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A Comparison of the Self-Concept Levels of Educable Mental Retardates in the Wenatchee Public Schools and the Lacey Public Schools

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A COMPARISON OF THE SELF-CONCEPT LEVELS OF EDUCABLE MENTAL RETARDATES IN THE WENATCHEE PUBLIC SCHOOLS AND THE LACEY PUBLIC SCHOOLS

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CHAPTER I

PROBLEM

I. BACKGROUND

Providing for the individual differences of each child has always been a paramount goal of the educator. In practice, however, too often the sequence has been to first meet the needs of the class average and then attend to the exceptional as time and money allow. Since the turn of the century, there has been a growing concern that the exceptional child has not been adequately educated. After World War II, attention became focused on meeting the needs of the retarded. This decade has seen tremendous advancements in curriculum and research. With money now coming more easily, virtually every state in the union is working to perfect its programs. Colleges and universities are for the first time offering courses and degrees for teachers of the retarded. Students are finding the field an honorable study and promising of gratifying rewards. Special education is rapidly moving away from the infamous "opportunity room" to an organized effort to meet the educational needs of the mentally handicapped.

With the expenditure of money mounting in proportion, educators and citizens are recognizing the need for evaluation. "Education for what?" is the question begging for answer. What is the potential of the retarded? Can the mentally subnormal be trained to lead a productive and well-adjusted life?

Research has, for years, been pointing toward life-oriented curricula. The Cincinnati Public Schools in a recent bulletin presented a curriculum, . . . based on the belief that slow learning children must realize their maximum potential and become useful contributing members of society (5:iii). At the secondary level, this means a curriculum based on vocational training. Probably no area in the educational program for slow learners is more important than that which concerns itself with preparing youth to adjust successfully to the demands of employment (5:529). Indeed, vocational training is now sweeping the high school special education curricula of the nation. The validity of this approach is verified by research. Applegate (1:369) concluded from his studies that

> . . . the retarded child needs to start training for a specific job placement fairly early in his school career. He needs training physically for the job and his thoughts must be conditioned.

C. S. Eskridge (3:455) advocated special education programs that have a sequential preparation of materials leading to employment in the community.

It would seem that at least the retarded are being given a chance and are being directed toward a productive and well adjusted life.

II. SIGNIFICANCE OF THIS STUDY

It is generally accepted by educators that the mentally handicapped special student has different needs to be met. Many studies have been made to determine what the needs of the retarded are. These range from the early curriculum studies of Duncan (12) which amounted to "watering down" the normal academic curriculum, to the more recent proposals which stressed a life and occupational directioned course of study. As stated earlier, current schools of thought place heavy emphasis on occupational success as a curriculum goal for the secondary level mentally handicapped.

Although much has been done to point the direction to go, little has been done to empirically test the effectiveness of our special education programs in meeting the needs of the retarded. Assuming there are certain characteristics that distinguish the occupational success

potential of the retarded, what is the best approach for developing these traits in the individual? Can the validity of the special education concept be assumed? Do the special education graduates succeed in, and adjust better to employment?

In a recent interview, Dr. Newt Buker, Supervisor of Special Education for Washington State, expressed the need for concrete evidence to show the state legislature that requests for funds for special education are justified. While this can probably never be done accurately, the question studied here relates to the effectiveness of our current special education programs in preparing the retarded student for occupational success and thus productive citizenship.

It is known that there are characteristics that distinguish the employable retardate from the unemployable and that these characteristics are mostly related to personality traits. Much of what we regard as personality is in actuality the result of how we perceive ourselves in relation to our environment. Our self perception may be inaccurate due to the stress of failure or social duress. Generally speaking, the more accurate the self perception, the better the self confidence and the higher the chances for success in life and employment.

Does the educable mentally retarded student, enrolled in special education, rate higher in measured self concept than the educable mentally retarded student enrolled in the regular secondary school program?

III. THE PURPOSE OF THIS STUDY

It shall be the purpose of this study to determine the measured self concept of the educable mentally retarded enrolled in a secondary special education program and to compare it with the measured self concept of the educable mentally retarded enrolled in a normal secondary school program.

Hypothesis

Completion of the secondary special education program of Wenatchee, Washington, results in a higher measured self concept rating for the educable mentally retarded than completion of the regular secondary school program in Lacey, Washington.

Null Hypothesis

Completion of a secondary special education program of Wenatchee, Washington, does not result in a higher measured self concept rating for the educable mentally retarded as compared to completion of the regular secondary school program in Lacey, Washington.

IV. LIMITATIONS OF THIS STUDY

Intelligence

It is known that self concept and intelligence are positively correlated and an attempt was made to control this variable in this study. Definite guidelines were established for selecting the sample, but difficulty arose due to the fact that the intelligence test, used to assign an intelligence rating, varied with the individuals involved as did the time of testing. It was not feasible within the confines of this study to retest each subject and intelligence scores were accepted from the WAIS, WISC, APT, and the Lorge Thorndike. Figure one outlines the tests and testing dates for all the subjects. APT scores were converted to WISC equivalents, but no conversion statistics could be found for the Lorge Thorndike or the WAIS.

Location of Sample

Due to public reaction to personality testing of any nature, it was necessary to forego the ideal and the study was made in two districts which were similar in size but a considerable distance apart and possessive of somewhat different environmental characteristics.

Testing Procedure

The successful completion of the testing was dependent upon the cooperation and coordination of the various school personnel involved, as well as the subjects. Within the confines of the school setting, it was necessary to test the subjects whenever the best opportunity arose. This was especially true of the experimental group which was enrolled in a "work-experience" program involving the business community. The result was testing of groups that ranged in size from one to ten.

V. DEFINITION OF TERMS

Educable Mentally Retarded

Those subjects tested by qualified psychometrists and found to be functioning with an I.Q. of between sixty-five and eighty-five, and where a designation of educable mentally retarded has been made in the permanent records.

Special Education

Program in which the educable mentally retarded are homogeneously grouped because of their handicap and are given a specifically different curriculum. No assumptions are made regarding the nature of the curriculum

other than it is different and the class load is smaller. In this study, the special program included a work experience program in which the subjects were actually placed at jobs in the community for a portion of the day.

Regular Secondary Program

The program offered to every secondary student in the district with no special curriculum designated for the educable mentally retarded in homogeneous groups.

Secondary

Grades nine through twelve, or high school level.

Self-Concept

Self esteem, or how a person perceives himself in relation to his personal values system. In this study, this consists of those perceptions, beliefs, feelings, attitudes, and values which the individual views as describing himself (30:221).

CHAPTER II

REVIEW OF LITERATURE

Although there is a paucity of information, which is surprising considering the extent of special programs now underway, there has been some research done in an attempt to evaluate the effectiveness of special classes. Porter and Millazzo (31:410) made a comparison of the post-school adjustment of educable mental retardates in special classes and those in regular classes. They found that adjustment tended to favor the special class group. Seventy-five percent of the special class graduates were self supporting, as compared to seventeen percent of the control group. Carriker (4:10) made a similar comparison in Nebraska, and found that special class students tended to drop out of school earlier and had more court referrals. These same students, however, tended to have higher employer ratings.

Any effort to rehabilitate a mentally retarded person must consider the nature and potential of the retardate. There is evidence to verify that the retarded are employable. Keeler (21:937) made a follow-up study of the educable mentally retarded educated in San Francisco and found forty percent were employed, thirty-eight point three percent were unemployed, and

twenty-one point seven percent had been previously employed but were currently out of work. Magnifico and Doll (23:32) and DePianta (11:404) felt that the mentally handicapped are not only employable, but also capable of good social and employment adjustment.

Efforts are being made to determine the characteristics that distinguish an employable retardate from a non-employable one. Kolstoe (22:329) studied the employed and not-employed and noted, . . . a clear superiority favoring the employed group in physical, personality, social, and work characteristics. Many other sources have noted characteristics and have emphasized the personality and character traits over the actual job skills. This is substantiated by Huber and Soforenko (19:51), and by Michael-Smith (28:139) who states, . . . it has been established that personality traits are very largely responsible for the success or failure of the mental deficient in industry. Cohen (8:54), and Cruichshank and Johnson (10:129) also concluded that how one looks at his self and how he interrelated between self-concept and other values has bearing on success in a vocational interest area.

Of particular interest in this study was the characteristic of self concept. Sufficient study has

been done to determine the nature of self concept, the factors that foster its development or retardation, and the vitalness of the self concept to the whole picture of life adjustment.

It became obvious that any attempt to relate special classes and self concept must include some definition of what factors influence the development or improvement of the self image, and conversely, what elements work to inhibit adequate self concept development.

Studies of exceptional children by Gowan (18:374) in 1965 brought him to the conclusion that the following were pertinent to effecting change in self concept in exceptional children.

1. Regard and attention to his problem.
2. Sympathetic understanding.
3. Personal interest in the student.
4. Specifying and isolating the fear.
5. Developing interactions with the outside world.
6. Seeking out and building on strengths.

Many authors point to the elements of success and failure as causal to self esteem. Gorlow, et al (17:553-555), reported a correlation between a favorable self attitude and scores on achievement tests, measures of intelligence, success in training and success on parole from the institution where the retardates studied

and resided. Cohen (7:638), asserts that in his study, successes led to increases in self-evaluation and failure led to decreases.

Bandura and Walters (3:100) placed heavy emphasis upon social influences on the self concept and concluded that much of the child's self image evolves from the attitudes his peers hold toward him. Michael-Smith and Kastein (27:435) were referring to this when they said (concerning the retarded)

> . . . because he himself is objective evidence of defect and inferiority, the child injures parental pride and the adults indicate their disappointment in him in both overt and subtle ways. More often than not he is the target of suspicion, fear, taunts, and rejection from others.

Goldstein and Seigle (16:215) reported an attitude of self devaluation as being characteristic of the educable mentally retarded. They felt this was the result of imbalance between the child's competencies and the demands of his environment. His behavior reflects strong feelings of unworthiness and that he holds his abilities in low esteem.

Probably the most pertinent study made was an investigation by Meyrowitz (26:443) into the efficacy of special homogeneous classes for educable mentally handicapped children. He found definitely (.05 significance) that the mentally handicapped child is more derogatory of

himself than the normal child. In his comparison of the educable mentally retarded in special classes with those in regular classes, he cites the special class students as significantly more self derogatory. A partial explanation for this may be found in the work of Johnson and Ferreira (20:36) in which a positive relationship ($r = .53$) was found between the child's attitude and his perception of his parents attitude toward special education.

A legitimate question in any comparative study of education is what, if anything, can a teacher do to effect positive change in the self image of students. Perkins (30:229) tested the effect of a teacher in-service training program of child study, and found a positive correlation with subsequent self concept level measurements done with their students. Goldstein and Seigle (16:221) emphasize that it is necessary that the teacher take steps to counteract tendencies toward self-devaluation as early as possible. The extent to which the child can correctly estimate his abilities and limitations will frequently determine the quality of his adjustment in society.

> If the educable mentally retarded child is permitted to nurture and develop his feelings of unworthiness during the school years, he will approach many situations in adulthood with anticipations of failure (16:221).

Verville (33:436) echoes the above when she characterizes the life of the retarded child as consisting of inferior achievement, rejection, isolation, degradation, and an apprehensive approach to school. She concludes that, the child's attitude about himself significantly affects his ability to learn in school and later to conduct himself as an adult (33:436).

Rogers (32:414-415) stressed the importance of self evaluation to the development of an adequate self concept. O'Neil (29:614-19) measured the ability of mentally retarded persons to rate relative work potential. Subjects later employed were more consistent raters. A relationship between self concept and the level of work adjustment was found, and the results of O'Neil's work support emphasis on self concept development in habilitation programs. This is also supported by Eskridge and Partridge (13:455) who found that the mentally handicapped were losing jobs more often by their failure to adjust to a work situation rather than their inability to perform the job assigned.

CHAPTER III

PROCEDURE OF INVESTIGATION

It was felt that due to the changes and innovations in the field of special education during the past five years, any evaluation of the effectiveness of special classes must be cross-sectional in design rather than longitudinal. This study did not attempt to measure improvement of any kind, but a comparison was made of the current ratings of two separate groups of students. To do this, an assumption was made concerning the quality of the school program and its nature. (i.e. regular or special) No attempt was made to either define or control the specific content of the school curricula involved.

I. EXPERIMENTAL DESIGN

The study is essentially a crosssectional, univariate comparison of the self reported self concept level of educable mental retardates.

In this experiment, the subjects enrolled in special classes were considered the experimental group, and those in the regular program, the control group. Each group was located in a separate school and district.

II. SELECTION OF THE SAMPLE

Location: Selection of the districts to be studied was accomplished using the following criteria:

1. Size.

2. Nature of the school program for educable mental retardates.

3. Permission. Five different districts were approached before permission could be obtained to study an experimental group.

Subjects: The permanent record files were searched and all students meeting the age and intelligence criteria were included in the study. It should be noted that there is a high dropout rate among students of this ability range and this could account for the small n of the study. In fact, two subjects in the control group left the school program between the time of initial screening and test time.

The primary screening criteria were:

1. Age--in order to control the possible influence of age variation on the study, only those subjects between the ages of seventeen and nineteen were chosen.

2. Intelligence--as defined earlier, educable mentally retarded will be assumed as those with a measured I.Q. score of between sixty and eighty-five.

Age was computed using September 15, 1968 as an arbitrary cutoff point. Intelligence scores on the most recent test were accepted, and conversion was made to the Wechler Intelligence Scale for Children whenever possible. Students in the special classes who did not meet the criteria were tested but not included in the study. Also, four students were not included in the control group because of special classes given to them.

Sample size was also affected by three control group members and three experimental group members who could not be located at any of the testing times because of illness or other committments.

Final selection of each subject was positioned upon parental permission to participate in the study, and upon the consent of the subjects themselves. The parental letters sent home with the students are included in Appendix A. No subject was left out due to non-permission.

III. NATURE OF THE SCHOOL PROGRAMS

Wenatchee: The school district is involved in a work experience program which takes the junior and senior

special students out into vocational training in the community. This is supported by part time school training in fundamental academic and shop skills.

Lacey: Although North Thurston High School has a special education program, only a very few of the educable retardates are involved. The majority are in the regular classroom. Only those in the regular classrooms were included in the study.

IV. MEASUREMENT

Variables

The variable measured was the level of self concept. Age and intelligence were criteria for selection and were not considered variables in the study.

Fitts (15:15), in the manual, found no significant correlation between the scale and completion time. Completion time was not considered significant in this study and was not recorded.

V. DESCRIPTION OF THE TENNESSEE SELF CONCEPT SCALE

A short rating scale for use in measuring self concept. The test is divided into categories corresponding to the various personality traits validated by Dr. William H. Fitts as being significant in the measurement

of self concept. These characteristics are arranged in a two dimensional, 3 x 5 scheme with ten extra questions comprising a Self-Criticism section which serves as a check for a defensive or overly complimentary attitude toward the self. Table One outlines the scale design including the self criticism section.

The scale is made up of 100 statements, forty-five of which are deemed positive, forty-five negative, and ten self critical. The subjects responded with a five point rating ranging from completely false (1) to completely true (5). The statements were originally taken from other self report scales and from original written self descriptions. The testee is asked if the statements apply to him (15:1).

TABLE I

THE TENNESSEE SELF CONCEPT SCALE

The 3 x 5 Scheme with the Self Criticism Section

	Column A Physical Self	Column B Moral-Ethical Self	Column C Personal Self	Column D Family Self	Column E Social Self	Self Criticism
Row I Identity--What he is	5	5	5	5	5	4
Row II Self Satisfaction--Acceptance of Self	5	5	5	5	5	4
Row III Behavior--How he acts	5	5	5	5	5	2

Total = 100 Statements

VI. VALIDITY OF THE TENNESSEE SELF CONCEPT SCALE

Use of the scale is supported by Dr. Fitts in the manual (15:14). The norms were established using six hundred twenty-six persons ranging in age from twelve to sixty-eight. All elements of society were represented. The scale is highly correlated to other personality measures, specifically the Minnesota Multiphasic Personality Inventory and the Edwards Personal Preference Schedule (15:17)

VII. REASONS FOR SELECTING THE TENNESSEE SELF CONCEPT SCALE

Reasons for selecting this particular test are: (1) the test can be administered individually or in small groups; (2) it appeared to be suited to the age and ability of the group to be tested; (3) it appeared that it could be administered orally without affecting the reliability (24:29).

VIII. ADMINISTRATION OF THE TEST

On the day prior to testing, the subjects were called in individually and the experiment was explained to them briefly. If they consented to participating in the study, they were given letters of explanation and

permission (See Appendix A), and were asked to come in at an agreed upon time the next day.

The scale was administered in groups of between two and ten persons. Procedure was similar to that described by Marshlain (24:35) and involved use of the overhead projector to aid the subjects in reading the test. The answering procedure was carefully outlined to the students and the statements were then projected singly on the screen and read aloud three times by the testor. A close watch was made at the beginning of each test to be certain the answering process was being done properly.

CHAPTER IV

DATA

I. TREATMENT OF THE DATA

At the completion of testing, the score sheets (counseling form) were filled out and eight sub-test scores, a total positive score, distribution and variability scores were calculated (15:5-6) for each subject. Means for the eleven scores were compiled for the control (Table II) and experimental (Table III) groups. Tables II and III also show the means of the groups by sex.

TABLE II

CONTROL GROUP: DESCRIPTION OF MEAN SCORES

	Total	Boys	Girls
Total Positive	315.312	310.900	322.666
Row 1 - Identity	118.625	117.200	121.000
Row 2 - Self Satisfaction	94.562	92.100	98.666
Row 3 - Behavior	102.125	101.600	103.000
Column A - Physical Self	68.125	68.700	67.166
Column B - Moral-Ethical Self	61.812	58.000	68.166
Column C - Personal Self	60.312	60.700	59.666
Column D - Family Self	63.000	62.200	64.333
Column E - Social Self	62.062	61.300	63.333
Self Criticism	33.375	31.700	36.166
Consistency	52.437	51.700	53.666
Distribution	99.125	91.700	111.500

TABLE III

EXPERIMENTAL GROUP: DESCRIPTION OF MEAN SCORES

	Total	Boys	Girls
Total Positive	307.700	307.750	307.625
Ron 1 - Identity	114.450	110.666	120.125
Row 2 - Self Satisfaction	91.450	93.833	87.875
Row 3 - Behavior	101.800	103.250	99.625
Column A - Physical Self	67.950	67.583	68.500
Column B - Moral-Ethical Self	57.700	57.250	58.375
Column C - Personal Self	60.050	61.666	57.625
Column D - Family Self	61.550	60.916	62.500
Column E - Social Self	60.450	60.333	60.625
Self Criticism	36.450	36.666	36.125
Consistency	57.500	52.250	65.375
Distribution	120.850	113.083	132.500

For comparison, the mean scores for the experimental and control groups were graphed on a profile sheet (Figure I) which also shows the standardized norms for the Tennessee Self Concept Scale. This profile sheet was also used to graph the distribution of the individual scores of the experimental group (Figure II) and the control group (Figure III).

FIGURE I

TENNESSEE SELF CONCEPT SCALE

COMPARISON OF THE MEAN SCORES OF CONTROL

AND EXPERIMENTAL GROUPS

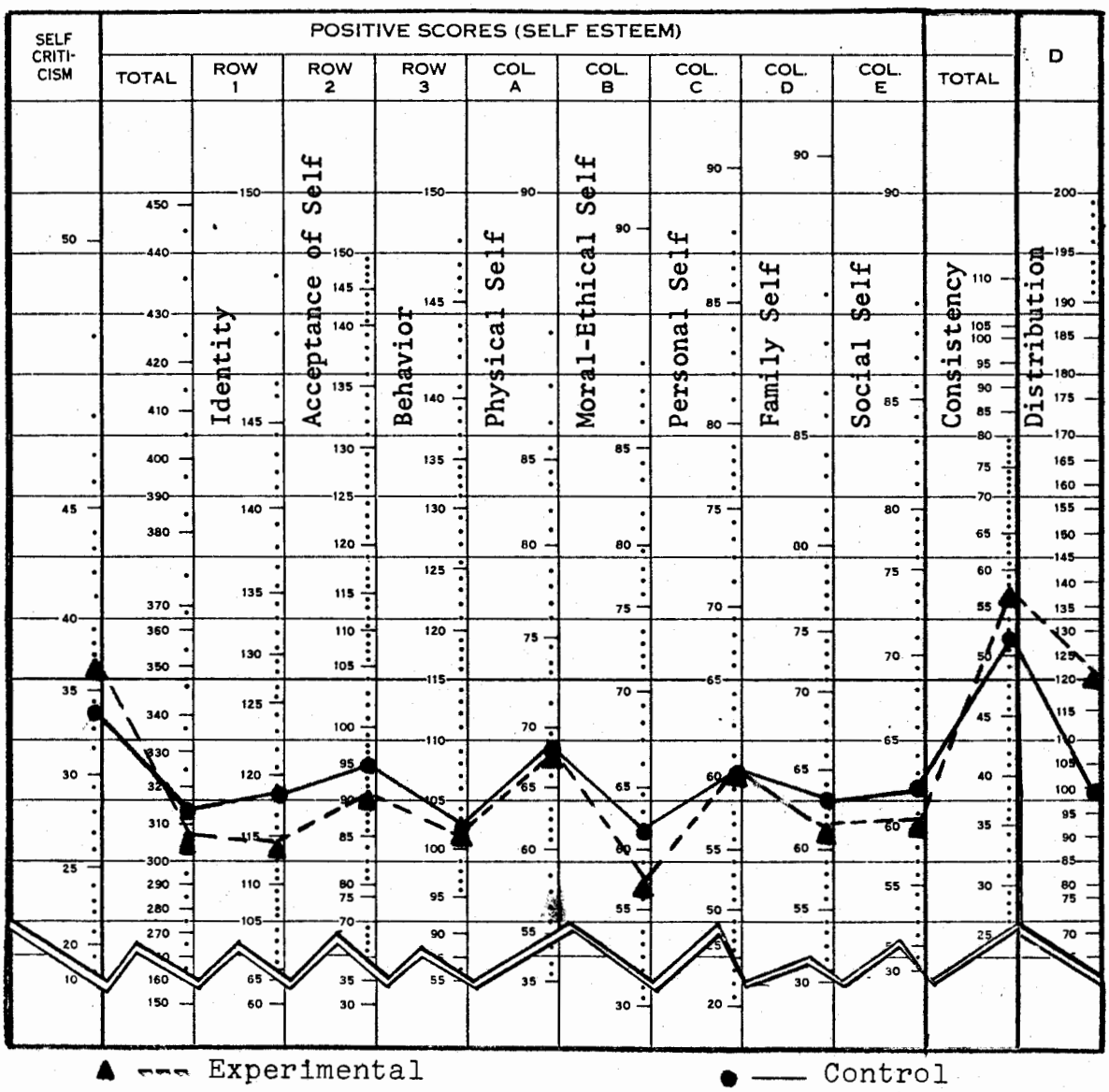


FIGURE II

DISTRIBUTION OF INDIVIDUAL SCORES:

EXPERIMENTAL GROUP

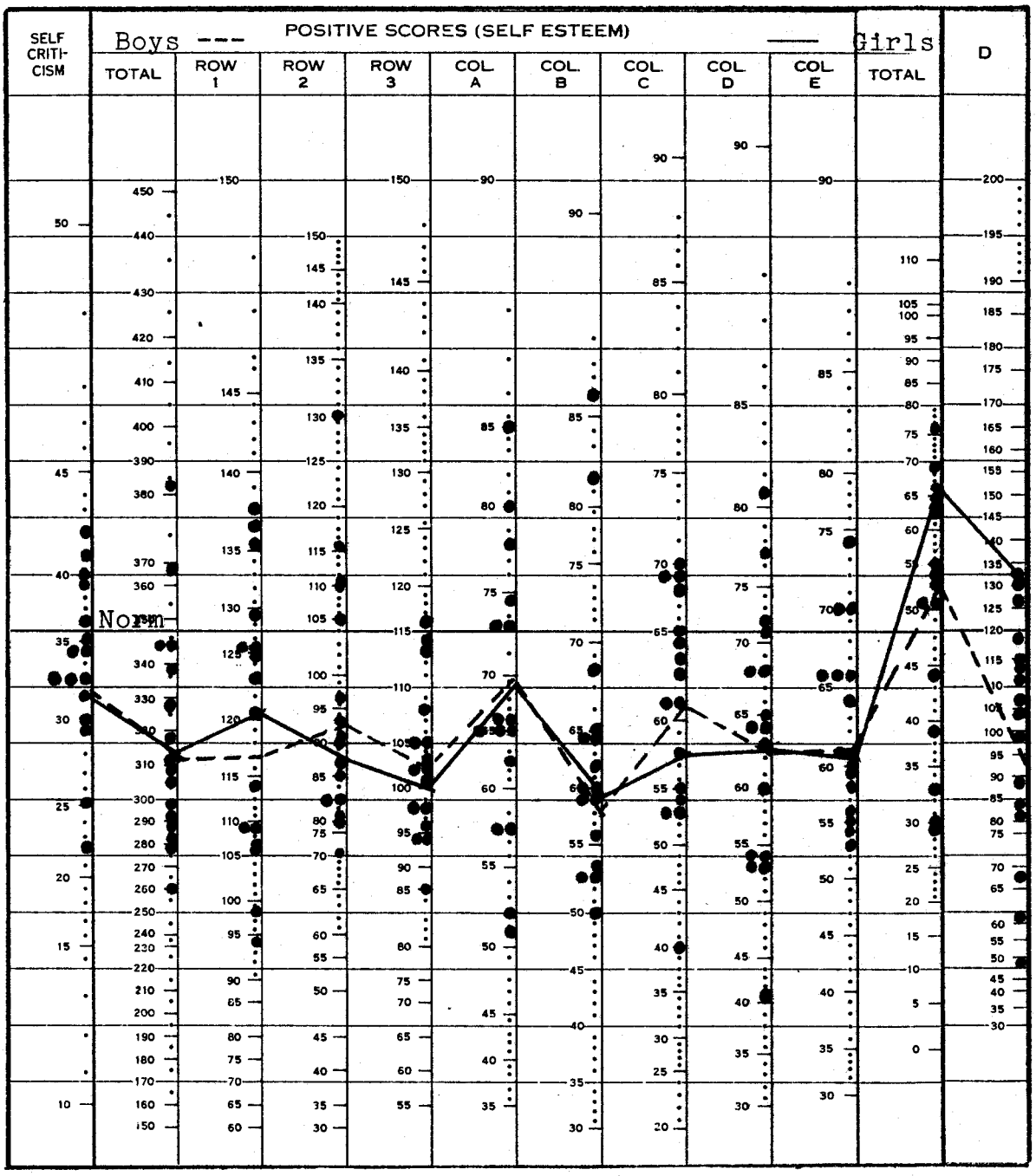
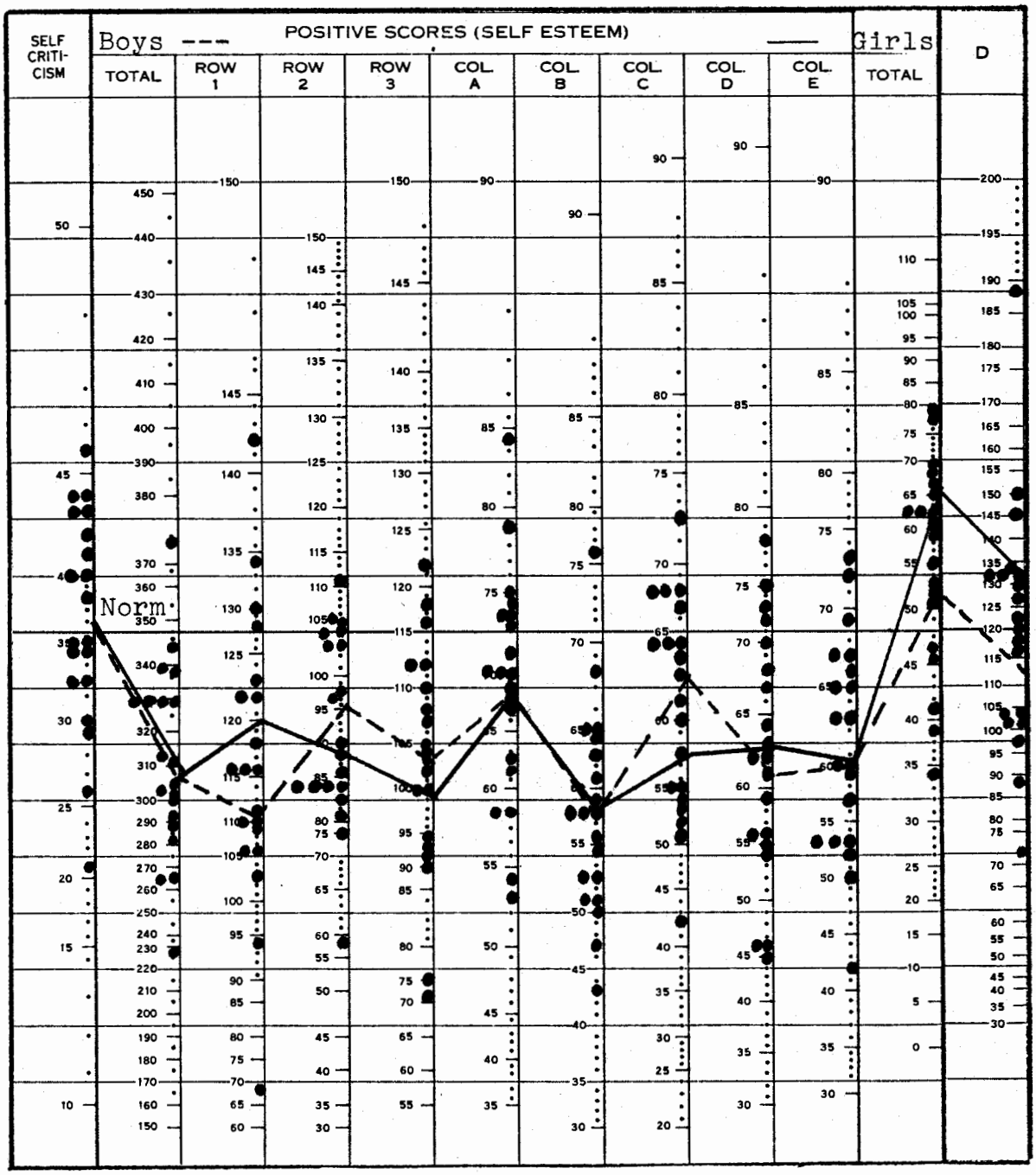


FIGURE III

DISTRIBUTION OF INDIVIDUAL SCORES:

CONTROL GROUP



To statistically compare the performance of the two groups in this study, a standard T-test of significance was calculated on each of the eleven scores (ten sub-tests, total positive, distribution, and consistency). All calculations of the T-test were performed by the computer located at Central Washington State College. T-test results on the two groups are shown in Table IV.

In the interest of serendipity, sex differences were compared by running T-tests on the mean scores of: (1) boys vs. girls (Table V); (2) experimental boys vs. experimental girls (Table VI); (3) control boys vs. control girls (Table VII); (4) control boys vs. experimental boys (Table VIII); and (7) control girls vs. experimental girls (Table IX).

II. INTERPRETATION OF THE DATA

The hypothesis that the experimental group would achieve higher measured self concept scores was treated as a single tail, directional hypothesis and the T-test results were plotted on a "t-distribution" table (2:337) with a significance level of .05 accepted for rejection of the null hypothesis that there would be no difference between the two groups.

It can be seen on Table IV that only one of the eleven test scores obtained a level of significant difference. This score, distribution, was quite high, sufficient to be afforded a significance of .025. The distribution score is a summary of the way the subject distributed his answers across the five available choices in completing the scale. It is interpreted as a measure of one aspect of self perception: certainty about the way the subject sees himself. High scores indicate that the subject is very definite and certain in what he says about himself (15:3). Restated, in terms of this study, it would seem that the experimental subjects were, as a group, more sure about their opinion of themselves. Conversely, the control group appears to be more guarded and defensive. In terms of the test, the control group responded by employing more three's and are thus deemed more non-committal than the experimental group.

TABLE IV

T-TEST RESULTS: CONTROL VS. EXPERIMENTAL GROUP*

1.697 = .05 Significance

Item	Sub-Test	Score	Degrees of Freedom	Significance
1.	Total Positive	.68497495	34	
2.	Identity	.83564292	34	
3.	Acceptance of Self	.63388942	34	
4.	Behavior	.09045700	34	
5.	Physical Self	.06211011	34	
6.	Moral-Ethical Self	1.37132270	34	
7.	Personal Self	.10135835	34	
8.	Family Self	.43386801	34	
9.	Social Self	.67585437	34	
10.	Self Criticism	-1.49909090	34	
11.	Consistency	-1.12276000	34	
12.	Distribution	-2.58654970	34	.025

*Experimental Group - Special Classes, Wenatchee High School, Wenatchee, Washington.
Control Group - Regular classes, North Thurston High School, Lacey, Washington.

Table IV reveals also, that the positive scores for both groups were well below the standardized norms for the Tennessee Self Concept Scale, which is seen to be representative of the general population.

Since no hypothesis was made concerning sex differences, it was decided this comparison was non-directional and constituted a two-tailed hypothesis. When treated in this manner, three comparisons were found to be significant. Comparing all the boys with all the girls (Table V), the girls were significantly (.05) higher scores and this could be subjected to the same interpretation as described earlier.

TABLE V

T-TEST RESULTS: TOTAL BOYS VS. TOTAL GIRLS

2.042 = .05 Significance

Item	Sub-Test	Score	Degrees of Freedom	Significance
1.	Total Positive	- .40003838	34	
2.	Identity	-1.33677330	34	
3.	Acceptance of Self	.10224732	34	
4.	Behavior	.34889185	34	
5.	Physical Self	.05679067	34	
6.	Moral-Ethical Self	-1.48751740	34	
7.	Personal Self	1.01327640	34	
8.	Family Self	- .47599205	34	
9.	Social Self	- .39938261	34	
10.	Self Criticism	- .76397907	34	
11.	Consistency	-1.92029070	34	
12.	Distribution	-2.33833480	34	.05

A comparison of the experimental boys and experimental girls (Table VI) revealed a difference (.05) in the consistency (variability) scores. This score measures the inconsistency from one area of self percept on to another. A high score here would indicate that the person's self concept is so variable from one area to another as to reflect little unity or integration. Well integrated people tend to score lower on these scores (15:3). In this study, the girls scored higher and it could be said they are not as well integrated or consistent as the boys.

TABLE VI

T-TEST RESULTS: EXPERIMENTAL BOYS VS. EXPERIMENTAL GIRLS

2.101 = .05 Significance

Item	Sub-Test	Score	Degrees of Freedom	Significance
1.	Total Positive	.00816428	18	
2.	Identity	-1.33607790	18	
3.	Acceptance of Self	1.06255040	18	
4.	Behavior	.57267738	18	
5.	Physical Self	- .24903222	18	
6.	Moral-Ethical Self	- .29119225	18	
7.	Personal Self	1.26718970	18	
8.	Family Self	- .33429967	18	
9.	Social Self	- .07987110	18	
10.	Self Criticism	.16243307	18	
11.	Consistency	-2.63255030	18	.05
12.	Distribution	-1.67815540	18	

Table VII is a description of the T-test scores within the control group and shows that when the girls were compared with the boys, no significant difference was noted on any of the sub-tests or total scores.

TABLE VII

T-TEST RESULTS: CONTROL BOYS

VS. CONTROL GIRLS

2.145 = .05 Significance

Item	Sub-Test	Score	Degrees of Freedom	Significance
1.	Total Positive	- .55682845	14	
2.	Identity	- .47600928	14	
3.	Acceptance of Self	- .65323171	14	
4.	Behavior	- .27142568	14	
5.	Physical Self	.31753616	14	
6.	Moral-Ethical Self	-1.88053170	14	
7.	Personal Self	.20871294	14	
8.	Family Self	- .32517903	14	
9.	Social Self	- .55134230	14	
10.	Self Criticism	-1.50704530	14	
11.	Consistency	- .28006145	14	
12.	Distribution	-1.92550900	14	

Item 10 of Table VIII shows that the control boys were less critical of themselves than the experimental boys. It is considered healthy by the authors of the scale (15:3), for a person to be reasonably critical of himself. When a person scores low on this item, it is suspected that he has not been open and honest or perhaps has been defensive.

TABLE VIII

T-TEST RESULTS: CONTROL BOYS

VS. EXPERIMENTAL BOYS

2.086 = .05 Significance

Item	Sub-Test	Score	Degrees of Freedom	Significance
1.	Total Positive	.26322039	20	
2.	Identity	1.06443270	20	
3.	Acceptance of Self	- .33784493	20	
4.	Behavior	- .40508413	20	
5.	Physical Self	.30978022	20	
6.	Moral-Ethical Self	.28592066	20	
7.	Personal Self	- .32670602	20	
8.	Family Self	.39073504	20	
9.	Social Self	.31984224	20	
10.	Self Criticism	-2.16334780	20	.05
11.	Consistency	- .09314054	20	
12.	Distribution	-2.01311400	20	

Table IX reveals no real difference in the test scores of the two total groups of girls. Perhaps the only significant fact to be noted is that the groups of boys showed (Table VIII) considerable difference on the critical sub-test while the girls did not. A review of Item 10 mean scores (Tables II and III) shows that the total experimental group and the control girls are quite similar in their self criticism scores (Item 10) while the control boys stand out with a mean score well below the others. Again, as stated above, openness and honesty would become suspect with respect to the control boys.

Table IX displays the T-test results of the comparison of the group of control girls and the experimental girls. No significance was noted in the test scores.

TABLE IX

T-TEST RESULTS: CONTROL GIRLS

VS. EXPERIMENTAL GIRLS

2.179 = .05 Significance

Item	Sub-Test	Score	Degrees of Freedom	Significance
1.	Total Positive	.64864601	12	
2.	Identity	.10025706	12	
3.	Acceptance of Self	1.04730650	12	
4.	Behavior	.47691046	12	
5.	Physical Self	- .27288855	12	
6.	Moral-Ethical Self	1.60383050	12	
7.	Personal Self	.40094138	12	
8.	Family Self	.24791772	12	
9.	Social Self	.64190519	12	
10.	Self Criticism	.01089186	12	
11.	Consistency	-1.86767970	12	
12.	Distribution	-1.86504030	21	

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

It was decided at the beginning of the experiment that there were certain priorities regarding the relative importance of the various scores obtained from the subjects. The total positive score was deemed most important as it reflected the overall positive view the subject had of himself. A high score would indicate a healthy degree of self esteem and confidence. Next in importance were each of the eight positive sub-tests that comprise the total positive score. Each of these scores shows a level of self concept for a particular aspect of the self.

The score on the self-criticism sub-test was also considered vital as an indicator of the subject's ability to see himself critically. It also serves as a check for defensive attitudes which would place suspicion on a high positive score.

Although differences were recorded, no significant difference was found between the control and experimental groups on any of the above mentioned scores. A difference was found in the degree of consistency of the responses (Table Four), but consistency in itself is not a major indicator of the self concept level. In view of this and the fact that consistency is but one of

eleven scores compared, the null hypothesis, that there is no significant difference in the measured level of self concept between the two groups, was accepted.

As discussed earlier, there are many elements that contribute to the development of the self concept. It is suggested by the evidence contained in this study, and by other research, that both the special program and the regular program are having a similar effect on the self concept level of the students. It is further suggested that both of these programs are having a negative effect. Figure One shows quite graphically that both groups scored low in comparison to the test norms of the general population. Since the test norms were made on a cross-section of society, it is reasonable to compare the subjects of this study to them, at least in a limited way.

Perhaps each program contributes to the development of the self concept in one way and at the same time hindering its development in another. The contribution of the regular program could be the absence of a social stigma surrounding segregation into separate classes. At the same time, little or no provision is made for academic success in the program. The converse is true of the special program, where academic success and occupational training are featured, but hindered by the

social plague of being segregated. Each of the alternatives would appear to have a similar effect on the self concept but in different ways. Some recent research adds to this view. Coopersmith (9:29) related achievement to the development of self esteem, while Mead (25:31) stated that self esteem is largely derived from the reflected appraisals of others. Fink (14:60) found a significant correlation between academic achievement and self concept. Clark (6:289) looked to the social stigma when he stated, . . . a child who finds himself reflected and attacked on all sides is not likely to develop dignity and poise as his outstanding traits.

It is concluded that both the regular class approach and the special class approach are having negative effects on the self concepts of the subjects in this study. It is suggested that each approach has its strengths and that in some way a synthesis should be sought.

I. RECOMMENDATIONS

Recommendations stemming from this study are three in number:

1. That more study and evaluation be done regarding the best approach to be taken in the public schools toward meeting the needs of the mentally retarded.

2. That the importance of the self concept be recognized and that it be used further as a measurement of evaluation and appraisal.

3. Although the Tennessee Self Concept Scale was deemed adequate for this study, it is recommended that future studies make some attempt to measure the ideal self so as to have a frame of reference within which to evaluate the real self.

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APPENDIX A

Dear Parent,

The Counseling Department of North Thurston High School is cooperating in county-wide study conducted through the graduate department of Central Washington State College.

Your child will be a part of the study by completing the Tennessee Self Concept Scale which takes about thirty minutes.

The scale will be given this week. If you have questions concerning the study, please feel free to contact me at the school.

Sincerely,

Mr. Frank Sinclair
Counselor

April 25, 1969

Dear Parent:

The Special Education Department of the Wenatchee School District is cooperating in a study being made through the graduate department of Central Washington State College.

The study concerns the student's self-image, and your child will be a part of the study by completing the Tennessee Self Concept Scale which takes about thirty minutes.

With your permission, the scale will be given to your child this week. If you have questions concerning the study, please feel free to contact me at the Special Education Department.

Sincerely,

Louis J. Powers, Director
Special Education Department
Wenatchee School District
No. 246

My child may take part in the study.

Signed _____
(Parent or Guardian)