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ABSTRACT

A series of three studies of emotionally disturbed children had, as objectives, to discover the effectiveness of clinical treatment on academic achievement and self concept and to determine if children of parents who also received counseling show more improvement than those whose parents did not. The control (C) group consisted of children who did not receive treatment, although it was recommended; the experimental (E) group consisted of those treated. The results indicated that over a 5-year period there was no significant difference in academic achievement with neither group catching up to normal peers. The E group did better immediately after treatment and then tapered off, indicating that treatment might be more helpful if continued. A second finding was that the earlier the treatment, the more improvement shown. The second study indicated that the C group had a higher sense of physical self concept and identity. It was suggested that the E group became introspective and honest with themselves during treatment, but its cessation left them without the means to utilize these characteristics for personal strength. The parental consistency study was inconclusive. Graphs and tables of results are included. (JM)

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Research in human behavior always depends upon the cooperation of persons involved but research with children, especially when it is a follow-up study, rests even more heavily on the willingness of a number of people--the subjects themselves, parents, school officials, and the personnel in centers which offer service.

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CHAPTER I

INTRODUCTION

There has been increased interest in the problem of mental health recently, resulting in appropriation of federal funds to increase the number of clinics for treatment of the emotionally handicapped. An important facet of the problem is the utilization of facilities for early diagnosis and treatment.

In the school age population, emotional difficulties come to light through referral of children with poor school adjustment or learning deficits to child guidance clinics. Such clinics have existed for a number of years, treating children with problems varying from reading disability to severe emotional disturbance. New help for emotionally handicapped children has developed in the past few years, i.e., the Re-Ed Program (Hobbs, 4), and the creation of a department in the Office of Education to study problems of these children and create classes in the regular schools where treatment and learning can occur simultaneously. It seems pertinent to look at the results of clinic treatment in order to determine what the best approach to the problem of emotional handicap may be.

In the past a diagnosis of emotional handicap usually led to a recommendation for treatment consisting of play therapy conducted along with counseling for the parents. The criterion of improvement in the child has been a reduction in general adjustment problems as seen in the home and school.

However, few studies have been done which evaluate the effectiveness of treatment over a longer period of time, or the influence it has on long-range school success. Those studies which have been done usually do not use a control group so as to make comparisons between pupils who have had treatment for emotionally based learning problems and those who are equally maladjusted and inefficient in school but do not have treatment. The question remains, then, if improvement is seen over a period of time, was it due to clinical treatment or to developmental or other factors which are a function of time itself?

Since school attendance and performance plays such a large part in the life of children of this age, it might be assumed that if learning capacity is affected

by emotional problems, then an improvement in the emotional condition of the child should be reflected in increased ability to achieve in keeping with intellectual capacity. This study investigated the later achievement of children treated for emotional handicap at two child guidance clinics in order to answer these questions: (1) do these children improve in school achievement and maintain their improvement from year-to-year over a long period, and (2) do children, whose parents are also involved in treatment, achieve at a higher level over a period of time than those whose parents did not receive counseling along with the child's treatment?

A parent faced with an emotionally handicapped child must seek treatment, and clinics provide trained personnel who function efficiently at diagnosis of emotional problems. However, as researchers of treatment with adults have pointed out, there is little evidence that can be cited for the efficacy of the treatment itself. If the clinic can deal with parental anxiety, and, perhaps, effect some change in the home itself through working with parents, then some benefit will accrue to the child. The question under study is not of the value of clinics which deal with emotionally handicapped children, but it is rather a question of what kinds of treatment seem to show the most payoff in the long run. The other methods mentioned earlier have not been in existence long enough to provide long-term information. However, the school records of clinic-treated children can be studied, and such an investigation will be dealt with in this report.

Related Research

Levitt (6), in a comprehensive study of the effectiveness of psychotherapy with children, found that in eighteen reports of evaluation at close of therapy two-thirds of the patients showed improvement, and in seventeen reports of follow-up improvement was shown by three-quarters. But roughly the same percentages of improvement were found for the respective control groups of untreated children. Levitt concludes that time is a factor in improvement and, thus, that psychotherapy with children is not effective. This review of thirty-six follow-up studies points up a weakness in studies of this kind--the criterion of judgment. How can improvement be measured? Does "improved" mean the same thing to parents, teachers, and others doing the judging? One thinks, for example, of the withdrawn child for whom

treatment may produce spontaniety of behavior which could possibly be seen by some teachers as the opposite of improvement. This criterion problem occurred in a pilot follow-up study done at the Peabody College Child Study Center by Noyes (11). Children who had been seen for appraisal and treatment were compared with those seen for appraisal only. Parents were asked to put checks in columns labeled "unimproved," "somewhat improved," and "greatly improved" as these applied to their children on 10 dimensions. The two groups varied randomly on the 10 dimensions, but overall differences between groups were not significant. Because of the difficulty in quantification of improvement, the study now being reported used the criterion of school achievement. If clinical treatment for emotional handicap as reflected in learning problems is not effective, then achievement scores of both treated and untreated emotionally handicapped children should show the same trends over a five year follow-up period.

In a follow-up study of reading clients at the University of Chicago, Robinson and Smith (12) contacted parents of 44 clients given remedial instruction in 1948. Ages at time of beginning treatment varied from seven to eighteen years with a median age of fourteen. Intelligence scores ranged from 85 to 147. As might be expected with this wide range of age and intelligence, it was found that a good deal of variance existed in school success. No quantitative scores were reported for either this group or a control group of non-treated clients; but the authors concluded that students who are retarded in reading can be rehabilitated educationally so as to fulfill their occupational ambitions. The clients were not screened on emotional disturbance.

A study of progress of pupils in remedial centers in England, done by Lovell, et al. (9), showed that these pupils made about equal progress with a matched group remaining in their own schools, which provides some evidence that the classroom may contain some factors contributing to improvement. Another comment on school achievement as a criterion for improvement is given by Libaw, et al. (7) who suggests that assessment of changes in rate of learning rather than magnitude of gain would give a better evaluation of the effectiveness of remedial treatment. The present study questioned whether learning rate remained constant following treatment.

Some of the studies quoted above focussed on

learning progress *per se* without giving attention to possible emotional components of poor school achievement; but they seem to suggest that results obtained from remedial treatment are as equivocal as those obtained from psychotherapy.

Objectives of the Study

In general terms, the objectives of this study were: (1) to follow up the school achievement year-by-year of children who were referred to the clinics for diagnosis and treatment of emotionally-based academic problems, (2) to compare the achievement records of these children with those of a group of children who had similar academic and personality problems but were not treated, in an attempt to discover what differences existed and whether clinical treatment could be assumed to have made changes in adjustment as reflected through increased achievement, (3) to determine if those children whose parents also received counseling appeared to make more school improvement than those whose parents were not treated, and (4) to obtain a present-day measure of self-concept for both treated and non-treated children and study these measures for personality differences between groups. As this study was exploratory in nature, the null hypothesis was used throughout. Hypotheses studied were:

1. There will be no difference in achievement scores for the five years following treatment of children receiving clinic treatment and those of children diagnosed as emotionally handicapped but not receiving treatment.

a. Corollary to this hypothesis was the prediction that there will be no difference in consistency of achievement from year to year between the two groups.

b. A second corollary was the prediction that when achievement scores within the treated group are compared between those children whose parents also received counseling and those whose parents were not treated, no difference will be found.

2. There will be no difference in present-day measures of self-concept between the two groups on an overall measure of positive self-view.

a. Corollary to the second hypothesis was the prediction that self-concept measures in a number of specific areas will not differ between the two groups.

Group Studied

The subjects were drawn from children seen at two clinics in a Southern city during the years from 1957 to 1960. All were Caucasian, of middle-class socio-economic status. Ages varied but all subjects were pupils in grades three to six, inclusive. Only children of normal intelligence, or above, were used, the mean I.Q. being 105.15 and the mean age 9.6 years. The sample was not a random one because it was necessary to use all children diagnosed as emotionally handicapped who met the other criteria in order to obtain a sufficient number of subjects. The criterion of emotional handicap was determined by two clinical psychologists who studied the case files of all children seen (within the limits of age and grade) and identified those for whom a staff diagnosis of emotional disturbance had been made. Both clinics were relying on staff diagnoses of cases at the time, with the staff consisting of a psychiatrist, a psychologist, one or more social workers and educational specialists, and students in training in these disciplines. Reports were available from everybody in the clinic who had interviewed or tested either the child or his parents. In addition, the raw data of tests was in the files. Only those children for whom therapy for emotional disturbance was recommended were used. That is, the study did not include children whose difficulties stemmed from perceptual problems, retardation, discontinuity of learning, school phobia, or other causes. Children diagnosed as disturbed enough to be hospitalized were also excluded.

Following the above identification of subjects, the investigators studied the clinic records to determine whether the recommendation for therapy was accepted by the parents. Those children who were not returned for treatment were placed in the control group. If any of these subsequently received treatment elsewhere they were not used. Failure to accept treatment was due to a variety of reasons such as lack of agreement of parents to its necessity, financial problems, changes in the family structure (i.e., divorce), and others.

In both clinics there was a time lag between diagnosis and availability of treatment during which some parents decided to try other methods such as sending the child to camp instead of accepting treatment. In follow-up studies of this kind the difficulty of obtaining an appropriate control group is recognized. It can be argued that the children who received treatment were more disturbed, thus motivating the parents to accept treatment. The alternative of obtaining a control group by denying treatment to some subjects has its ethical problems. Therefore,

while being aware of the "impurities" of the control group, investigators may still gain knowledge about the effects of treatment which is otherwise unavailable to them.

Nature of the Treatment

No subjects were used unless they had remained in treatment for at least six months. The treatment consisted of relationship or play-therapy (depending on the age of the child) and was carried on in weekly sessions which lasted one hour. Persons serving as therapists were psychologists, third-year students in clinical psychology, and, in a few cases, psychiatric social workers. A non-directive approach was used in therapy.

Collection of Data

When appropriate subjects in both groups had been identified, their parents were contacted by mail (see Appendix A) and asked to return cards authorizing the investigator to use their child in the study. No children, whose parents objected were used in the gathering of self-concept data, a measure obtained from the subject himself. However, school achievement records of both these children and those who had moved away since the original diagnosis were studied. Permission was obtained from the Superintendent of the Metropolitan school system for use of these records by professional personnel as long as the identity of the child was not revealed.

The achievement scores were taken directly from the child's school folder by the chief investigator and an assistant. The schools are part of a large metropolitan school system. No Negro children were used in the study because, (1) schools in the area were not integrated during the years covered by the study and the effect of segregated schools was not known, (2) few Negro children were seen at the clincs in these years, generally going instead to a clinic in a predominately Negro residential area, and (3) the socio-economic level of the Negro children was not comparable to that of the Caucasian subjects used.

Achievement scores are derived from testing done in the spring of the year at all schools. There are a number of factors which can cause loss of data. If the child was absent on the testing day, then his score for that particular year was missing. In addition, where children

had transferred from one school to another within the system there were occasions where the records had failed to go with him or had been misplaced. Records had burned in fires at some schools or had been destroyed when schools were closed. Collection of the achievement scores was a challenging and time-consuming task and although scores for each child over the five-year period were not always available, it was possible to gather enough data to gain meaningful results.

Self-concept data were obtained individually from the subjects (presently in high school) with their consent, either at the school during a free period, or at the office from which the study was conducted. The subjects were told that the clinics were interested in following up their previous clients. Teachers were told only that the children were needed for a research study. In view of the fact that a great deal of research is carried on routinely, both by the schools themselves and by departments in local colleges, a particular study does arouse much reaction; therefore, children were not identified as former patients.

A scale of parental consistency had originally been planned as a research instrument in this study. A small amount of data were collected but the number of parents responding was so small that no valid conclusions can be drawn. This instrument will be discussed in Chapter V.

Only about half as many subjects could be obtained in the present-day data collection as were used in obtaining school records. For this reason the results of the study will be discussed in two sections. Chapter II will provide results and discussion of the achievement scores while Chapter III will present information concerning the self-concept measure. Chapter IV will discuss the parental consistency scale. The final Chapter will summarize the entire study and give conclusions and implications for the treatment of the emotionally handicapped child.

CHAPTER II

ACHIEVEMENT SCORE MEASURE

The comparison of school achievement scores between experimental and control groups for the five years following treatment will be discussed in this chapter. These score comparisons were broken down into separate analyses of (1) total achievement, (2) language achievement, (3) quantitative achievement, (4) yearly gain periods, and (5) gains made by subjects with parents involved in therapy compared to subjects whose parents were not involved in therapy. As mentioned in the previous chapter the number of subjects described in this phase is large because records could be studied without the subjects themselves being seen.

Subjects

Experimental Group

The experimental group, hereafter referred to as the E Group, consisted of 40 subjects. Of these, five were female and 35 male. (The ratio of boys to girls in treatment in clinics is usually about three to one.) Length of treatment time for these children varied from six months to four years, with a mean of one year, four months. The grade distribution of subjects, at time of entry into clinic contact, was as follows: Grade 4 - 15; Grade 3 - 14; Grade 5 - 6; Grade 6 - 5. Achievement scores at entry averaged eight months below grade level. Mean age of the experimental group was nine years, seven months; mean grade level was fourth grade; and, mean I.Q. was 105.73. (Intelligence scores were determined on the Wechsler Intelligence Scale for Children during the child's initial examination at the clinics.)

Control Group

The control group consisted of 43 subjects, nine of whom were female and 34 of whom were male. This group will be referred to hereafter as the C Group. Grade distribution of C Group subjects at time of clinic entry was: Grade 4 - 17; Grade 3 - 13; Grade 5 - 7; Grade 6 - 5. Entry achievement scores averaged seven months below grade level. Mean age of the control group was nine years, four months; mean grade level was fourth grade and mean I.Q. was 104.56.

Figure 1 presents these comparisons in tabular form.

	$\bar{X}$ Age at Entry	$\bar{X}$ Grade at Entry	$\bar{X}$ IQ	No. in Each Grade 3	4	5	6	M	F
E Group N=40	9-7	4	105.73	14	15	6	5	35	5
C Group N=43	9-4	4	104.56	13	17	7	5	34	9

Figure 1. Comparisons of E and C Groups on Age, Sex, and I.Q.

The differences in age at entry, grade at entry, and intelligence between the E and C groups were not statistically significant.

Instrument

During the five-year period of the study, the Metropolitan School System shifted from use of the Metropolitan Achievement Test to use of the Stanford Achievement Test (13). Some of the earlier scores collected were derived from the Metropolitan Test. In order to make all scores comparable, the conversion table furnished by the Stanford Achievement Test was used to convert Metropolitan scores to Stanford scores. The elementary, intermediate and advanced battery scores were used depending on grade.

Scores are reported in a number of areas of study. In addition, a total overall score, a total language achievement score, and a total quantitative score are derived from adding sub-scores in the various areas. For example, a quantitative score would be comprised of mathematical computation and mathematical reasoning, while a total language score would include speed of reading, level of reading, and comprehension, and a total overall score would include both quantitative, language, and additional scores such as scores on social studies or other subjects, depending on the subjects offered at a particular grade level. The total possible scores over a yearly period for each subject would thus be nine.

Not all scores were available each year but statistical methods were used to control for the deficits. These will be explained in the analysis section.

Hypotheses

As the study was exploratory in nature, no predictions were made as to direction of change. The null hypothesis was used throughout and can be stated in the general areas of study as follows:

1. There will be no differences in the gains in total achievement made over five years by children who received therapy and the gains made by children who did not receive therapy.

a. Children who received therapy will not show significantly greater gains in Language Achievement than children who did not receive therapy.

b. There will be no differences in the two groups in gains in Quantitative Achievement scores.

2. The E (Therapy) Group will not show increasing gain in (a) total, (b) language, and (c) quantitative achievement scores with each passing year following therapy over the C (no therapy) Group. Conversely, the C Group will not show decreasing gain in (a) total, (b) language, and (c) quantitative achievement scores with each passing year following inclusion in the study.

3. There will be no differences in gain in achievement between children who entered the study early (i.e., at a younger age) and those entering at an older age. Specifically, those children who entered during the third grade will not show greater gains in total achievement than those who entered during the fourth grade. Nor will those entering in the fourth grade make higher gains than those entering in the fifth grade, or those entering in the fifth make greater gains than those entering in the sixth.

4. Those children who received therapy and whose parents received therapy also will show no differences in their achievement scores and gains from those children who received therapy but whose parents did not also receive therapy.

5. There will be no interaction between variables of the study. That is, there will be no difference in achievement gains between children who were involved in

therapy in the earlier grade and those who were not involved in therapy and entered the study in the later grades.

6. The mean gain in (a) total, (b) language, and (c) quantitative achievement, averaged over the five years for those children involved in therapy, will not differ from the gain of one year for each nine months in school, which is normal for the population of school children as a whole on this achievement test.

Analyses of Data

The achievement test data were analyzed in Lindquist Type I and III Analysis of Variance designs (Lindquist, 8). Analysis of Variance designs require that the subjects be randomly drawn from the treatment populations. Our subjects were not selected at random, but according to certain characteristics. However, if the obtained sample completely exhausted all the subjects available, the requirement of random (assignment) selection was not violated. By using all the subjects available, one is giving a "representative" sampling; in fact, one is obtaining a perfect representation. Therefore, the generality of the conclusions of the study rests on how representative the local sample is of the population of emotionally handicapped children as a whole.

Achievement Scores

As stated above, these scores were obtained from two achievement test batteries equated through use of a conversion table. The scores were copied directly from the school records by the investigator and a research assistant.

Unit of Measurement

Achievement was indexed in scholastic year units. An achievement score of 7.1 indicates that the student's achievement is at the mean for students in the seventh grade, first month.

A student whose achievement is measured at 4.5, at the first testing following therapy, and at 5.1, at the second testing a year later, would have demonstrated a gain in achievement of .6 or six months of scholastic achievement.

Missing Data

All the achievement test scores for each subject, at each of the five different year intervals, were not available. In some cases the child was not tested at a particular time because he was absent from school the day the achievement tests were given; he moved out of the city before the final set of achievement scores were obtained; the school did not administer achievement tests that particular year; or for other reasons, beyond the control of this study, records were not furnished.

A tabulation of the number of missing scores at each of the testing periods is presented below in Figure 2.

Since each missing score makes it impossible to compute two gain scores and renders certain existing data unusuable, it is desirable to supply missing data. These numbers are shown in Figure 2.

Achievement	Group	N	Year 1	2	3	4	5
Total	E	40	2	4	4	11	15
	C	43	5	2	7	9	18
Language	E	40	9	11	9	15	17
	C	43	14	9	11	13	20
Quantitative	E	40	8	9	8	15	19
	C	43	9	7	12	11	20

Figure 2. The Number of Achievement Test Scores Missing for the Subjects in the E and C Groups at Each of the Year Periods and for Each of the Types of Achievement.

As one can see from Figure 2, there is a relatively high percentage of scores missing in the cases of both the language and quantitative achievement scores. Spurious effects are likely to occur when extrapolating from limited data; consequently missing scores were not supplied for the quantitative or language achievement tests. However, the scores for the total achievement data are

relatively complete. This is true especially for the first three testing periods. Therefore, only the missing scores for the total achievement at each of the three testing periods were supplied.

An individual's missing achievement score was computed by adding the average gain of the appropriate gain period to the initial score of that gain period. This calculation provided the initial score used in figuring the gain for the next gain interval. The same procedure was followed in calculating all missing scores except in the case where the first achievement score was missing. This score was calculated by subtracting the average gain of the first gain from the person's second achievement score.

By computing the average gain for the E and C Groups separately, and for each of the three gain periods separately, the mean differences between the various groups were maintained without unduly biasing the results. A close check indicated that in the majority of cases where achievement scores were supplied, the score that was computed was very close to the score that might have been supplied by extrapolating from the trend of each individual's existing achievement scores.

Kinds of Analyses

Four different analyses were performed:

1. Change in Achievement. The Stanford Achievement Test provides three measures of achievement. A separate analysis, using the change scores from each of the three measures, was done. These were:

   a. Change in Total achievement

   b. Change in Quantitative achievement

   c. Change in Language achievement

2. Effects of parent therapy concurrent with child therapy. An analysis comparing the change in achievement of children, who had parents in therapy, to the change in achievement of children, who did not have parents who were in therapy, was made only for children who were in therapy themselves (that is, the E Group). None of the C Group subjects were involved since neither they, nor their parents, were undergoing therapy.

Design

The data were analyzed in two Lindquist-type analysis of variance designs.

1. The change scores for the total achievement were analyzed in a Lindquist Type III design. Treatment conditions were:

a. Gain periods: 1-2; 2-3; 3-4 (A)

b. Experimental (therapy) vs. Control (no-therapy) (B)

c. Grade at Entry: Entry at grades 3, 4, 5, or 6 (C)

2. The change scores for the language and quantitative achievement were analyzed in a Lindquist Type I, design:

a. Gain periods: 1-2; 2-3; 3-4; 5-6 (A)

b. Experimental vs. Control (B)

Thus, this analysis simply collapses the Type III design into two dimensions by summing over grades at entry.

3. The differences in total achievement change scores for children with parents in therapy and children whose parents were not in therapy were also analyzed in the Lindquist Type I design, with dimensions as follows:

a. Grade periods: 1-2; 2-3; 3-4; 5-6 (A)

b. Parent Therapy vs. No Parent Therapy (B)

4. Multiple Comparisons: In those cases where significant F-ratios were obtained, Kramer's modification of Duncan's New Multiple Range Test (Kramer, 5) was employed to test for significant differences between the various means.

A level of significance of .05 was used to determine statistical differences throughout the study.

Results and Discussion

When we consider the overall achievement gain over the total five post-therapy years there is not a

significant difference in the overall mean gains for total, quantitative, or language achievement between the subjects who had received therapy (E Group) and the subjects who had not received therapy (C Group). (See Figure 3.) Summary tables appear in Tables 1, 2 and 3.

Group	Achievement		
	Total	Quantitative	Language
Therapy (E)	.780	.848	.599
No-Therapy (C)	.816	.891	.852

Figure 3. Mean Yearly Gain in Total, Quantitative and Language Achievement for Subjects Who Received Therapy and Those Who Did not Receive Therapy.

Consequently, the null hypothesis holds for prediction 1, and its corollaries 1a and 1b. Children who received therapy did not show significantly greater gains in total, quantitative or language achievement above those children who did not receive therapy. In fact, in each case there was a slight overall tendency for the children who received therapy to show smaller gains in achievement than the children who did not receive therapy. However, these differences are not statistically significant, and thus would be attributed to chance.

The lowest achievement gains were realized by the experimental group in language achievement. It is precisely in this area that one might have expected the greatest gains since therapy is largely a verbal process. This finding, in conjunction with the overall retardation, of achievement for experimental subjects, leads to interesting speculation. However, there was not a statistically significant difference between the experimental and control group in language achievement. It is conceivable that the E Group children were quite deficient in their ability to relate verbally to others or to use language profitably in other ways when they began therapy and thus had further to go in making gain than did the C Group.

Although the gain made by the C subjects in

Table 1

Summary Table Analysis #1 (Total Score)

Source	df	SS	MS	F	F .05
Between Subjects	79	2022.81			
B (Experimental Control)	1	4.03	4.03	1.02	N.S.
BC	3	129.30	43.10	10.94*	2.62
error (b)	474	1889.48	3.94		
Within Subjects		5414.15			
A (Gain Period)	2	24.47	12.24	1.22	N.S.
C (Grade at Entry)	3	55.55	18.52		
AB	2	109.05	54.53	5.44*	3.02
AC	6	263.76	43.96	4.38*	2.12
ABC	6	155.88	25.98	2.59*	2.12
error (w)	479	4805.44	10.03		
Total		7436.96			

quantitative achievement was significantly greater than the gain made by the E subjects in language achievement, there were no significant overall differences between the three areas of achievement.

For the second prediction of the study concerning an increase in gains from year to year, the null hypothesis again holds. The results can be seen in Figure 4. The summary table for this analysis is Table 2 on the following page.

Table 2

Summary Table Analysis #2 (Quantitative Scores)

Source	df	SS	MS	F	F .05
Between Subjects	70	2990.15			
B (Experimental Control)	1	9.75	9.75	.3397	N.S.
error (b)	69	2980.30	28.70		
Within Subjects	213	6973.86			
A (Gain Period)	3	286.06	95.35	3.13*	2.65
AB	3	384.27	128.09	4.21*	2.65
error (w)	207	6303.53	30.45		
Total	276	10964.01			

Table 3

Summary Table Analysis #3 (Language Scores)

Source	df	SS	MS	F	F .05
Between Subjects	68	6438.48			
B	1	341.94	341.94	3.76	3.99
error (b)	67	6096.54	90.99		
Within Subjects		32757.57			
A	3	451.82	150.61	.96	N.S.
AB	3	986.33	328.78	2.11	N.S.
error (w)	201	31319.42	155.82		
Total	268	39196.05	146.25		

Group	Gain Periods		
	1-2	2-3	3-4
E	.831	.735	.762
C	.683	.890	.897
Total	.756	.814	.836

Figure 4. Mean Gain in Total Achievement for the E and C Groups at the Different Gain Periods.

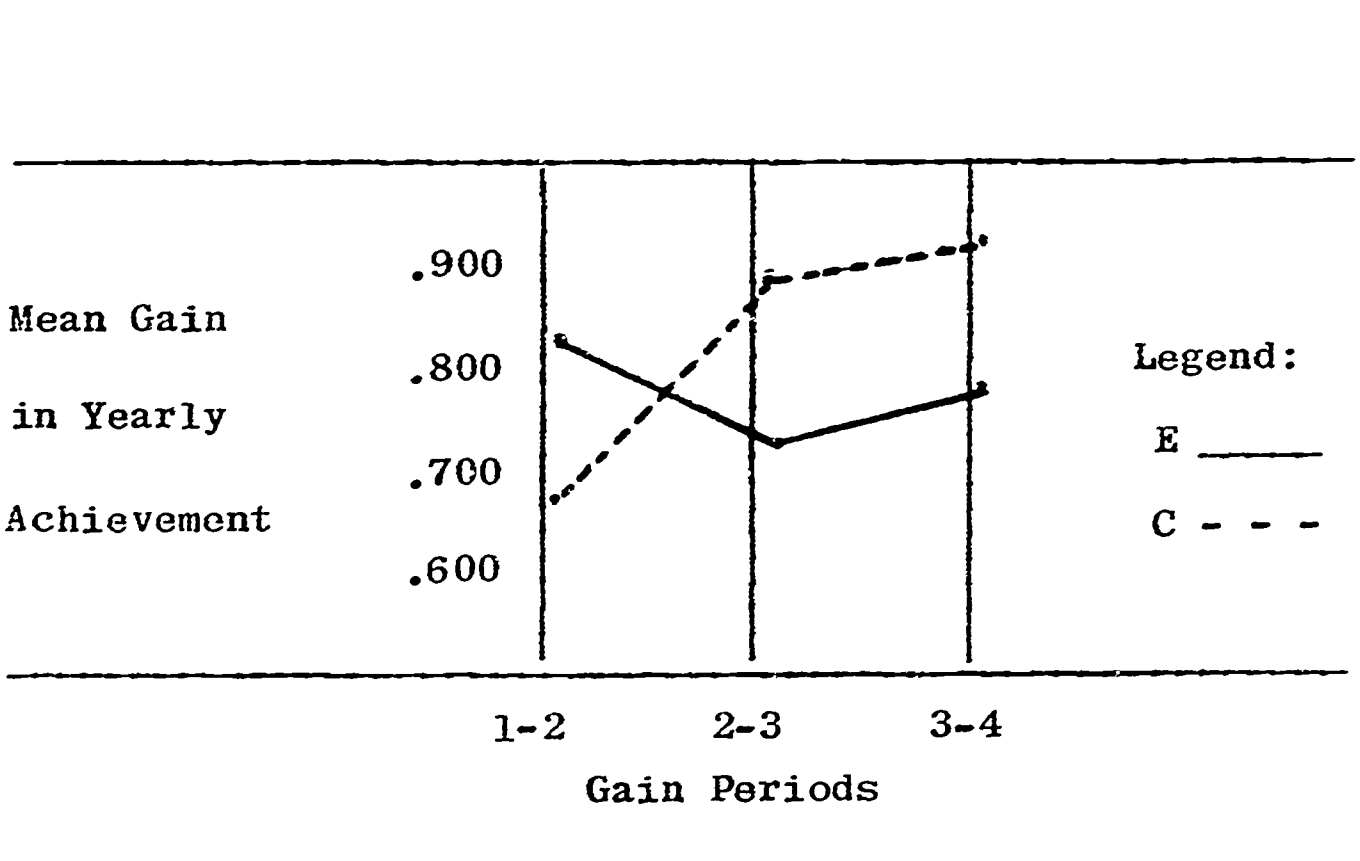


Figure 4A. Mean Gain in Total Achievement for Experimental and Control Subjects after Each of the Gain Periods.

The interaction between therapy treatment and gain periods was significant for the total achievement scores as well as for the quantitative achievement scores. (See Figure 5.)

Group	Gain Periods				Tot. Mean
	1-2	2-3	3-4	4-5	
Experimental Therapy	.921	1.132	.679	.545	.848
Control No-Therapy	.779	.886	1.090	.782	.891
Total mean for Gain Period	.850	1.009	.904	.669	

Figure 5. Mean Gains.

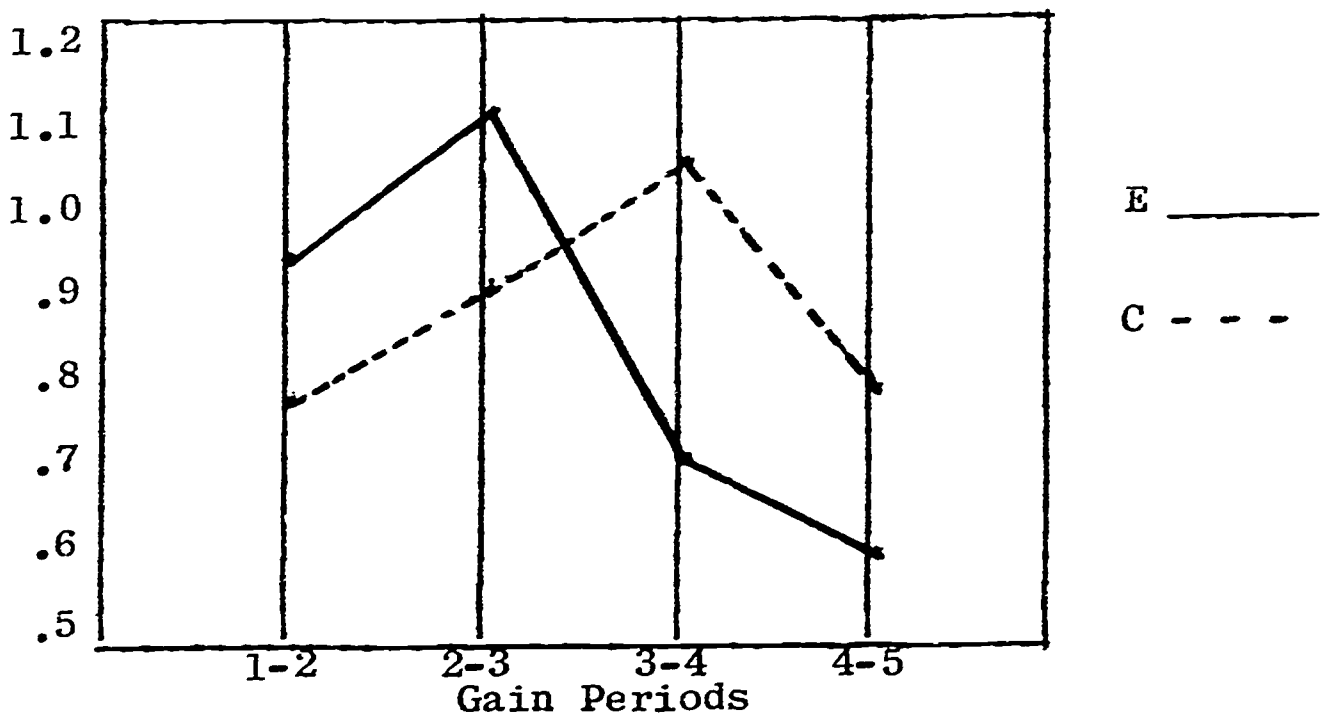


Figure 5A. Mean Gain in Quantitative Achievement for the Experimental and Control Groups over the Different Gain Periods.

Individual comparisons of the total achievement data indicate that the control subjects demonstrated a significant increase in total achievement gain from the first to the second gain period (1-2, 2-3), and a slight, but insignificant gain from the third to the fourth gain period. The trend for the experimental subjects was reversed, toward increasingly smaller gains in achievement. However, the differences in mean gains for each of the gain periods were not statistically

significant for these experimental subjects. The experimental group demonstrates a significant decrease from the initial gain periods to the latter gain periods while the control subjects demonstrate a trend toward increased gains in quantitative achievement for the latter periods.

Hypothesis three predicted that children who entered the study early would not show greater gains in total achievement than children who entered later. The overall analysis of grade at entry revealed that those children who entered at the fourth grade (regardless of therapy treatment) made significantly greater gains in achievement than those who entered at the fifth and sixth grades.

However, breaking gain in achievement down between the experimental and control groups at the different grades at entry reveals several significant differences. (See Figure 6.)

Group	Grade at Entry				Total Mean
	3	4	5	6	
Experimental Therapy	.851	.829	.594	.563	.780
Control No-Therapy	.717	.874	.859	.836	.816
Total Mean	.788	.853	.726	.721	

Figure 6. Total Mean Gain for the Grades at Entry.

Children who entered therapy at the third grade showed a significantly greater gain in overall total achievement than children of the same grade who did not receive therapy. This relationship was reversed at the fifth and sixth grades where the control subjects' achievement was significantly larger. (See Figure 6a.)

Looking at the mean yearly gain for the experimental group at the different grades at entry reveals a significant decrease in gain for children who entered in the fifth and sixth grades compared to the children who entered at the fourth and third grades. Thus, these children who received therapy early made greater gains

in achievement than the children who received therapy later. In fact, those who received therapy later made smaller gains than the children who had not received therapy at all.

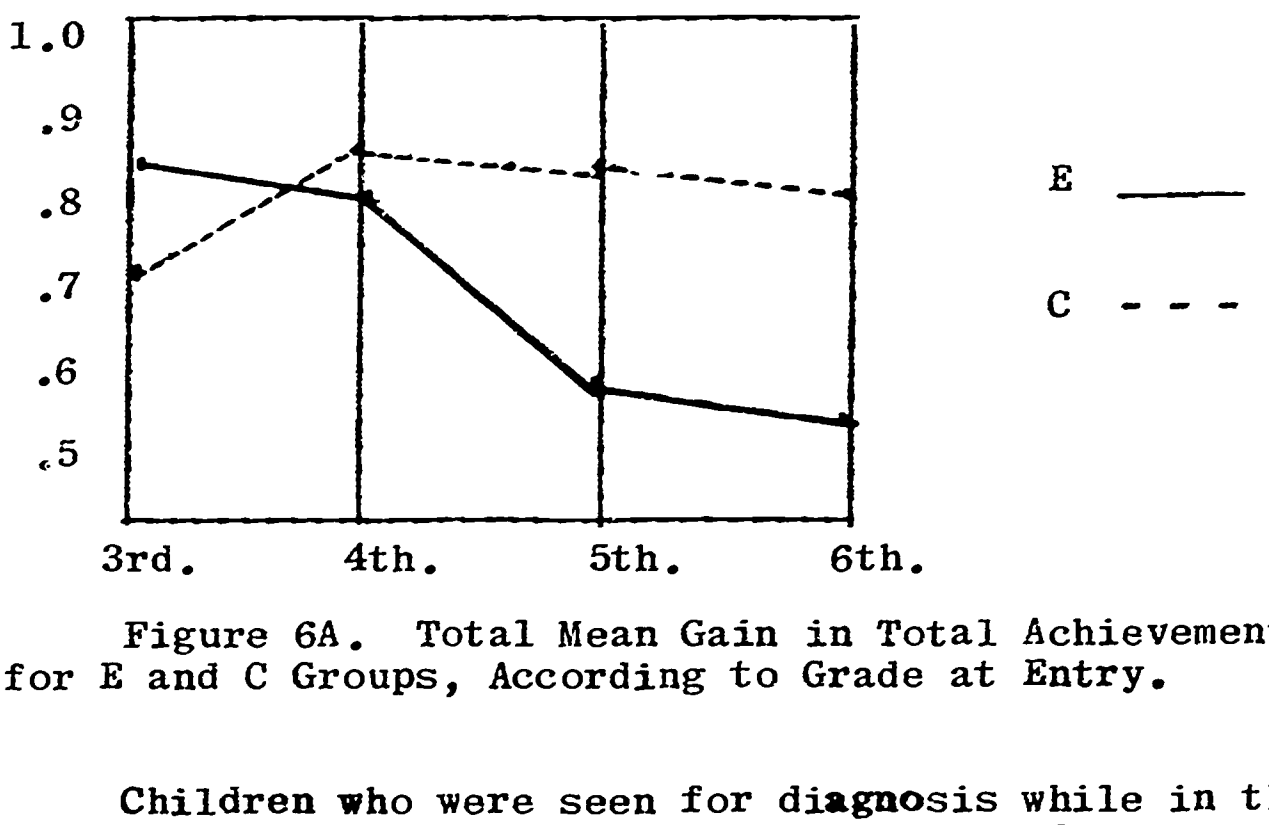


Figure 6A. Total Mean Gain in Total Achievement for E and C Groups, According to Grade at Entry.

Children who were seen for diagnosis while in the third grade, but who did not become involved in treatment, had significantly lower gains in total achievement than those children who were also in the no-therapy group but who were seen for diagnosis at the fourth and fifth grades.

If a major theme emerges at this point, it might be called the principle of primacy. Only the children who received therapy early showed greater gains in achievement and these gains were shown at first but not later after therapy had terminated. A principle of continuity seems also to be involved.

When all three of the treatment dimensions are considered together, i.e., (1) therapy vs. no therapy, (2) grade at entry, and (3) gain period, a significant interaction is obtained. This indicates that the E and C subjects made differential achievement gains, depending on when they entered the study, in conjunction with the point at which their achievement was assessed. The complexity of this interaction renders it difficult to represent visually but these differential effects can be seen when the cells which denote the various treatment combinations are rank-ordered according to level of achievement gain. To aid interpretation, the cells can be considered in quarter segments as in Figure 7.

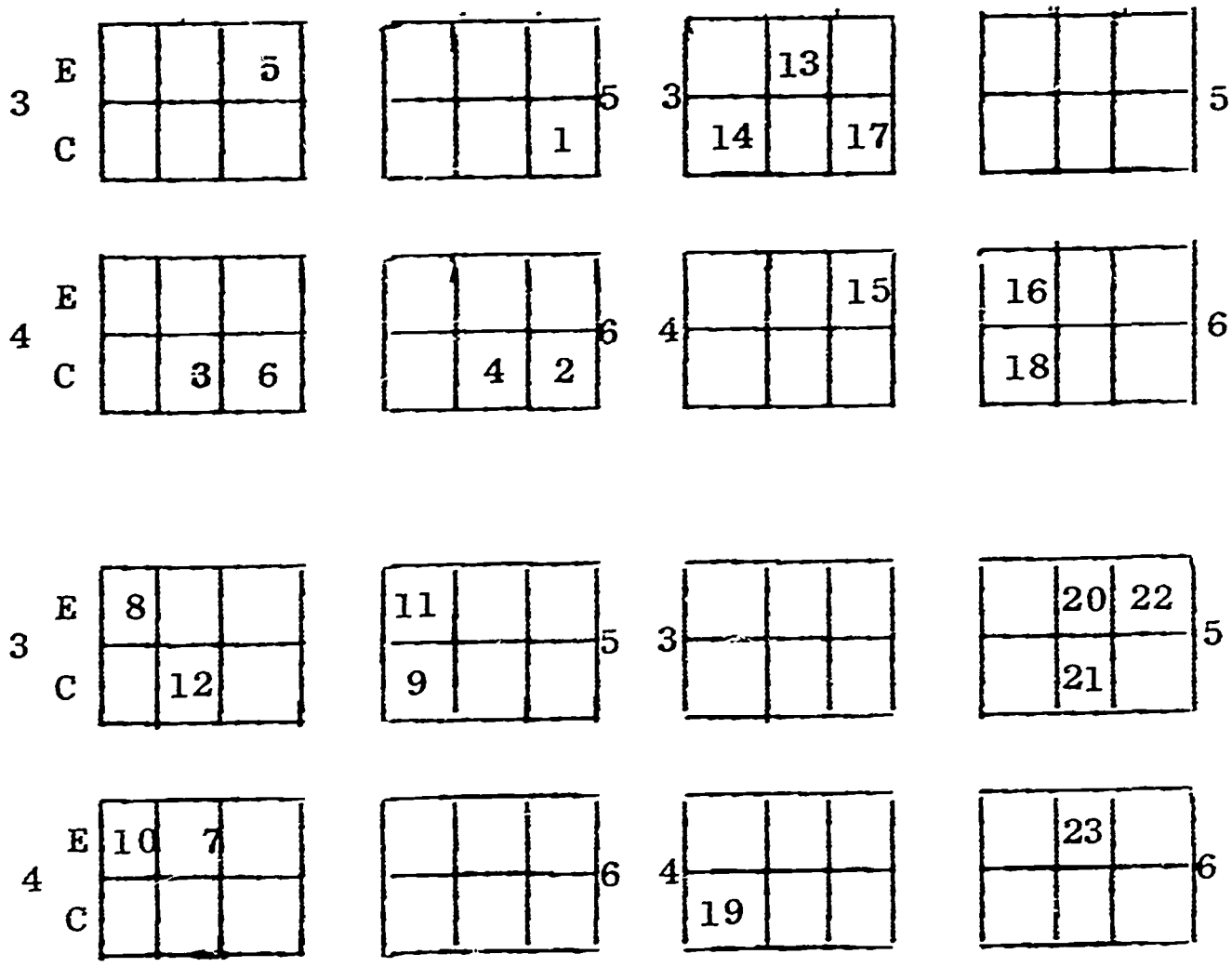


Figure 7. A-B-C Total Achievement. Rank ordering of treatment cells which denote a conjunction of (a) experimental-control, (b) grade at entry, and (c) gain period. For convenience of interpretation quarter segments are separated.

Looking at the six cells at which the highest achievement gains were made, one can observe that all but one of these cells are subjects in the control condition. As was found previously, these control subject gains are made by the subjects who entered the study relatively late and are subjects whose gains are observed relatively later.

Those cells which made up the second highest quartile are generally experimental subjects who received therapy in the early grades and are those subjects whose greatest achievement gains are observed soon after beginning therapy. (Scores were not collected until subjects had been in school a year after therapy began.)

This can be contrasted to those subjects who made the smallest gains in total achievement. Three of the five lowest cells are composed of experimental subjects who were not seen until the later grades (fifth and

sixth) and whose achievement was observed at relatively long periods following therapy, e.g., from the second to the third year.

The prediction of hypothesis 5 is not confirmed in that differences do appear between experimental and control subjects but we find that the highest gains are made by late entering control subjects, while the next highest gains are those of early entering experimental subjects.

It was predicted (hypothesis 4) that children receiving therapy whose parents were also in therapy would not show higher gains than children receiving therapy whose parents were not being seen at the clinic. Results show that there was not a significant difference between the mean gain in total achievement for children who had parents in therapy and the mean gain in total achievement of children whose parents were not in therapy. However, there was a slight difference in mean achievement favoring the children whose parents were being seen concurrently at the clinic.

The null hypothesis of prediction 6 was not upheld. It was predicted that the experimental and control subjects of the study would show gains over the five-year period following therapy or a decision for no-therapy which would average the 1.0 gain made by school children in general on yearly achievement tests. Instead of this 1.0 gain, the mean gains ranged from a low of .599, for the language achievement in the experimental group, to .891 mean gain for the control subjects in quantitative achievement. Therefore, hypothesis 6 was not confirmed. These emotionally-handicapped children did not show average increases in any achievement area. (See Figure 3.)

Summary and Discussion

Chapter II has related the collection, analyses, and results of achievement test data over a five-year period. Yearly achievement scores were obtained for a group of 40 children, who had been seen in therapy for at least six months, and these scores were compared with the scores of a group of 43 children for whom therapy had been recommended but not received. Analyses were made of changes in total achievement, quantitative achievement, and language achievement over the five-year period. An analysis was also made of changes in scores of a group of children receiving therapy, whose parents were also seen in counseling, and these changes compared to a therapy group whose parents were not seen. The null hypothesis was

used throughout the study.

When gains for the entire period were averaged, there are no significant differences in overall mean gains for total, quantitative, or language achievement between the two groups. This finding was in keeping with the null hypothesis advanced.

When gains from year to year were compared, it was found that the therapy group began at a higher point than the control (no-therapy) group (the first achievement scores were collected after a child had been in therapy at least six months). However, there was a significant decrease in the following periods for the experimental subjects while the control subjects demonstrated an increase in gains. Thus, it appeared that the experimental subjects made an improvement in achievement for the first two years following therapy but dropped off during the next two years to end up below the control subjects, whose achievement rose following their diagnosis at the clinic, beginning slowly but improving during the third and fourth year after diagnosis. This finding seems to suggest that therapy was effective at first but that it should have been continued for best effects. The control group finding suggests that emotional handicap, as reflected in school achievement, does improve with time and perhaps diagnosis is as effective as treatment for these children. That is, simply being taken to the clinic, and seen by professionals in the field of emotional handicap, may be beneficial to child and parents. Other variables were involved, however, such as changes in family situation, that could have caused the improvement in the control subjects.

The age at which a child is brought to the clinic seems to be involved in his later improvement. It was found that children seen at the clinic when they were in the fourth grade made significantly greater gains in achievement than those in the fifth and sixth grades, regardless of whether they received therapy or not. It appears that early recognition of emotional problems leads to better school adjustment for the child even though specific treatment does not ensue.

The summary this far has dealt with the groups as a whole. When the analysis is broken down for the experimental group, we find that children who began therapy at the third grade showed a significantly greater gain in overall total achievement than children of the same grade who did not receive therapy; but, this relationship was reversed at the fifth and sixth grades.

Only the children who received therapy early showed greater gains in achievement. This finding may be related to studies in cultural deprivation where it is found that children, who do poorly in the early grades, get further behind as they go along. It appears that there is a "critical period" in the early grades where emotional handicap needs to be dealt with in order for later achievement to improve. The nature of emotional handicap seems to be that of reoccurrence, if the finding that achievement drops off following therapy can be interpreted to mean that some kind of emotional support needs to be continued for the child. In view of the reoccurrence of emotional illness in adults during times of stress, it is not surprising to find the same phenomenon in children. The principles of primacy and continuity seem to be important ones in the treatment of emotional handicap in children.

No significant difference was found in the achievement of the subsample of experimental children whose parents were also involved in therapy although this group does show some gains over those experimental children whose parents were not in therapy.

Neither of the groups were able to average the nine-month gain over the five-year period which would be expected from school children generally. That is, both experimental and control subjects continued to stay behind the normal population in their yearly achievement gains in school. All the children studied were of normal intelligence or above. Yet they did not catch up (at least over the five-years studied) with their peers. School achievement appears to be adversely affected by emotional disturbance, suggesting that some system of early attention to this problem needs to be devised so that these children do not continue to be deficient throughout their entire schooling.

CHAPTER III

SELF-CONCEPT MEASURE

Subjects

Subjects in this portion of the study numbered 26 in the experimental (therapy) group and 21 in the control (no-therapy) group. These groups were subsamples of the experimental and control groups used in the achievement measure phase of the study. These were the subjects presently available of the original groups seen at the two clinics during the years involved in the study. Present ages of the children ranged from 14 to 18 years with a model age of 16. There were four females in the control group and 17 males, while in the experimental group there were 3 females and 23 males.

Procedure

The subjects were tested individually either at school during a free period or at the study office by staff members of the study. The subjects were told that they were being asked to be part of a research project following up the children who had been seen at the clinics. All subjects agreed willingly to complete the measure.

Instrument

The instrument used in this portion of the study was the Tennessee Self-Concept Scale (Fitts, 3). The instrument is a self-report containing 100 items to be answered by the subject on a five-point scale of falseness or trueness in their self description. The scale takes about 20 minutes to complete and uses words congruent with a sixth-grade reading level. Sample items are, "I am a cheerful person," or "I have a lot of self-control." Copy of the scale may be found in Appendix B (attached). Norms for the Tennessee Self-Concept Scale were developed from a sample of 626 people representing a broad range of age, intelligence and socio-economic levels. Test-retest reliabilities of the separate dimensions range from .60 to .92. There are 28 dimensions of the scale, giving a self-view in various areas such as the physical self, the moral self and the social self. There is also a measure of deviant signs which has been shown to discriminate between normal samples and patient samples with 80% accuracy.

Analyses of Data

The data from the Self-Concept scales were analyzed with the use of a Fortran computer using a program worked out by the scale publishers. Individual profiles were drawn for all subjects. Typical profiles from members of E and C Groups are shown in Tables 4 and 5, pages 28 and 29. It will be seen from these individual profiles that determining means for the group from an average on each dimension will necessarily cause a good deal of data loss. Ashcraft and Fills (1) showed that scores on the scale tend to average each other out so that means give only a gross measure of group self-concept. However in this study a comparison of E and C Groups was of interest. For this reason t tests (two-tailed) between E and C Groups were run on all 28 dimensions. Of these comparisons we would expect several to be significant by chance alone. Results of the averaging of dimension scores for the two groups are shown in Table 6, page 30.

In addition to individual profiles and group comparisons the number of deviant signs was computed individually for subjects in each group. This measure indicates a kind of variability between scores, indicating significant discrepancies or conflict in the various areas. The number of deviant signs can be compared to those shown by normal subjects, thus giving an overall measure of emotional disturbance.

Among the dimensions is a set of five scales, referred to as empirical scales, representing various areas of maladjustment; these are the Defensive Positive, General Maladjustment, Psychotic, Psychopathic Deviant Scales; and there is also a scale obtained on persons considered to be positively mentally healthy, or integrated personalities. Mean scores of the E and C Groups of the study were compared to those of the normal population, or in the case of the Personality Integration scale to supra-normal persons. In the self-concept phase as in the achievement measure phase of the study the .05 level of significance was used.

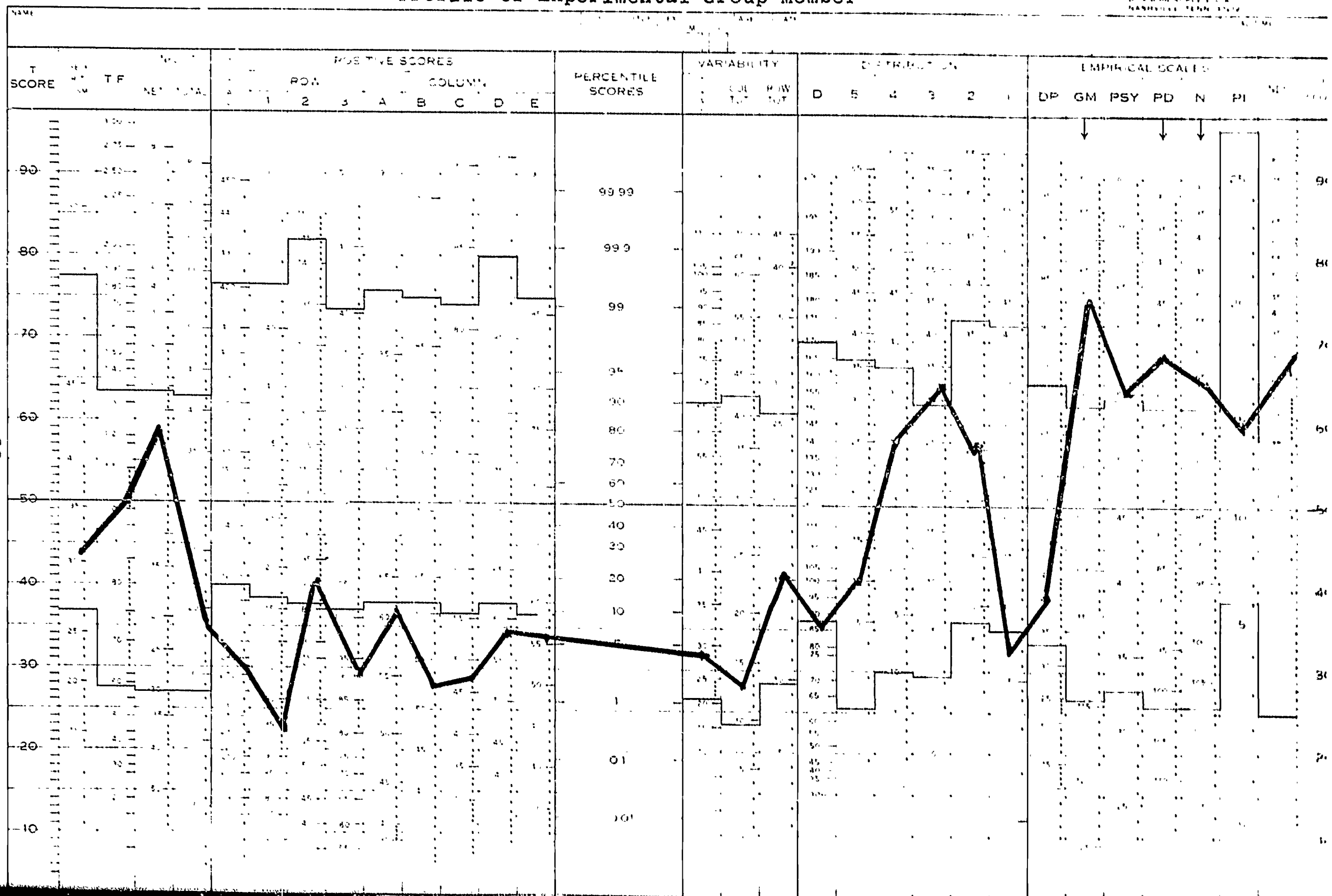
Results

Individual profiles of the subjects revealed many fluctuations with the general pattern being scores below the normal sample of self-concept areas such as physical or moral self and scores above the normal sample on the empirical scales of emotional disturbance.

Tennessee Self Concept Scale

Table 4

Profile of Experimental Group Member



Tennessee Self Concept Scale

Table 5

Profile of Control Group Member

NAME

T SCORE

POSITIVE SCORES — ROW 1 2 3 — COLUMN A B C D E

PERCENTILE SCORES

VARIABILITY

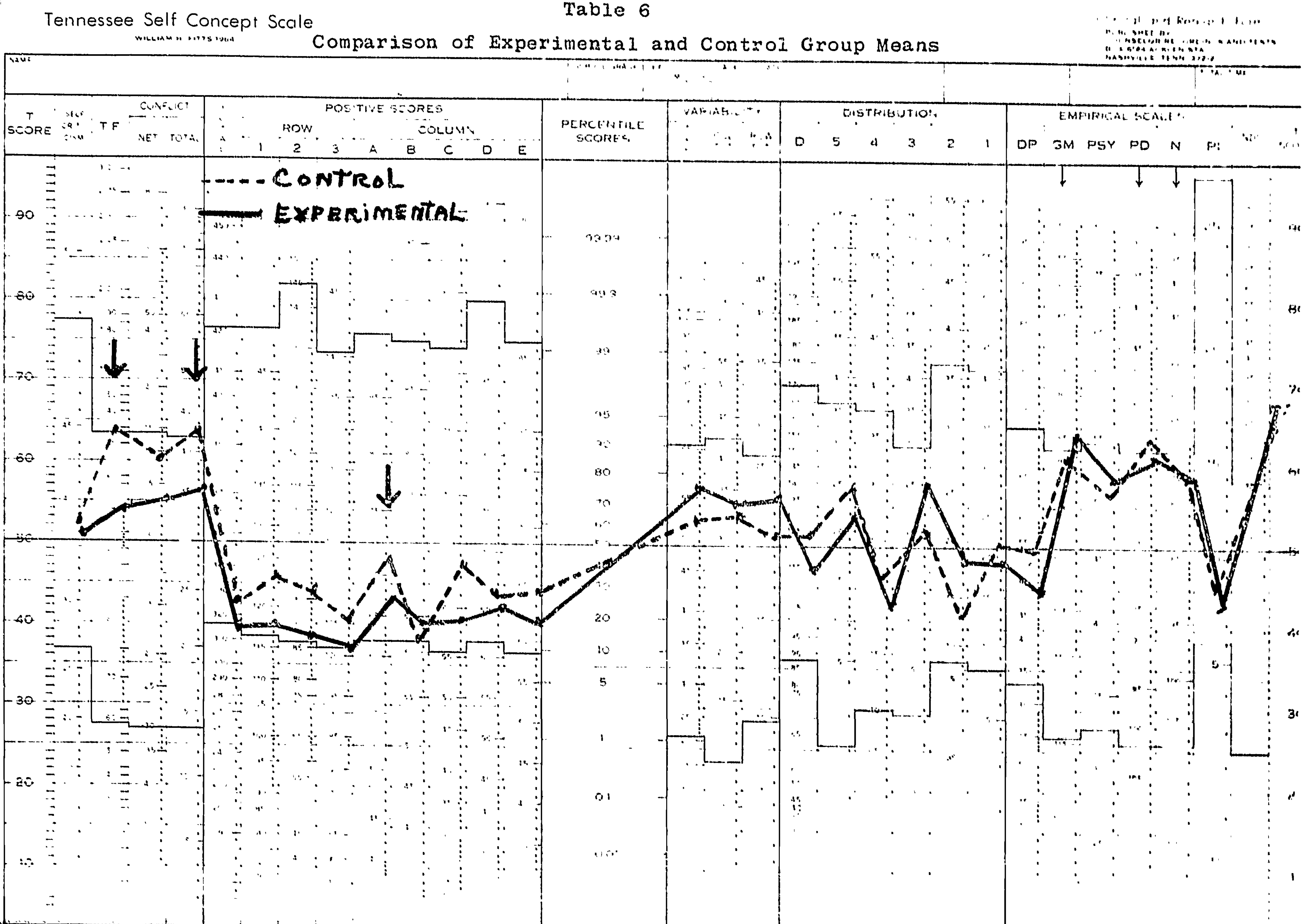
DISTRIBUTION

EMPIRICAL SCALES — DP GM PSY PD N PI

29

Table 6

Comparison of Experimental and Control Group Means



Reference to Table 6 (page 30) shows that the profiles of the E and C Groups are quite similar, ranging above normal on the True/False ratio and below normal on such self views as physical self, social self, and the like. They are also somewhat above normal on the scales of maladjustment and below the norm of the personality integration group. The fact that present-day measures of self concept are so similar for both groups lends confirmation to the use of these groups in the study, i.e., it was postulated that the only difference between the groups was the fact of therapy, and it appears that they are indeed similar at the present time in terms of personality configuration.

True/False Ratio

The Control group scores significantly higher on the True/False Ratio than the Experimental group. According to the manual for the test the T/F score is interpreted as follows: "High T/F scores indicate the individual is achieving self definition or self description by focusing on what he is and is relatively unable to accomplish the same thing by eliminating or rejecting what he is not. Low T/F scores would mean the exact opposite, and scores in the middle ranges would indicate that the subject achieves self definition by a more balanced employment of both tendencies--affirming what is self and eliminating what is not self" (p. 4). It appears that the control subjects are less able to "eliminate the negative" as it were or to discriminate between self and not self. If therapy is seen as self exploration we could expect the experimental subjects to be clearer in this distinction than the control subjects.

Total Conflict

The Control group is significantly higher on the dimension of Total Conflict than is the Experimental group, and the Control group score is at the upper limit of normality. High scores on this dimension indicate confusion, contradiction, and general conflict in self perception. Disturbed people generally score high on this variable. Here again we may be seeing some effects of therapy in leaving the Experimental group freer of conflict in their self-perception, although their score is above normal on the dimension.

Self View

The third dimension showing a significant difference between the two groups is that of Physical Self view. On this dimension the individual is presenting his view of his body, his state of health, his physical appearance, skills, and sexuality. Although this is the only significant difference in the self-view dimensions, the Experimental group scores below the Control group on almost this entire block of scores which include Total Positive Self Concept, Identity, Self Satisfaction, Behavior, Personal Self, Family Self, and Social Self. On the moral-Ethical Self score the Control group is slightly below the Experimental group.

In distribution of responses among the positions 1 - 5, which represent positiveness of responses (either true or false) the scores of the Experimental group approach significance of difference from the Control group. The Experimental group uses more "2" and "3" answers, indicating less certainty or commitment than do the answers at either extreme. This finding appears to be at variance with the earlier significances although, as stated, they are non-significant differences and both groups are comfortably within normal limits where distribution is concerned.

Empirical Scales

When we look at the scales of maladjustment we find that the Experimental group scores lower on the Defensive Positive scale than does the Control group but both scores are well within the normal range. On the General Maladjustment scale the Experimental group is slightly higher with both groups being at the upper limits of index of adjustment-maladjustment but provides no clues as to the nature of the pathology" (p. 5). Again on the Personality Disorder scale we find that both groups are at the red line indicating the limits of normality. According to the manual, "this category pertains to people with basic personality defects and weaknesses in contrast to psychotic states or the various neurotic reactions" (p. 5). We see again that the groups are quite similar in their emotional handicap even when seen a number of years after diagnosis. The disturbances appear to be long-standing ones as opposed to short term kinds of emotional handicap, which could be taken to indicate the continued need for some kind of emotional support that was found in the lowering of achievement

scores as time after therapy lengthened.

Computation of the number of deviant signs for both groups gives another measure of the emotional handicap which is apparently still maintained in these subjects. Although a total of 10 deviant signs places an individual at the upper limits of the normal range we find that the mean number of signs for the Experimental group is 26.2 and the mean number of signs for the Control group is 22. This measure discriminates patients from normals with 80% accuracy. We see that both our groups are manifesting disturbance on this scale at the present time. In fact the Experimental and Control groups of this study present a rather remarkable similarity to the profile sheet of patients presented in Figure 5 of the test manual and reproduced as Table 7, page 34.

The differences found between Experimental and Control groups on the Self Concept data should be considered as tentative in light of the differences expected by chance. However, the comparison of scores with those of normal persons and patients seems to indicate that both groups are currently demonstrating a picture similar to that presented by adult clinic patients. Without having been able to administer the Self Concept scale at diagnosis (and this would have been impossible in most cases due to the ages of the subjects) it is not feasible to make conjectures as to whether changes may have taken place or not. Ashcraft and Fitts, (1) found that significant changes take place in the scale during a period of psychotherapy with adult patients. The present similarity of the groups seems to suggest that the therapy treatment was (a) inaffective in ameliorating the emotional handicap or (b) of short term effectiveness.

Table 7

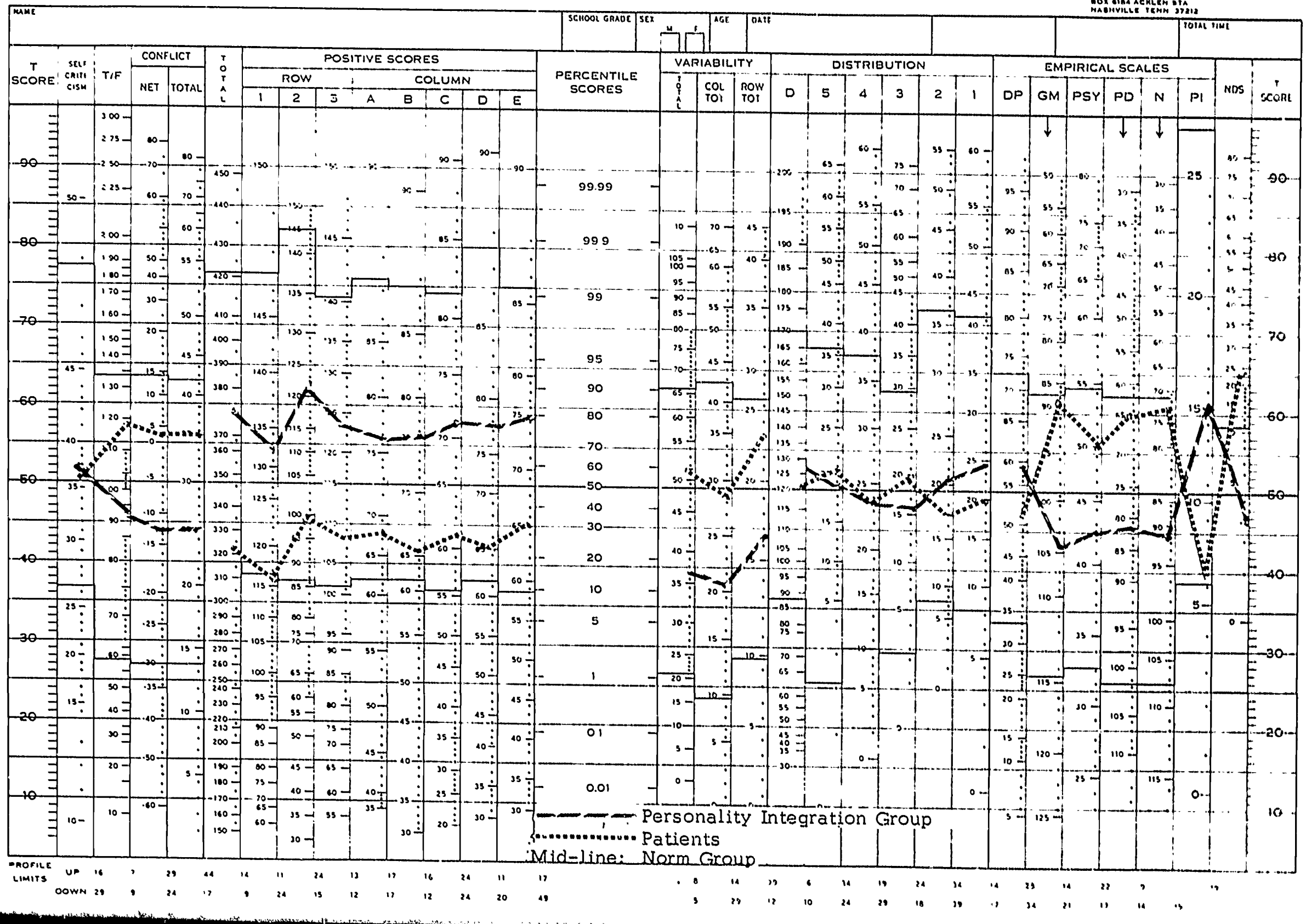
Profiles of Personality Integration Group and Patient Group

Tennessee Self Concept Scale

PROFILE SHEET

Clinical and Research Form

PUBLISHED BY
COUNSELOR RECORDINGS AND TESTS
BOX 6184 ACKLEN STA
NASHVILLE TENN 37212



CHAPTER IV

PARENTAL CONSISTENCY SCALE

Instrument

When the present study was devised a measure of parental consistency toward the child was included as one of the instruments. This scale is called the Peabody Scale for Rating Emotional Behavior (Neville, 10). The scale was being used in one of the clinics to measure the effect of inconsistency between parents on the emotionally disturbed behavior of the child. Although the scale was then being validated it has been written up in the above reference. The scale includes seven traits taken from Cattell (2). Reliabilities of the scale range from .65 to .79 (test, re-test) and a full scale reliability of .82 (split-half). A validity study indicated that reliability among parents rating their own children was .823 while, when rating the average and ideal child reliabilities were .923 and .901, respectively. Further information on development of the scale may be obtained from the author. A copy of the scale will be found in Appendix B (attached).

Parents are asked to check behaviors which are arranged on a five-point scale from very characteristic to not characteristic of their child. Each of the behaviors fits into one of the seven factors, which are listed below:

A:	Gregarious	unsocial
B:	Bright	dull
C:	Emotionally Stable . .	neurotic
E:	Dominant	submissive
F:	Cheerful	depressed
H:	Adventurous	timid
K:	Socialized	unsocialized

Scores of Mother and Father on the factors are compared with a discrepancy score being determined as a measure of inconsistency.

Hypothesis

The question of interest was whether parents of children seen in therapy would presently see their children more consistently (that is, both parents would agree in their view of the child) than would parents of the children who underwent diagnosis but did not become

involved in therapy. Using the null hypothesis it was predicted that parents of the experimental (therapy) group would not differ in the consistency with which they viewed their children from parents of children in the control (no-therapy) group of children who were not involved in therapy. The measures used in the study, then, would be a measure of school achievement, personality of the child after therapy, or no-therapy, and how parents now view their eomtionally handicapped children.

This measure was disappointing because of the small number of returns from parents. Just as attrition of subjects occurred from the first phase to the second (over the five-year period) so it continued to occur to the third phase. Over the period of the study there were seven divorces in the C group parents and two divorces in the E group parents. The larger number of divorces in the control group may explain why some of the children did not return for therapy. That is, the disturbance may have been a reflection of general unrest in the family which changed when the parents separated. In any case, there were only four returns of the Parental Consistency Scale in the control group and nine returns from the experimental group. When comparisons are made of parental discrepancy scores it is found that the mean discrepancy of the parents of the E group is 11.7 while the mean discrepancy of the parents of the C group is 18.2. No systematic patterns of discrepancy appeared, that is, there were no trends for Mother to see the child more favorably than Father on particular traits or vice-versa. The extremely small number of pairs to be compared makes this analysis suspect. But there seem to be no differences in the way in which the two groups of parents view their children at the present time.

The discrepancy scores of the two groups are shown in Figures 8 and 9.

A comparison of figures 8 and 9 indicates no clear pattern. In each group there is one large discrepancy with the father's opinion less favorable than the mother's. Parents who were in therapy show no particular trend where discrepancy is concerned. As mentioned the numbers involved are too small for meaningful conclusions. From these figures discrepancy in parental beliefs about the child does not seem consistently related to therapy for child or parents. The discrepancy figure is lower for E group parents, and only one discrepancy in eight is unusually large. It may be that the treatment helped the child to behave more consistently with parental expectations.

	Mother	Father	Discrepancy
S #1	102	119	+17
S #2	115	79	-36
S #3	65	74	+ 9
S #4	66	69	+ 3
		Tot. Disc.	65
		$\bar{X}$ =	18.2

Figure 8. Discrepancy Scores for Control Subjects.

	Mother	Father	Discrepancy
S #1	95½	101	+ 5.5
S #2	81	88	+ 7*
S #3	94	95	+ 1
S #4	90	83	- 7
S #5	111	105	- 6*
S #6	114	75	-39
S #7	72	63	- 9
S #8	83	104	+21*
S #9	80	89	+ 9
		Tot. Disc.	105
*Parents who were in therapy.		$\bar{X}$ =	11.7

Figure 9. Discrepancy Scores for Experimental Subjects.

The best way to use this scale would seem to be an administration at the beginning of treatment (regardless of the form treatment takes) and periodically during the course of the treatment. The instrument seems promising both for bringing behavior in line with expectations and in pointing out to parents their differences in viewpoint and the areas where expectation may not be consistent with reality.

CHAPTER V

SUMMARY, CONCLUSIONS AND IMPLICATIONS

Summary

The study reported on in this document was undertaken in an effort to evaluate the effects of clinic treatment on the long term adjustment of emotionally handicapped children. Dependent variables investigated were school achievement, self-concept, and consistency between parents in their view of behavioral traits exhibited by the child.

There have been a number of attempts to determine the effectiveness of therapy with children. To date, there is no clearcut objective evidence that therapeutic treatment aids in overall adjustment. The use of school achievement scores over the five-year period following therapy was suggested as a way of quantifying one type of improvement that may occur. The author of this study makes no claim that school achievement is the only criterion of improvement, or even the most important one. But clinicians usually see children for diagnosis as a result of referral from schools or teachers.

While clinics sometimes see emotionally disturbed children who are successful in school but unsuccessful in interpersonal relationships, such a situation is unusual. Just as an adult often finds his work more difficult because of handicapping anxiety, so does an emotionally handicapped youngster find concentration on school work becoming harder, with a resultant drop in his learning effectiveness. If his therapy is successful, then his school achievement should improve, once his disturbance has been alleviated. The emotionally handicapped youngster who is not treated might be expected to fall behind in school and stay behind. Of course, the improvement due to therapy may manifest itself in other ways such as increased ability to relate to others or a lessening of deviant behavior at home or in school. But, in any case, it appears that schoolwork which takes up a large percentage of the child's waking hours is linked to his adjustment as a whole.

When the achievement scores over a five-year period were compared, it was found that there were no significant differences between the experimental group of children who received at least six months of treatment on a once-a-week basis and children who were diagnosed as emotionally handicapped but did not follow through with

treatment. The treated children showed improvement during the first two years but then began to decline in improvement and were actually behind the untreated children at the end of the five-year period. Children who were brought to the clinic early in their school career (by the third or fourth grade) made more improvement and more consistent improvement than those whose emotional handicap occurred or was diagnosed later. There was a tendency for the treated children to make more improvement in their achievement if their parents were seen for treatment also, than if they were the only members of the family in treatment.

Whether receiving treatment or not, these emotionally handicapped children were never able to equal the achievement progress of normal school children. They made gains from year to year but these gains were short of the nine-month gain which would be expected from one year to the next.

Implications

What implications can we draw from this data? It is possible, of course, that our experimental group was actually more disturbed than the control group and that this is the reason they were brought in for treatment after having been diagnosed while the control children were not. This is a possible explanation of the failure to find differences but it seems too simplistic in view of the original reports of testing and recommendations made by the staff. There seem to have been more subsequent changes in family situations in the control group, i.e., more divorces between parents, but these changes might be expected to aggravate emotional handicap in some cases rather than alleviate it (even though they explain the failure to follow through with treatment due to changes in family finances or to changes in geographical location of the family). The similarity in self-concept mean scores between the two groups, which will be discussed subsequently, also offers evidence that the two groups were probably not greatly different in degree of disturbance at the beginning of treatment.

If we look further for some reasons behind the findings of the study's first phase, it is first noted that the experimental group made improvement during the first two years following treatment but fell behind the control group in the latter part of the five-year period. This finding suggests that treatment does make some differences in school progress initially, as would be hoped, but apparently when treatment ceases (as it is likely to

following a two-year period) then the improvement begins to dissipate. The implication seems to be that some kind of treatment or follow-up needs to be continued for a longer period of time. It would seem that these children began to do better school work while in contact with the therapist but the achievement decreased to its earlier level (or below) when the supports of therapy were no longer available. An arrangement which makes therapeutic involvement possible over a longer period of time would be desirable in order to maintain gains. An educational program providing classes for the emotionally handicapped with follow-up arrangements available might provide a solution to the problem of achievement loss when therapeutic support ceases.

The second important finding in this phase of the study seems to be that of early attention to possible emotional handicap. During the time when these children were seen at the clinics it appeared from reports of teachers and parents that the disturbance had existed for some time before it became exacerbated to such an extent that diagnosis or treatment was sought. Neither parents or teachers seemed to be highly sophisticated in recognition of emotional handicap, so that it became more and more unmanageable before some kind of help was sought. The child became more deeply entrenched in patterns of disturbed behavior and therefore more difficult to treat successfully. Better training in this kind of recognition is suggested for teachers and a more effective way of alerting parents to signs of emotional problems needs to be found. Teachers are now receiving training in mental health; and there are programs for training educational specialists in emotional handicap at a number of colleges. So perhaps the problem of obtaining early diagnosis and treatment may be alleviated soon.

The second phase of the study involved locating those experimental and control children still available in the metropolitan school system in order to study their present emotional adjustment through a measure of self-concept. Again, it is recognized that there are many other measures of emotional stability. A complete psychological assessment of the students would have yielded more data. But the changes in clinic personnel over the five-year period made it impossible to use the original clinicians for testing. A new variability would have been introduced by using different testers as well as the different tests which would not be appropriate (such as the Thematic Apperception Test for students now too old for the children's scale). Considerations of time and expense were also involved.

The numbers of subjects were decreased in this phase because families had moved away, some subjects had gone away to private schools, and a few of the older ones were unavailable because they had left school to marry or work. As mentioned in Chapter III, the group mean scores for the treated and untreated children on the self-concept scale were similar in many respects. The significant differences which occurred are of interest in that they seem to form a pattern. The control subjects made significantly higher scores on the following dimensions: physical self-view, total conflict, and true-false ratio. Scores were higher (approaching significance) for the control group on personal self-view and identity, and lower on neuroticism. These differences when viewed as a pattern suggest that the non-treated subjects have somewhat more positive self-views in particular areas than do the treated subjects. However, the true-false ratio and conflict scores indicate that they were more defensive and less realistic than the children who had received treatment. The finding that treated children were more uncertain of their self-views fits into the total picture. It could be interpreted as meaning that the experimental group were in treatment long enough to become introspective and dissatisfied with themselves and to be honest about their weaknesses; but the cessation of treatment seemed to leave them in this state. That is, they apparently had not consolidated a positive view of self, or they have lost such consolidation over the period since their treatment. Again, we see the need for follow-up of treatment. While the ability to look at one's self honestly and to have questions about the certainty of self-view would usually be seen as advantages in a person involved in treatment, the uncertainty should eventually be resolved and the self-view would be expected to become more positive with increased self-acceptance. Both treated and untreated groups had self-concept profile scores below normal on self-view and above normal on the empirical scales measuring degree and direction of maladjustment. Additionally, their scores on the overall measure of maladjustment, "the number of deviant signs," indicates that both groups have the jagged profiles with extreme high and low points characteristic of adults with emotional disturbance.

While it might be expected that teenagers would show departures from normal in uncertainty or intensity, these data seem to indicate that both the treated and untreated students are still classed as emotionally handicapped five years after the original diagnosis was made. There is little evidence that those who received treatment are now more emotionally stable. Rather, they appear to be

at about the same level as the untreated in terms of low positive self-view and are also more vulnerable to negative feelings about themselves. Perhaps the traditional views as to how long treatment should continue or how often it should take place, are chiefly determined by the convenience of therapist and client rather than based on data as to what length or intensity of the therapy is most effective.

These scores, as well as the achievement trends, seem to suggest that this treatment was terminated before achieving the goals usually associated with successful therapy. In view of the limited opportunities open to a child to exercise total self-direction, or to choose among alternative behaviors, it may be that the ways of setting up treatment borrowed from adult treatment methods, are unrealistic. Some kind of ongoing program seems to be suggested since there is evidence that some improvement in achievement occurred during early treatment and the children became more able to admit to problems. It seems that if the treatment had been totally ineffective these effects would not have occurred. But some further support is needed to sustain and consolidate gains.

The data from the parental consistency scale are not extensive enough for conclusions. But, along with the returns, or sometimes in lieu of returns when parents had been divorced, several parents sent clippings or information about the children. Some indicated that they are grateful to the clinic for the child's current success in school although the success may be in athletics rather than academics. Some children hold school offices and show other evidence of success. Other parents indicated that the children have not changed much and they have lowered their own expectations. Parents who were less pleased with the clinic were probably among those who failed to reply. Some parents said they were not willing to have school or teachers know that the child had ever been in treatment. It appears that emotional handicap continues to carry some stigma.

Recommendations

Taken altogether the findings of this study are consistent with those of Levitt for child therapy and Eysenck for adult therapy. That is, the quantitative evidence of school achievement and present day self concept data do not show evidence of therapeutic gain in the group of emotionally handicapped children who received treatment over that of the untreated children.

It is recommended that newer ways of treating emotionally handicapped children be explored. The classes for emotionally handicapped now being offered in educational programs should be followed up with research. The Re-Ed school programs now established in Tennessee and North Carolina show promise of being more effective than clinic treatment. They have not been in existence long enough to study the long range effects.

Clinic treatment of emotionally handicapped children will undoubtedly continue. This treatment is important for emergency cases and training purposes but the results of this investigation indicate that additional more long-range supports need to be built in for maximum effectiveness.

REFERENCES

REFERENCES

1. Ashcraft, Carolyn, & Fitts, W. H. Self-concept change in psychotherapy. Psychotherapy: Theory, Research and Practice, 1964, Vol. No. 3, 115-118.

2. Cattell, R. B., Saunders, D. R., & Stice, G. The Sixteen Personality Factor Questionnaire: Handbook. Champaign, Ill.: Inst. Pers. Ability Testing, 1950.

3. Fitts, W. H. Tennessee Self Concept Scale. Nashville, Tenn.: Counselor Recordings and Tests, 1964.

4. Hobbs, N. Helping disturbed children: Psychological and ecological strategies. American Psychologist, 1966, Vol. 22, 1105-15.

5. Kramer, C. Extension of Multiple Range Test to group means with unequal numbers of replications. Biometrics, 1956, 12, 307-310.

6. Levitt, E. E. The results of psychotherapy with children: An evaluation. Journal of Consulting Psychology, 1957, Vol. 21, No. 3, 189-195.

7. Libaw, Frieda, Berres, Frances, & Coleman, J. C. A new method for evaluating the effectiveness of treatment of learning difficulties. Journal of Educational Research, 1962, 55, 582-584.

8. Lindquist, E. F. Design and analysis of experiments in psychology and education. Boston: Houghton Mifflin Co., 1953.

9. Lovell, K., Byrne, C., & Richardson, B. A further study of the educational progress of children who had received remedial education. British Journal of Educational Psychology, 1963, 33, 3-9.

10. Heville, D. N. The Peabody Inventory for Rating Children's Emotional Behavior. George Peabody College, 1964 (mimeographed).

11. Noyes, Mary. Design of Parent Questionnaire for the George Peabody College for Teachers Child Study Center. George Peabody College, 1962 (mimeographed).

12. Robinson, Helen, & Smith, Helen. Reading clinic clients--ten years after. Elementary School Journal, 1962, 22-27.

13. Stanford Achievement Test. Chicago: World Book Co., 1953.

APPENDIXES

APPENDIX A

TENNESSEE SELF CONCEPT SCALE

	Item No.
1. I have a healthy body	1
3. I am an attractive person	3
5. I consider myself a sloppy person	5
19. I am a decent sort of person	19
21. I am an honest person	21
23. I am a bad person	23
37. I am a cheerful person	37
39. I am a calm and easy going person	39
41. I am a nobody	41
55. I have a family that would always help me in any kind of trouble	55
57. I am a member of a happy family	57
59. My friends have no confidence in me	59
73. I am a friendly person	73
75. I am popular with men	75
77. I am not interested in what other people do	77
91. I do not always tell the truth	91
93. I get angry sometimes	93

Responses-	Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
	1	2	3	4	5

Item No.

2. I like to look nice and neat all the time 2

4. I am full of aches and pains 4

6. I am a sick person 6

20. I am a religious person 20

22. I am a moral failure 22

24. I am a morally weak person 24

38. I have a lot of self-control 38

40. I am a hateful person 40

42. I am losing my mind 42

56. I am an important person to my friends and family 56

58. I am not loved by my family 58

60. I feel that my family doesn't trust me 60

74. I am popular with women 74

76. I am mad at the whole world 76

78. I am hard to be friendly with 78

92. Once in a while I think of things too bad to talk about 92

94. Sometimes, when I am not feeling well, I am cross 94

Responses-	Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
	1	2	3	4	5

	Item No.
7. I am neither too fat nor too thin	7
9. I like my looks just the way they are	9
11. I would like to change some parts of my body	11
25. I am satisfied with my moral behavior	25
27. I am satisfied with my relationship to God	27
29. I ought to go to church more	29
43. I am satisfied to be just what I am	43
45. I am just as nice as I should be	45
47. I despise myself	47
61. I am satisfied with my family relationships	61
63. I understand my family as well as I should	63
65. I should trust my family more	65
79. I am as sociable as I want to be	79
81. I try to please others, but I don't overdo it	81
83. I am no good at all from a social standpoint	83
95. I do not like everyone I know	95
97. Once in a while, I laugh at a dirty joke	97

Responses-	Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
	1	2	3	4	5

		Item No.
8.	I am neither too tall nor too short	8
10.	I don't feel as well as I should	10
12.	I should have more sex appeal	12
26.	I am as religious as I want to be	26
28.	I wish I could be more trustworthy	28
30.	I shouldn't tell so many lies	30
44.	I am as smart as I want to be	44
46.	I am not the person I would like to be	46
48.	I wish I didn't give up as easily as I do	48
62.	I treat my parents as well as I should (Use past tense if parents are not living).	62
64.	I am too sensitive to things my family say	64
66.	I should love my family more	66
80.	I am satisfied with the way I treat other people	80
82.	I should be more polite to others	82
84.	I ought to get along better with other people	84
96.	I gossip a little at times	96
98.	At times I feel like swearing	98

Responses -	Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
	1	2	3	4	5

		Item No.
13.	I take good care of myself physically	13
15.	I try to be careful about my appearance	15
17.	I often act like I am "all thumbs"	17
31.	I am true to my religion in my everyday life	31
33.	I try to change when I know I'm doing things that are wrong	33
35.	I sometimes do very bad things	35
49.	I can always take care of myself in any situation	49
51.	I take the blame for things without getting mad	51
53.	I do things without thinking about them first	53
67.	I try to play fair with my friends and family	67
69.	I take a real interest in my family	69
71.	I give in to my parents. (Use past tense if parents are not living)	71
85.	I try to understand the other fellow's point of view	85
87.	I get along well with other people	87
89.	I do not forgive others easily	89
99.	I would rather win than lose in a game	99

Responses -	Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
	1	2	3	4	5

		Item No.
14.	I feel good most of the time	14
16.	I do poorly in sports and games	16
18.	I am a poor sleeper	18
32.	I do what is right most of the time	32
34.	I sometimes use unfair means to get ahead	34
36.	I have trouble doing the things that are right	36
50.	I solve my problems quite easily	50
52.	I change my mind a lot	52
54.	I try to run away from my problems	54
68.	I do my share of work at home	68
70.	I quarrel with my family	70
72.	I do not act like my family thinks I should	72
86.	I see good points in all the people I meet	86
88.	I do not feel at ease with other people	88
90.	I find it hard to talk with strangers	90
100.	Once in a while I put off until tomorrow what I ought to do today	100

Responses-	Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
	1	2	3	4	5

Means and Standard Deviations of Self Concept Scale

Variable	Control Group (N=21, df=45) mean	sd	Experimental Group (N=26, df=45) mean	sd	t Test
Self Criticism	36.38	7.24	36.54	5.54	-0.08
T/F Ratio	1,334.90	444.70	1,103.27	414.37	1.84*
Net Conflict	9.06	18.81	- 0.04	-19.60	1.61
Total Conflict	42.19	13.12	36.73	8.20	1.74*
Total Positive	325.33	40.62	315.04	36.47	0.91
Identity	123.52	12.34	117.85	12.41	1.56
Self Satisfaction	97.33	16.01	95.58	17.27	0.36
Behavior	104.48	15.08	101.62	12.93	0.70
Self					
Physical	70.48	8.56	66.23	7.63	1.80*
Moral	61.67	11.66	63.23	9.48	-0.51
Personal	62.52	6.81	58.81	- 9.36	1.52
Family	66.43	10.33	64.92	9.72	0.51
Social	64.24	8.98	61.85	- 9.85	0.86
Variability Score					
Total	52.43	10.58	53.35	16.15	-0.71
Column Total	32.14	7.38	33.23	-12.88	-0.34
Row Total	20.29	4.28	22.12	- 6.91	-1.06
Distribution Score					
#5	23.86	9.32	19.81	10.15	1.41
#4	22.33	8.34	20.58	- 9.12	0.68
#3	19.52	9.26	23.96	9.53	-1.61
#2	13.95	7.26	17.62	8.42	-1.57
#1	20.33	8.39	18.04	- 9.45	0.87

Means and Standard Deviations of Self Concept Scale (Continued)

Variable	Control Group (N=21, df=45) mean	sd	Experimental Group (N=26, df=45) mean	sd	t Test
Empirical Scales					
DP	53.67	15.99	47.62	13.04	1.43
GM	91.14	10.65	88.15	9.46	1.02
Psy.	50.57	6.72	51.08	6.14	-0.27
PD	62.67	14.52	63.81	14.33	-0.27
N	81.86	13.19	76.27	11.01	1.58
PI	8.05	4.31	7.62	3.32	0.39

*Significant at the .05 level.

APPENDIX B

PEABODY INVENTORY FOR RATING CHILDREN'S EMOTIONAL BEHAVIOR

Date: _____

Client's Name: _____ Age: _____ Sex: M or F
(Name of Child)

Name: _____ Relationship to client ___
(Person filling out scale) (e.g., mother or father)

Note to Parents: We request that each parent complete a copy of the following checklist so that we may better understand your child. It is important that you do not confer with each other regarding the ratings since your independent judgments are more helpful. This information will aid us in better understanding your child, and in understanding boys and girls in general. Thank you.

Number of children (see sample) 1 2 3 4 5 6 7 8 9 10

Client's position, mark with X.

Sample: If you have three children you would circle thusly:

1 2 3 4 5 6 7 8 9 10

If client is oldest, you would mark No. 1.

1 2 3 4 5 6 7 8 9 10

If client is youngest, mark No. 3.

1 2 3 4 5 6 7 8 9 10

DIRECTIONS: On the following pages are some words which describe children's behavior. You are asked to read and rate your child on each item. (Please do not skip any items and rate under one heading only.)

1 will represent very often or very like. (My child is often like this; it is very characteristic of him.)

2 will represent fairly often. (My child is frequently like this; it is fairly characteristic of him.)

3 will represent sometimes. (My child is sometimes like this; not often, but there are times when he is like this; it is somewhat characteristic of him.)

4 will represent occasionally. (My child is like this once in a while; it is only slightly characteristic of him.)

5 will represent almost never. (My child is hardly ever this; it is not characteristic of him.)

	1	2	3	4	5
happy		X			

Number 2 is marked because the child is frequently happy. Frequently best describes his behavior.

Name _____ Date _____

	very characteristic	fairly characteristic	somewhat characteristic	slightly characteristic	not characteristic
	1	2	3	4	5
1. easy going (not quarrelsome)					
2. smart					
3. patient					
4. easily managed					
5. cheerful					
6. sociable					
7. dependable					
8. careful					
9. systematic					
10. persevering					
11. reserved					
12. energetic					
13. adventurous					
14. composed (at ease in social situations)					
15. humorous (sense of humor)					

	very characteristic	fairly characteristic	somewhat characteristic	slightly characteristic	not characteristic
	1	2	3	4	5
16. good student					
17. frank (not evasive)					
18. forceful					
19. talkative					
20. impulsive					
21. independent (doesn't follow the crowd)					
22. friendly					
23. self-controlled					
24. tactful					
25. trusting					
26. self-confident					
27. responsible					
28. generally ahead of his age group					
29. amiable					
30. truthful					
31. modest					
32. open (not concealing)					

	very characteristic	fairly characteristic	somewhat characteristic	slightly characteristic	not characteristic
	1	2	3	4	5
33. well coordinated (in movement)					
34. reasoning (can be reasoned with)					

ANALYSIS FOR RESPONSES TO PARENTS' PERCEPTION OF CHILD BEHAVIOR SCALES

Name_____ Age_____ Grade_____ Sex_____

Trait		Mother	Father
A:	Gregarious.....unsocial		
B:	Bright.....dull		
C:	Emotionally Stable.....neurotic		
E:	Dominant.....submissive		
F:	Cheerful.....depressed		
H:	Adventurous.....timid		
K:	Socialized.....unsocialized		
	Total		

No. of children 1 2 3 4 5 6 7 8 9 10