classroom success. The major portion of available research deals with prediction of strictly academic success in a normal population. This review will seek to establish several things; first, that personality variables are valid predictors of academic and social behavior in the normal classroom. Second, that they are valid predictors of classroom success for the educable mentally retarded. Third, that personality variables are more valid predictors of classroom success than is the psychometric IQ score.

Snyder, Jefferson, and Strauss (1965) felt that there is a wide variety of personality organization among retarded individuals and that the adequacy of self concept attitudes will have a determining influence on the degree to which optimum use is made of their native endowment. To test this hypothesis the California Test of Personality was administered to two groups of mildly retarded high school students. In this study the two groups were matched for intelligence but were widely dichotomous in their reading ability. It was shown that self concept attitudes were strongly related to reading ability. The authors conclude that there is a "strong relationship between reading achievement and personality variables in general and self concept in particular" for the mildly retarded.
Kelly and Berrera (1958) in a study entitled "The Rorshach Method in the Study of Mental Deficiency", summarize the findings of several researchers in the field of personality. For example, Rorshach tabulated norms for the incidence of various Rorshach responses in different levels of intelligence. He found that each of his six levels of intelligence ranging from imbecile to very superior possessed a characteristic pattern of color and movement and original responses. Kelly and Berrera go on to point out the advantages of the personality test over such instruments as the Binet. Perhaps their most important conclusion is that the Rorshach has more advantages "because the test does not merely supply a single numerical score for intelligence but indicates also the abstract intellectual type, the practical and material, the analytic or meticulous and the broad organizing types of intelligence."

The personality test is superior in that it is able to differentiate between genuine capacity and actual efficiency.

In a 1945 study of thirty subnormals, Able suggests that a good Rorshach protocol is predictive of successful school performance. The fifteen pairs of girls were matched for Binet IQ and age. All subjects were given the Arthur Point Scale and the Rorshach ink blot test. It was found that the Rorshach could differentiate between groups of similar
intellectual levels but different behavioral patterns. By following up his subjects Abel found that while psychometric intelligence scores could not make a valid differential prediction about school success of the thirty girls, the personality and behavioral patterns could make such a prediction.

Paul A. De Sena (1945) reported that in a study of 126 college students "common non-intellectual factors in the areas of interests and personality can be identified which characterize over, under, and normal achievers as individual groups and significantly distinguishes them from each other." Non-intellectual factors were pointed out as having positive value in the prediction of achievement. Academic success was found to depend in significant part upon the amount of time spent in study, motivation toward future goals and levels of aspiration and such factors as self-direction and self-discipline. The over, normal and under achiever were found to have characteristic profiles. The over-achiever, for example, was found to be self-sufficient, not revealing a strong need for companionship, was better able to concentrate without being distracted by trivial matters, showed a sense of responsibility, strong motivation and self-direction.

Vern H. Jensen (1958) notes the need to supplement intellectual measures with measures of non-intellectual factors
in academic ability and achievement. In his study, 458 college students were divided into four groups; achieving students of low scholastic ability, non-achieving students of low scholastic ability, achieving students of high scholastic ability and non-achieving students of high scholastic ability. "The major assumption in this study was that students of low scholastic ability who were achieving poorly in their academic courses were also likely to be at a disadvantage with respect to non-intellectual areas of college life as measured by a personality inventory."

Jensen (1958) found that, based on MMPI scores, his data supports the hypothesis stated above. There was a general tendency for non-achievers of low scholastic ability to encounter more adjustment problems than other students with whom they were compared. Thus, these students tended to be at a disadvantage with respect to non-intellectual areas as well as in their academic pursuits.

H. G. Gough (1964) studied the relationship between non-intellectual factors and academic achievement. Fifty four high school seniors were given the Minnesota Multiphasic Personality Inventory in an attempt to determine the relationship between personality factors, Otis IQ scores, and school achievement as determined by grade point average. The study concludes
that while it did not find significant differences between achieving and non-achieving groups on the MMPI, more research with broader and more valid instruments may result in more positive findings. In a study of college age populations in 1947 Bolander was able to use MMPI scales which did predict academic success.

Sontag, et al, (1955) report a longitudinal study of 300 children from ages 2½ to 15 years. Each child was tested 17 times over a period of 12½ years on the Stanford Binet. The researchers also gather observational reports and personality test data from the T.A.T. and Rorshach personality tests. The researchers have hypothesized that motivation as part of a person's personality make-up is responsible for changes in childrens I.Q. scores. Motivation subsumes mastery of problems, competitiveness, approval for attainment and sexual role identification. These different manners of emotional adjustment (or personality structure) were studied in the various situations of the 300 children. Motivation as it is determined by the above factors was noted to have significantly affected the rise or fall of IQ scores over the 12½-year period. It is concluded that personality does affect performance while the exact manner in which this is done was not elaborated on.

Werner (1957) tested the hypothesis that talented and
underachieving boys and girls in grade 4-6 differ significantly from the norm group on CPQ Personality factors. Forty three boys and girls were in the talented group while 44 were included in the under-achieving group. The sample was selected from a summer session either in an enrichment or a remedial program. The sample students were equated for intelligence. After administration of the CPQ each group was found to have a characteristic personality profile. Factor scores then discriminate between under-achievers and talented students. In this sense personality factors can be said to be predictive of school success.

Savage (1962) studied 39 seven and eight and one half year olds in order to determine the relationship between extraversion and neuroticism, intellectual level and school attainment. Each child studied was given the Otis Quick score Mental Ability Test, and the Eysenck Personality Inventory. It was concluded that high extroversion is related to a brighter intellectual level and higher academic attainment. Further, "It would appear that the relationship between neuroticism and academic success is not as striking in these children as it was found to be in previous studies." The researcher explains that the reason for this finding may be due to the inverse relationship between neuroticism and performance. This
explanation is also supported in research by Kline in 1966. In any event it seems apparent that personality factors do serve as partial determinants of academic success.

The Children's Personality Questionnaire was administered by two investigators to children enrolled in special classes for the educable mentally retarded. Each researcher worked independently with a different sample. One group was made up of 158 children and the other 171, for a total of 329 children. The mean age was 12 years and the mean IQ was 65. McIver and Collins (1965) agree that the educable mentally retarded have a characteristic personality pattern.

Boys are typically emotionally immature, depressed, reserved, critical, aloof, undependable, socially bold, venturesome, impulsive and obstructive. Girls tend to be excitable, impatient, unrestrained, careless, demanding, submissive, dependent, and likely to ignore social standards. Perhaps the most important finding presented in this study is the notion that the farther away one deviated in either direction from the norm personality pattern, the farther he is away from average intelligence. Retarded children in special class are seen to have a personality pattern and as such, successful special class placement may be predicted by use of the CPQ. The personality pattern as mentioned above was found in both pieces of research cited here.
CHAPTER III

Design and Procedures

Statement of the Problem

The problem that was investigated in this study was whether the Children's Personality Questionnaire was a better predictor of classroom success than was the Wechsler Intelligence Test. The study sought to determine which of these two instruments yielded scores which correlated more highly with the teacher's ratings of the students total classroom performance. Thirty students from grades 3 through 12 in the Fremont Unified School District were rated by their teachers and subsequently given the Children's Personality Questionnaire (Form A). The Wechsler tests had been previously administered as part of the screening process by the school psychologist.

Instruments Used

One of the two test instruments used in this study was the Children's Personality Questionnaire developed by Raymond B. Cattell in 1959. The CPQ consists of fourteen scales each measuring a functionally independent dimension of personality.
Each dimension is defined by two poles or extremes. The child answers 140 forced choice questions. There are 10 questions covering each personality factor. Each factor score is translated to a standard test score and plotted on a personality profile. Each test score gives a description of what the child tends to be like on that particular dimension.

There are two forms to the CPQ, Form A and Form B. Only Form A was used. Form A is divided into two parts, A-1 and A-2. Each part consists of seventy forced choice questions on which the child is instructed to mark which of the two statements fits him best. The test is designed for children between the ages of eight and twelve, with appropriate norms of age and sex. By working with the fourteen scores it is possible to obtain predictions of school related criteria such as school achievement, especially under-achievement. The construct validity of a test is the extent to which the test may be said to measure a theoretical construct or trait. In this case the theoretical construct is the structure of personality. Cattell reports the direct construct validity and the validity coefficient for each factor can be found in the test manual. The criterion validity for the CPQ is not reported. This test was chosen because it can be given either individually or in a group, the statements
are simple and unthreatening and the test is easy to score and interpret.

The second instrument used in this study was a twenty item questionnaire which was completed by the teachers of those students taking part in the study. The questionnaire itself was one page in length and was designed by this experimenter specifically for the purposes of this study. This instrument shall be referred to as the Classroom Performance Rating Scale (CPRS). It was the aim of this questionnaire to provide the teachers rating of the students level of overall classroom success. The questions were made in the form of behavioral statements which attempted to describe the components necessary for successful classroom performance. Four general areas of consideration were included in the questionnaire: Social-emotional factors, Study skills, Academic progress, and Motivational factors. The choice of these areas was based on Blooms Taxonomy of Educational Objectives (1956) and the theoretical discussion by Jastak & Jastak (1946) concerning the development of the wide range achievement test. The Wechsler Intelligence Test scores were obtained from existing student records. Since all the students taking part in this study had been recently screened out of a class for the educable mentally retarded, all
had been tested by the school psychologist in Fremont as part of the screening procedure. It was felt that the test results were recent enough to provide valid and reliable IQ scores.

As a check on the reliability of the instrument, the questionnaire was completed by 3 teachers rating 10 children each. Ten days after the initial rating these three teachers were again asked to rate their same students. This yielded a correlation between rating I and rating II of .95. It was felt that for the purposes of this study this reliability coefficient was adequate. The questionnaire was devised in the absence of any suitable standardized instrument.

Population and Sample

The study was conducted using students attending grades 3 through 12 in the Fremont District. The sample population included 30 students who had been screened out of classes for the educationally mentally retarded and placed in either a regular class or in a class for the educationally handicapped. These students attended schools throughout the district, the sample being drawn from eighteen different schools. There were 8 students from regular classes and 22 students from E.H. classes participating. Since this study was exploratory in nature and because of the limited number of students being screened out of
EMR classes there was no control group used.

Fremont is located in southern Alameda county, about forty five minutes from San Francisco. The area is growing rapidly and many of its residents are from young families with varied socio-economic status. Fremont is a racially homogenous community, but one with varied economic, social, occupational, and residential characteristics.

Test Administration

In the initial phase, the teacher was told that the researcher was completing a project and would appreciate her help. Each teacher was asked to fill out the questionnaire on several students in her class who had been "randomly selected". She was not told that only one of these students was to participate in the research project. This was done so as to eliminate any halo effect and to provide the teacher with some perspective when rating the student.

Any given student may have had class contact with several teachers. For example, if subject 1 had four different teachers during the course of a school day, then each of these teachers was asked to rate a random list of her students with subject one appearing on each of the four lists.
When teachers had completed their rating of the student, each study subject was administered Form A of the CPQ. The students were told only that they were participating in a project on which the researcher needed their help.

Experimental Conditions

As mentioned earlier, the students in the sample population were drawn from grades 3 through 12. Eighteen different schools were involved in the study. For the sake of expediency, all students at a given school were tested together. In some instances, the test administration was individual while in other cases there were as many as five students tested together. Students from regular classes were tested with educationally handicapped students when they were in attendance at the same school.

The number of teachers rating any given student varied from 1 to 5. The reason for this difference was the school placement of the student. While an elementary E.H. student might have contact with only one teacher during the course of a school day, a high school student in a regular program might have as many as five different instructors. In any given case, as many teachers as were available were asked to rate the student in question.
While the criteria for classroom success may vary from classroom to classroom and from program to program, it was felt that teacher ratings on comparative intra-class basis would provide a valid measure of relative success or failure.

**General Methodology**

The dependent variable in this study was success in the classroom. Success was measured by the teachers rating of classroom performance in the areas of social, emotional and motivational factors, study skills, and academic progress. As previously mentioned, there were five rating items in each of these areas and the ratings were made on a five point scale. (See Appendix 2)

The students overall rating was determined by averaging scores on the twenty individual questions. This average score was carried out to two decimal places. Since this study is exploratory in nature and because of the large percentage (85%) of the population sampled there was only a single selection made.

**Analytical Procedures**

The purpose of this study was to find the correlation of eighteen personality and intelligence variables with a criterion variable. The criterion variable was designated as a teacher's
rating of a student's overall classroom "success". The basic analysis was accomplished by use of Pearson product moment formula for correlation.

\[ r = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2 \sum (y_i - \bar{y})^2}} \]

In addition to simple correlational data, a multiple linear regression equation was used in the analytical process. The following formula was used:

\[ \hat{y} = b_0 + b_1 x_1 + b_2 x_2 + b_n x_n + c \]

The acceptable level of significance for this study was set at the .05 level.
The purpose of this chapter is to present the statistical results of the study. Since there are approximately only thirty seven students who have been screened from EMR to regular or EH class, in the entire district, this is a fairly inclusive sample.

**Testing the Hypotheses**

For the most part, the test of a given hypothesis was whether or not it had a significant correlation (positive or negative) with the criterion variable. These correlational hypotheses are presented below:

**Hypothesis 2** formulated as a null hypothesis, stated that:

- There is no significant correlation between the subjects classroom performance as measured by the CPRS and their sex. A non-significant correlation of .16 was found between sex and successful classroom performance. The null hypothesis was accepted.

**Hypothesis 3** There is no significant correlation between the
subjects classroom performance as measured by the CPRS and their full-scale IQ as measured by the Wechsler Intelligence Scale. A non-significant correlation of -.14 was found between full scale IQ and successful classroom performance. The null hypothesis was accepted.

Hypothesis 4
There is no significant correlation between the subjects classroom performance as measured by the CPRS and their Performance Intelligence Quotient as measured by the Wechsler Intelligence Test. A non-significant correlation of .14 was found between Performance IQ and successful classroom performance. The null hypothesis was accepted.

Hypothesis 5
There is no significant correlation between the subjects classroom performance as measured by the CPRS and their Verbal Intelligence Quotient as measured by the Wechsler Intelligence Test. A non-significant correlation of .14 was found between verbal IQ and successful classroom performance. The null hypothesis was accepted.

Hypothesis 6
There is no significant correlation between subjects classroom performance as measured by
the CPRS and their reserved-outgoing variable of personality as measured by the CPQ. A non-significant correlation of .19 was found between the reserved outgoing variable of personality and successful classroom performance. The null hypothesis was accepted.

Hypothesis 7
There is no significant correlation between the subjects classroom performance as measured by the CPRS and their intelligent-less intelligent variable of personality as measured by the CPQ. A non-significant correlation of .31 was found between the intelligent-less intelligent variable of personality and successful classroom performance. The null hypothesis was accepted.

Hypothesis 8
There is no significant correlation between the subjects classroom performance as measured by the CPRS and their lower ego-strength higher ego-strength variable of personality as measured by the CPQ. A non-significant correlation of -.07 was found between the low-high ego strength variable of personality and successful classroom performance. The null hypothesis was accepted.
Hypothesis 9 There is no significant correlation between the subjects classroom performance as measured by the CPRS and their phlegmatic-excitable variable of personality as measured by the CPQ. A significant correlation of .38 was found. The null hypothesis was rejected.

Hypothesis 10 There is no significant correlation between the subjects classroom performance as measured by the CPRS and their obedient-assertive variable of personality as measured by the CPQ. A non-significant correlation of -.27 was found between the obedient-assertive variable of personality and successful classroom performance. The null hypothesis was accepted.

Hypothesis 11 There is no significant correlation between subjects classroom performance as measured by the CPRS and their desurgency-surgency variable of personality as measured by the CPQ. A significant correlation of -.41 was found. The null hypothesis was rejected.
Hypothesis 12 There is no significant correlation between subjects classroom performance as measured by the CPRS and their expedient-conscientious variable of personality as measured by the CPQ.
A non-significant correlation of .14 was found between the expedient-conscientious variable of personality and successful classroom performance. The null hypothesis was accepted.

Hypothesis 13 There is no significant correlation between subjects classroom performance as measured by the CPRS and their shy-venturesome variable of personality as measured by the CPQ.
A non-significant correlation of -.02 was found between the shy-venturesome variable of personality and successful classroom performance. The null hypothesis was accepted.

Hypothesis 14 There is no significant correlation between subjects classroom performance as measured by the CPRS and their self-reliant dependent variable of personality as measured by the CPQ.
A non-significant correlation of .27 was found
between the self-reliant dependent variable of personality and successful classroom performance.
The null hypothesis was accepted.

Hypothesis 15
There is no significant correlation between subjects classroom performance as measured by the CPRS and their vigorous-circumspect variable of personality as measured by the CPQ.
A non-significant correlation of .21 was found between the vigorous-circumspect variable of personality and successful classroom performance.
The null hypothesis was accepted.

Hypothesis 16
There is no significant correlation between subjects classroom performance as measured by the CPRS and their forthright-shrewd variable of personality as measured by the CPQ.
A non-significant correlation of .02 only was found between the forthright-shrewd variable of personality and successful classroom performance.
The null hypothesis was accepted.

Hypothesis 17
There is no significant correlation between subjects classroom performance as measured by the CPRS and their placid-apprehensive variable of personality as measured by the CPQ.
A non-significant correlation of -.02 was found between the placid apprehensive variable of personality and successful classroom performance. The null hypothesis was accepted.

Hypothesis 18

There is no significant correlation between subjects classroom performance as measured by the CPRS and their undisciplined self-conflict controlled variable of personality as measured by the CPQ.

A non-significant correlation of .18 was found between the undisciplined self-conflict controlled variable of personalities, and successful classroom performance. The null hypothesis was accepted.

Hypothesis 19

There is no significant correlation between subjects classroom performance as measured by the CPRS and their relaxed-tense variable of personality as measured by the CPQ.

A non-significant correlation of -.14 was found between the relaxed tense variable of personality and successful classroom performance. The null hypothesis was accepted.
Hypothesis 20  It is a general hypothesis of this study that some multiple linear combination of personality variables will serve as more valid predictors of classroom performance than will a multiple linear combination of Wechsler IQ variables. The multiple linear combination of personality variables 9, 11, and 15 proved to be the most valid combination of predictors at the .01 level when both personality and IQ variables were considered.

Interpretation of Results

When considered independently, only two variables proved to correlate significantly with the criterion variable at the .05 level of significance. These two variables were the personality variables numbered 9, and 11. Although not reaching significance at the .05 level, all but three personality variables had higher correlations with the criterion than did those IQ variables considered, but the significance of these differences was not tested. (Table III)

It was significant that the first three variables entered into linear combination were also personality variables. Those being the variables numbered 9, 11, and 15. In combination
these three variables had a standard error of estimate of .645 and a multiple correlation coefficient of .647. In combination, these variables were able to account for approximately 41% of the variance and had T values significant at the .01 level. (Table I)

In light of the exploratory nature of this study, it was felt that a useful prediction of classroom performance could be achieved using these three variables in a regression equation. This formula with computed values appears in Table II.

The regression equation could theoretically have been expanded to include other personality variables as well as IQ variables. There were several considerations which determined the number of variables included in this equation. As variables are entered into the regression equation, each succeeding inclusion will help the equation account for more of the variance. At the same time a point is reached at which the inclusion of additional variables fails to reduce the standard error of estimate. When the standard error of estimate is no longer being reduced, no more variables need be entered in the equation.

Following this model, the regression equation devised from this study could have included some six personality and two intelligence variables. The standard error figure was reduced
with the addition of the first eight variables. The problem encountered with the inclusion of eight variables was that only three of the personality variables and one of the intelligence variables had T values significant at the .05 level. As a result, it was decided that the inclusion of more than three variables was not indicated inasmuch as they did not markedly improve the predictive power of the regression equation. When using the three personality variables 9, 11, and 15 all T values reached significance at the .01 level.
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TABLE 2

Regression Equation for Prediction of Classroom Success
For Students Screened from E.M.R. Classes into regular
or Emotionally Handicapped Classes.

General Formula
\[ \hat{Y} = b_1 x_1 + b_2 x_2 + b_n x_n + c \]

Formula with Computed Values
\[ \hat{Y} = 16078 x_1 + 24225 x_2 + 13885 x_3 + 2.87600 \]

\( Y = \) Predicted Success
\( x = \) Individual Variable Score
\( b = \) Regression Coefficient
\( c = \) Constant
TABLE 3

Variable Correlation With Criterion - Teacher Rating

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Discussion and Conclusion

At the present time there is a growing trend away from special classes for the mentally retarded. This trend is based on both theoretical and economic considerations. With the reduced number of EMR classes, the number of students served is also decreased. The question facing educators is which students will remain in the special class and which students can profit from placement in a regular class. Guidance departments have been charged with responsibility for this selection and evaluation process.

Because of the negative effects on a child if an incorrect screening decision is made, the selection process is important. The child improperly placed may suffer both emotionally and educationally. Further, the placement and removal process for an improperly placed child is costly to the school district in terms of professional staff time, class disruption and economic expenditures.

If the criterion for success in a regular classroom can be more adequately defined then the class placement decision
can be more knowledgably made, thus reducing the possibility of an incorrect placement. It is this researchers opinion that personality variables have an important place among the criteria of success in the regular or EH classroom. This study supports that opinion.

This study was concerned with identifying effective criteria for the screening of EMR students into a regular or an EH class placement. It was felt that intelligence measures did not go far enough in explaining the success or failure of students in school. It seemed clear that the relationship between IQ and classroom performance was insufficient to be of utility in making placements. An intelligence quotient can be looked upon as a measure of potential performance. It seems that personality variables play a large part in determining whether or not this potential is utilized.

Thirty former EMR students took part in this study; twenty two of whom are now in classes for the educationally handicapped and eight now attend regular classes. Full scale IQ's ranged from 57 to 94. Within this almost forty point spread of scores, there was an equally varied pattern of successes and failures according to teacher ratings. There
was actually a negative correlation of -.14 between full
scale IQ and the teacher's estimate of the students classroom
success. Obviously, classroom performance was related to
factors other than IQ. The significant correlations between
successful teacher ratings and personality variables supports
the hypothesis that personality is an explanatory factor in
predicting how well a child will do in the classroom.

In light of this study as well as other research evidence,
it seemed that some systematic consideration should be given to
the part played by a personality assessment in a comprehensive
screening procedure for the EMR student. In this study the
Childrens Personality Questionnaire proved to be a more valid
predictor of classroom success than did the Wechsler Intelligence
Quotient. Personality variables 9, 11, and 15 entered as values
in a regression equation provided a valid tool to help solve
the screening decision. As mentioned earlier, only three per-
sonality variables were taken into account when formulating this
equation. This is not to say that intelligence measures have
no place in prediction. What was shown was that in this study
the IQ test did little to improve the over all predictive
power of the equation and at best could only be considered as
a predictive factor of secondary importance.
After examining the Wechsler scores of those students screened from EMR classes in Fremont, it was apparent that the district's psychologists did not depend solely upon these scores. Student scores showed no pattern and no cut off scores were evident. Students were not placed by their IQ scores. This study points up the utility of taking a systematic look at the variable of personality rather than leaving it as some intuitive and unspoken consideration. Personality should assume a formal place and figure prominently in the screening and placement decision.

Limitations

This study was intended to investigate the predictive validity of the Children's Personality Questionnaire in predicting classroom success. The results of the study supported the major hypotheses. However, the results should be considered tentative in light of several limiting factors.

This study included both males and females from grades four through twelve. Regular and EH classes were sampled. In light of the purpose for which this predictive model was established, that is for use with precisely this type of population, the conclusions seem generalizable. From the simple correlational data it was determined that some personality
variables were significantly related to classroom success. This conclusion does not seem to have any theoretical or practical limitation. The practical application of the regression equation, however, is tentative and dependent upon follow up studies to validate these findings. In replication this study should have more teachers rating the students being studied. Further, other students not in the study should be rated by the teachers before these teachers involved learn of the purpose of the study. This would help to avoid any possible effects upon the teacher ratings.

When evaluating the results of this study, the reader should keep in mind that the criterion variable, classroom success, was measured on an unstandardized instrument. In spite of the specific questions on the questionnaire, each teacher rater may well have differed in their subjective definition of classroom "success". Other criterion variables might have been used in place of teacher ratings. The use of such measures as the student's grade point average or achievement test scores would have resulted in an inherently less subjective evaluation process.

Recommendations

It is recommended that this study be replicated using
other measures of personality as well as other measures of classroom success. It is felt that the basic assumption is sound; namely, that personality affects classroom achievement. It remains unknown, however, just how much the results of the study are tied to the specific instruments and sample used. A replication of this study might employ both a larger sample size as well as different instruments. The comparison of several districts with differing re-screening policies is also suggested.
REFERENCES

Baller, W. R., A study of present social status of a group of adults who, when they were in elementary schools, were classified as mentally deficient. Genetic Psychology XVIII 1936 165-244.


Bonfield, J. R., Predictors of Achievement in E.M.R. children Dissertation Abstracts International 1969 30 (3A) 1009


De Sona, P. "The Role of Consistency in Identifying Characteristics of Three Levels of Achievement", Personnel & Guidance Journal 1964, 43 (2) 145-149.


APPENDIX
CLASSROOM PERFORMANCE RATING SCALE

Name ______________________  Age __________  Grade __________
Teacher ____________________ School ________________  Date __________

Please rate each and every statement by putting an X in the appropriate square after the statement. The squares are numbered from 1 to 5 and represent the degree to which you have noticed the described behavior. The bases for making a judgment are given below:

1) You have not noticed this behavior at all.
2) You have noticed the behavior to a slight degree.
3) You have noticed the behavior to a considerable degree.
4) You have noticed the behavior to a large degree.
5) You have noticed the behavior to a very large degree.

1. Good peer relations: the student is friendly and gets along well with other students.
2. His moods are stable; without wide mood swings. (happiness, depression etc.)
3. He accepts help and/or criticism from others (teachers, students)
4. He tends to see things as other students do rather than using bizarre explanations etc.
5. When frustrated his behavior is adaptive rather than physically and/or verbally aggressive (not flexible).
6. He is attentive in class; participates and "doesn't just sit".
7. He can work independently rather than being pushed or constantly reminded.
8. His efforts are persistent, he makes an equal and consistent effort, (not sporadic ups and downs).
9. His work is conscientiously done; not careless or hap-hazard.
10. His work is completed and handed in on time.
11. He is working up to his potential.
12. He shows good understanding and is able to master subject matter being tested.
13. He is working up to grade level in most subjects.
14. His achievement is on a par with that of the other students in the class.
CLASSROOM PERFORMANCE RATING SCALE

15. He is making good progress with more than minimal performance.
16. He appears interested in school: participates in class work and discussions.
17. He seeks new learning experience in the classroom; (he is not satisfied with just the required assignments)
18. He takes an interest in his performance and is realistically concerned about his progress.
19. He is willing to continue in spite of some initial failures.
20. He appears self-directed and not dependent upon teacher praise and encouragement when doing class work.
Dear Teacher:

I am a graduate student from California-State Hayward presently completing the school Psychologist program. I ask your cooperation in a research project I am conducting throughout the Fremont Unified District.

Because I realize you have very limited time and because of the large number of teachers who must be contacted, this note will probably be my only contact with you.

What I would like you to do is complete the enclosed rating scales for the students listed below. If you will leave the completed forms in your mail box, I will return to pick them up within several days.

This project has been cleared with the District Office and your cooperation is desperately needed.

Thank you for your concern.

Sincerely,

Barry M. Healy