

## INFORMATION TO USERS

This dissertation was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.
2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.
3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.
4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.

### **University Microfilms**

300 North Zeeb Road  
Ann Arbor, Michigan 48106

A Xerox Education Company

72-20,213

**SCHIEDNER, Lillian Claire, 1937-**  
**THE USE OF INTERPERSONAL PROCESS RECALL WITH**  
**EMOTIONALLY DISTURBED ELEMENTARY SCHOOL AGE**  
**CHILDREN IN SPECIAL CLASS IN PUBLIC SCHOOL.**

Temple University, Ed.D., 1972  
Psychology, general

University Microfilms, A XEROX Company, Ann Arbor, Michigan

© 1972

LILLIAN CLAIRE SCHIEDNER

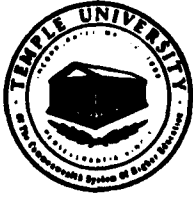
ALL RIGHTS RESERVED

THE USE OF INTERPERSONAL PROCESS RECALL WITH  
EMOTIONALLY DISTURBED ELEMENTARY SCHOOL AGE  
CHILDREN IN SPECIAL CLASS IN PUBLIC SCHOOL

by

Lillian Claire Scheiner

A Dissertation Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Education  
in the  
Graduate School  
Temple University  
1971



TEMPLE UNIVERSITY GRADUATE BOARD

**Title of Dissertation:** THE USE OF INTERPERSONAL PROCESS RECALL WITH  
EMOTIONALLY DISTURBED ELEMENTARY SCHOOL AGE  
CHILDREN IN SPECIAL CLASS IN PUBLIC SCHOOL

**Author:** LILLIAN CLAIRE SCHEINER

**Read and Approved by:**

*Joseph S. Rosenfeld, Chairman*  
*Gilbert R. Fredler*  
*Earl Jones*

**Date submitted to the Graduate Board**

*January 20, 1972*

Accepted by the Graduate Board of Temple University in partial fulfillment of the requirements for the degree of Doctor of Education.

**Date**

*January 21, 1972*

*Mark C. Everett*  
(Dean of Graduate School)

**PLEASE NOTE:**

**Some pages may have  
indistinct print.**

**Filmed as received.**

**University Microfilms, A Xerox Education Company**

## Table of Contents

	page
List of Tables	
Chapter	
I    The Problem	1
Overview	1
Hypotheses	4
Method of the Study	4
Limitations of the Study	6
II   Review of Relevant Research	8
Emotionally Disturbed Children	8
Behavioral Characteristics of Emotionally Disturbed Children	9
Academic Achievement of Emotionally Disturbed Children	13
Screening for Emotional Disturbances in Children	16
Surveys of Classes for Emotionally Disturbed Children in Public School	19
Descriptions of Special Programs for Emotionally Disturbed Children	24
The Efficacy of Special Classes for Emotionally Disturbed Children	41
Programs for Emotionally Disturbed Chil- dren Not in Special Class	43
Residential Programs for Emotionally Disturbed Children	47
Critique of Literature Reviewed	52
Self Confrontation Techniques	54

	History of Self Confrontation Techniques	54
	Videotape Recordings in Hospital Settings	55
	Other Uses of Self Confrontation	60
	Reactions to Self Confrontation	62
	Interpersonal Process Recall	63
	The Use of IPR with Children	67
	Use of IPR in the Classroom	67
	Rationale of IPR for Use with Emotionally Disturbed Children	68
III	Method	73
	Sample Selection	73
	Procedure	76
	Design	76
	IPR Personnel	79
	Audio Video Recordings	80
	Interpersonal Process Recall Technique	82
	Counseling Sessions	84
	Instruments	87
IV	Analysis of Results	97
	Self Concept	97
	Attitudes	101
	Behavior	118
	Achievement	129
	Correlations of Tests Used	133
V	Conclusions	141
	Discussion of Obtained Results	141
	Self Concept	141

Attitudes	145
Behavior	149
Achievement	155
Traditional Counseling	157
Conclusions	157
Recommendations and Needs for Further Studies	160
Summary	162
References	165
Appendices	
Appendix A: The Childrens Self Concept Scale	181
Appendix B: The Way I Feel About Myself	183
Appendix C: Semantic Differential	187
Appendix D: Behavior Problem Checklist	199
Appendix E: Deviant Classroom Behavior Fre- quency Count - Instructions	202

## List of Tables

	<u>page</u>
1. Selection of Classes to be Included in Study	74
2. Racial and Sex Balance in Sample Population	74
3. Deviant Behavior Frequency Count: Interrater Reliability	93
4. Mean Scores of the Self Concept Scale	98
5. Analysis of Covariance of Three Groups on Self Concept Scale	98
6. Mean Scores on The Way I Feel About Myself	99
7. Analysis of Covariance of Three Groups on The Way I Feel About Myself	99
8. Mean Differences Between Treatment Groups on The Way I Feel About Myself	100
9. Adjusted Mean Scores of Factor of Evaluation on Semantic Differential for Three Treatment Groups	103
10. Analysis of Covariance of Three Groups on Evaluative Factor: Semantic Differential	104
11. Differences Between Treatment Groups with Significant Differences on the Evaluative Factor	106
12. Analysis of Covariance of Three Groups on Evaluative Factor: Semantic Differential	107
13. Analysis of Covariance of Three Groups on Evaluative Factor: Semantic Differential School Work	108
14. Adjusted Mean Scores of Factor of Activity on Semantic Differential for Three Treatment Groups	109
15. Analysis of Covariance of Three Groups on Activity Factor: Semantic Differential People Related to School	110

16.	Analysis of Covariance of Three Groups on Activity Factor: Semantic Differential: School Places	111
17.	Mean Differences Between Treatment Groups on the Activity Factor: Classroom	112
18.	Analysis of Covariance of Three Groups on Activity Factor: Semantic Differential: School Work	113
19.	Mean Differences Between Treatment Groups Which Showed Significant Differences on the Activity Factor	114
20.	Adjusted Mean Scores of Factor of Potency on Semantic Differential for Three Treatment Groups	115
21.	Analysis of Covariance of Three Groups of Potency Factor: Semantic Differential: People Related to School	116
22.	Analysis of Covariance of Three Groups on Potency Factor: Semantic Differential: School Places	117
23.	Analysis of Covariance of Three Groups on Potency Factor: Semantic Differential: School Work	119
24.	Differences Between Treatment Groups on Potency Factor for Staying After School	120
25.	Table of Mean Scores of Treatment Groups on Be- havior Problem Checklist.	121
26.	Analysis of Covariance Between Treatment Groups on Behavior Problem Checklist	121
27.	Means of Two Treatment Groups for Four Periods of Observations: Quay-Werry Deviant Behavior Frequency Count	123
28.	Repeated Analysis of Variance Between Two Groups for Four Observational Periods on Quay-Werry Deviant Be- havior Frequency Count: Attending Behavior	124
29.	Repeated Analysis of Variance Between Two Groups for Four Observational Periods on Quay-Werry Deviant Be- havior Frequency Count	125

30.	Means of Two Treatment Groups for Four Observational Periods on Quay-Werry Deviant Behavior Frequency Count	127
31.	Repeated Analysis of Variance Between Two Groups for Four Observational Periods on Quay-Werry Deviant Behavior Frequency Scale	130
32.	Mean Scores of California Achievement Tests	134
33.	Analysis of Covariance of Three Groups on California Achievement Tests	135
34.	Intercorrelations Between Tests and Vari- ables Used in this Study	137
35.	Correlation Between Observed Behavior and Tests Used	138

## Acknowledgements

There are many people, in Temple University Department of School Psychology, in the Camden School System Community, and at home, without whose support and help this project could never have been accomplished.

Special thanks are due to the support and help received from members of the dissertation committee. Dr. Rosenfeld, Chairman of the dissertation committee was always available, and offered insightful and kindly guidance, patience and encouragement. He was always available for consultation, direction and invaluable advise. To Dr. Soucar, much thanks is due for his invaluable help with all aspects of the analysis of the data, and for his wise criticisms and aid on all the research relevant to this study. To Dr. Gredler, acknowledgement is due for his unfaltering demands of the highest academic standards, and concern with uncompromising professional integrity.

To the other members of the Department of School Psychology, I am indebted for their unobtrusive support and encouragement through many difficult hours. For their constructive criticism, sense of humor, sense of proportion, and especially for their presentation of a role model, I am grateful.

It is not every public school system that will sup-

port, or even allow an undertaking of such magnitude, in terms of equipment, money and professional time required, as this attempt to remediate emotional disturbances in their children required. In this acceptance and support Camden is a giant.

Special acknowledgement is due to all those teachers, principles, and administrators in Camden City Schools, who cooperated on this project. In spite of their original reticence, their primary concern with the welfare of the children they serve, and their professional integrity won the day, and they gave of themselves and their talent.

The thirteen guidance counselors and the school psychologist who were involved in this project, entered with enthusiasm, and gave beyond what may have been considered their professional responsibility. Although often on the firing line, they withstood the pressures of the status-quoers, and maintained their trust with the children of Camden. Theirs was no small accomplishment.

Sometimes, in an undertaking, there is one person, who is primarily responsible for the critical spark of the happening. Such a being, is Mr. Kirkpatrick, Director of Special Services. He gave birth to the germ of the idea, nurtured the spark, provided the wherewithall, fought the foe, stood sentry, and took pride in the results. To him belong the spoils. He always gave a damn.

Attention must now be directed to those people, who not only gave the most, but also suffered most. Special acknowledgements are due to my husband, Rabbi Dr. Louis Scheiner. Although, it was at no small cost to his personal comfort and position he willingly played the confident and counselor. Because he was always there when I needed him most, I love him. Because he is so proud of this accomplishment, I thank him.

Special thanks are due to my parents, without whom, none of these confrontations would have been so enjoyably possible. They have always given unquestionably of their love. In spite of their protestations to the contrary, they have always encouraged the attainment of high aspirations. I am thankful to be able to make them proud.

Last, but not least, the younger members of the family, Zippy, Devora, Avi and Judy. Actually the children deserve most of the credit for insightful guidance in every phase of the dissertation. They gave support during difficult periods of confrontation both in Camden and at home. They marked tests, collated data, filled in IBM sheets, proofread tabulations, corrected typographical mistakes, and made me laugh when I rather felt like crying. They gracefully accepted their loss of a mother, although, it must be admitted that they were not consulted in the matter. In spite of their youth, they exhibited an uncanny under-

standing. They complained always with a remarkable sense of humor. I am most proud to acknowledge that they are the most wonderful children in spite of it all!

## Chapter 1

### The Problem

#### Overview:

The public school is dedicated to the ideal of educating all the children of all the people. However, the behavior of emotionally disturbed children deviates from what is expected for their age, sex, and status, and causes them to experience serious difficulty in the school system. Since World War II there has been a tremendous upsurge of interest in such children. This has resulted in the growth of the number of special education facilities for these children (Donahue & Nichtern, 1965). The aim of education in these classes is to help the children learn more adaptive behaviors. Heretofore, education has had little success in this endeavor due to the fact that generally little is known about how to work with these children. In order for the public schools to discharge their responsibilities to all the children, including the emotionally disturbed, it is necessary to find ways which are effective in helping such children overcome their emotional blocks and function within normal boundaries, in order that they may return to regular classes and maintain normal progress.

There are estimated one and a half million emotionally disturbed children in the United States (Hobbs, 1966). These children cannot be contained in the regular classroom because their behavior is so inappropriate that such

attendance would be disruptive to the classroom or place undue pressure upon the teacher or further the disturbance of the pupil (Dunn, 1963). Various attempts have been made to try to cope with and educate these children. These have included residential treatment centers, special schools, and multi-disciplinary approaches. In all of these treatments, attempts have been made to try to modify the behavior of emotionally disturbed children so that they can adjust to and cope with regular class placement. Attempts have been made to provide for these children in special classes within the public schools (Birch, 1956).

Emotionally disturbed children are frequently reported to be hyperactive, aggressive, distractable, impulsive, and irritable. Their behavior is often unpredictable. They may have difficulty with abstract reasoning, tend to be anxiety ridden, emotionally immature and school failures. However, there is no one outstanding feature, social history, or personality constellation, that distinguishes all emotionally disturbed children (Donahue & Nichtern, 1965).

Most of the approaches used so far to work with emotionally disturbed children have been implemented on a philosophical basis. Their success has been reported in terms of case histories, anecdotal records and subjective evaluations. As yet, there is a lack of structured approaches, that have been experimentally tested and found to make a significant contribution toward the improved ad-

justment of emotionally disturbed children. It is to the implementation of such a technique within a public school special class setting that this study is directed.

The technique of Interpersonal Process Recall (IPR) via video tape, as developed by Kagan and his associates (1967) has been successfully used to train guidance counselors. A counseling session is videotaped and then played back for a recall interview in which both the counselor and client are interrogated for the purpose of assisting in the recall and examination of feelings. This insight has been found to result in modifying counselor behavior. It has also been used to provide clients with insights that result in more rapid therapeutic gains. There has been some small scale experimentation both in modifying teacher behavior and in marital counseling (Alger & Hogan, 1969).

However, this technique has never been attempted with a group of emotionally disturbed public school children. This study will direct itself to the question: Can IPR be effectively used in a class of emotionally disturbed children in public school in order to effect behavioral changes, as well as changes in attitudes toward self and school, and academic achievement?

The use of IPR is seen as a possible technique which can help the child perceive himself, introspect either verbally or non-verbally, assess his behavior, accept his feelings and thereby change his self-concept, his attitudes toward himself and others, and modify his behavior. We

would also expect to see the child better able to achieve academically.

Hypotheses:

- H1: Following exposure to IPR, children will have more positive self-concepts than children not so exposed, as measured by a Self-Concept Scale (Lipsitt), and The Way I Feel About Myself Instrument (Piers and Harris).
- H2: Following exposure to IPR, children will have more positive attitudes toward school than children not so exposed, as measured by a Semantic Differential.
- H3: Following exposure to IPR, children will exhibit less disruptive behavior than children not so exposed. This will be evaluated by teachers on a checklist, and measured by the observations of trained observers on the Quay-Werry Instrument.
- H4: Following exposure to IPR, children will gain more in reading and in arithmetic than children not so exposed. This will be measured by scores on the California Achievement Test in Reading and Arithmetic.

Method of The Study:

In order to investigate the problem and conduct the study the following methods and procedures were used:

- 1- A review of previous literature pertinent to the

study was made.

- 2- Nine classes of emotionally disturbed children were used for this study. In six of these classes, four of the eight students were randomly selected to be exposed to IPR. The other half of the class received conventional counseling as usually practiced in the school. The three other classes were not given any counseling and comprised a control group.
- 3- School psychologists and guidance counselors were trained in the techniques of IPR counseling.
- 4- In September, all children in the study received pre-tests: Pupil Self Attitude Inventory, The Way I Feel About Myself, The Semantic Differential and the California Test in Reading and Arithmetic. Teachers recorded Behavior Problem Checklists for each child. In May post tests were administered.
- 5- Observers were trained in the use of the Quay-Werry instrument, a measure of disruptive behavior (Werry & Quay, 1969) and made three observations (of 10-15 minutes each), of each child in October 1969, six observations during treatment, and three more observations in May 1970 as a post measure.
- 6- Analysis of the data collected was carried out according to the statistical procedures described in Chapter IV.

- 7- On the basis of the findings, a number of conclusions and recommendations were formulated regarding the usefulness of IPR as a technique for ameliorating the emotional disturbances of children in special classes and enabling them to deal more effectively with their academic environment.

Limitations of the Study:

1. This study was carried out within one school district, the school system of Camden City. This is an urban area whose school population encompasses 20,400 children, 60% of whom are black, 28% Caucasian, and 12% Spanish-speaking of Puerto Rican extraction. (A Proposal to Install and Operate a Personnel Development and Demonstration Program in Camden, New Jersey School System, 1969.) The sample population was 60% black, 31% Caucasian, and 9% other (who are mainly Spanish speaking of Puerto Rican extraction). There is no reason to believe that this population is basically different from those in other urban, industrial areas, but one should be cautious about generalizing the results of this study to rural, suburban, middle class or largely white settings.
2. The population studied consisted of 91% males. Caution should be exercised before generalizing the results of this study to a female population.

3. Because of the nature of the population studied, class size was small. One may not generalize the results of this study to regular classes, or to emotionally disturbed children in regular class settings.
4. Classes were randomly assigned as experimental and control groups in order to control for teacher variables. However, since the total number of classes included were only 9, the teacher factor may have affected the results.
5. Because the nature of this study necessitated working within a school setting, work was done with intact classes. This precluded the use of absolute randomization.

As a consequence of these limitations the conclusions arrived at should be limited to the setting and population studied and interpreted cautiously.

## CHAPTER 2

### Review of Relevant Literature Emotionally Disturbed Children

Estimates of the number of children in the United States who have emotional problems vary greatly. White and Harris (1961) estimate the incidence of emotional maladjustment in the school population to be between four and seven per cent. Pate (1963) suggests that five per cent of school children are emotionally disturbed, and in need of intensive special education. Abrahamson (1955) and Bower (1961) feel that 10 per cent need help for emotional problems. According to Stennett (1966), a significant number of these children are not likely to resolve their adjustment problems without help.

Children who had been screened in the primary grades and had shown evidence of incipient pathology, were later found to show greater indications of maladjustment on objective tests and behavioral ratings, obtained lower achievement scores, were less well liked by their peers, and had more physical complaints than their non affected peers (Cowan, Zax, Izzo, and Trost, 1966).

Glavin (1968) questioned the basic assumption that the majority of childhood problems would continue to get

worse, if left untreated. In 1962, he conducted a survey of elementary school aged children in public school grades 2 to 5 in Anderson County, Tennessee. He classified 12.9% of the children "emotionally disturbed," as defined by a score of 7 or lower on a 25 point teacher-peer-self adjustment scale. Only thirty per cent of the children so classified, who had not received any intervention, continued to be classified as emotionally disturbed on a similar screening four years later. These findings suggest that the majority of emotional disturbances among school aged children do not persist more than four years.

The difference between the above survey and the previous two may be partially due to a statistical regression effect as suggested by Glavin (1968), and partially due to the definition of emotional disturbance. Morse, Cutler and Fink (1964) have found that many children are defined as emotionally disturbed and placed in special classes as a result of the attention that they have drawn to themselves in the classroom rather than as a result of screening procedures.

#### Behavioral Characteristics of Emotionally Disturbed Children

The behavior of children who have been placed in emotionally disturbed classes has been found to be significantly different from children found in the regular class

in three major ways: (1) the prevalence of unsocialized aggression, that is, hostile, contentious behavior, (2) the presence of conduct disorders, that is, defiant, impertinent, uncooperative, irritable and boisterous actions, and (3) the prevalence of many symptoms of the inadequacy-immaturity syndrom (Quay, Morse, & Cutler, 1966; Spivack & Swift, 1966).

Werry and Quay (1969) were able to differentiate behavior of normal and emotionally disturbed children in their classrooms using a behavior frequency counting technique. Behaviors are classified into three categories: (1) deviant behaviors, (2) attending or work-related behaviors, and (3) teacher-pupil interactions, which are further divided into mutually exclusive subitems. In comparing conduct problem children with normal children, the conduct problem children were clearly different in the areas of referral such as running around the room, noisiness, talking, and not working. Attending to their work occurred only 54% of the time, compared to 75% of the time that normal children attended to their work. Normal children were largely capable of independent work and infrequently received or sought teacher contact, whereas the conduct problem children received an inordinate amount of teacher attention which was largely positive and initiated by the teacher. When the child was not working, the teacher would go to his desk, show him how to do the problem, help

him get school supplies, find his place in the book, and make such remarks as: "this is correct, now see if you can do the next example." A great deal of this type of positive teacher-initiated interaction occurred when the child was engaged in disruptive behavior. There was a large variance in this behavior, indicating that some children received a large amount of teacher contact while others received almost none. In general, physical aggression and daydreaming occurred infrequently. A significant proportion of the deviant behavior took the form of such passive aggressive acts as dawdling, fiddling, playing with toys, and reading comics, which can be classified as "not working."

Spivak and Swift (1966) also found that special class children have a greater need to seek out the teacher as a source of attention. They state that the poorly self controlled passive aggressive and psycho-neurotic child has a greater tendency to engage in behavior that is not relevant to the work going on in the classroom. Such children were also found to have a significantly greater need for achievement recognition.

In attempting to obtain an increased understanding of behavior problems of children, teacher ratings of 58 clinically frequent problems were obtained for 831 kindergarten and elementary school aged children, and four

separate factor analyses were conducted by Peterson (1961). He found that two separate factors invariably evolved.

One, which implied a tendency to express impulses against society, included such things as disobedience, disruptiveness and fighting and was labeled "conduct problems." The other implied impulses inhibited so that the child suffers, contained elements of low self esteem, social withdrawal and dysphoric moods and was called "personality problems."

The resultant Behavior Problem Checklist was found to be instrumental in discriminating the number and degree of severity of teacher-perceived problem behaviors of emotionally disturbed, learning disabled and normal children, ages 6-13, grades 1.2 - 7.9 (McCarthy and Paraskevopoulos, 1969). The profiles of the three factors: (1) unsocialized aggression (2) immaturity-inadequacy and (3) personality problems were also found to be significantly different for each of the groups. The teachers of emotionally disturbed children saw their pupils as having more behavior problems of greater severity, than did either teachers of learning disabled or of average children. The main behavior problems of emotionally disturbed children were characterized by acting out, overt aggression, hostility, negativism and hyperactivity.

Academic Achievement of Emotionally Disturbed Children

Werry and Quay (1969) feel, that although many evaluations of programs for emotionally disturbed children measure achievement, it is quite possible that such educational improvement is not likely to be seen until there is an improvement in behavior.

Hirschberg (1953) says that the educational process of an emotionally disturbed child should be measured in such units as the development of "less tension within the child," a decrease in "testing, demanding behavior," and the development of a more comfortable relationship with the teacher. Although he states that such progress must take place before increases in educational achievement can be seen, he makes no suggestions as how to measure these criteria.

Swift and Spivak (1969) found that those factors that correlated highly with achievement in regular class secondary school pupils, also were related in the same way in pupils in emotionally disturbed classes. Factors that related to achievement in both groups were reasoning ability, originality, verbal interaction, rapport with teachers, disturbance-restlessness, general anxiety, poor work habits, expressed inability and lack of intellectual independence.

Many studies have shown that emotionally disturbed

children in special classes in public school were found to suffer a significant degree of academic retardation in spite of the fact that their intelligence quotients were normally distributed (Morse, Cutler & Fink, 1964; Stone & Rowley, 1964; Shimota, 1964). It has also been found (Stennett, 1966) that emotionally handicapped children tend to get progressively farther behind their peers academically as they progress through elementary school.

A study of 116 children referred to the Child Psychiatry Service of the State University of Iowa for diagnosis and possible treatment of emotional problems revealed educational disabilities in both reading and arithmetic on the Wide Range Achievement Test, when mental age as well as chronological age was used as the basis of expected achievement (Stone and Rowley, 1964). Arithmetic scores were found to be significantly lower than reading scores. A much larger proportion of these children were also in grade placements below that expected on the basis of chronological age.

Shimota (1964) found almost one third of a sample of 74 hospitalized disturbed adolescents disabled in reading based on age or IQ expectancies. Graubard (1964), using a small sample of 21 pupils used comprehension rather than oral word pronunciation as the criterion of reading, and found both reading and arithmetic (computation) of

emotionally disturbed children about three years below the mental age means. One of his main findings was that many of the emotionally disturbed children had deficiencies on the ITPA similar to those of learning disabled youngsters.

Motto and Wilkins (1968) analysed the academic achievement of 48 hospitalized children, and found that all of them were underachieving relative to their mental age expectations. However, it is not known whether this difficulty is due to emotional disturbance or whether the academic underachievement was exacerbated by the fact that they were confined to an institution. However, it is a longstanding common clinical belief that emotional disturbance has its inhibiting effect, and that disturbed children are functioning below their intellectual potential (Rosen, 1925; Miller, 1933; Eysenck, 1947; Salzinger, 1957; Bortner & Birch, 1969).

However, this opinion was not borne out by a study of 34 children receiving residential treatment at an Ohio psychiatric hospital (Tamkin, 1960). The Wide Range Achievement Test scores showed that for the group as a whole, the academic achievement level was consistent with the expectation for its mean chronological age. Only 32% demonstrated some degree of educational disability, 41% were educationally advanced and 27% were at their expected

grade level. But this group of children had significantly lower scores in arithmetic than in reading. Tamkin felt that these findings lent support to the theory that educational disability may be a symptom of the same condition that produced the emotional problem.

Wolf (1965) studied the academic performance of emotionally disturbed children and teacher ratings of their "effort" and compared it to normal children. He found no significant difference in such performance, but a difference in teacher's marks in "effort." He suggests that this mark reflects problem behavior that is alarming or disrupting in a group which is doing as well academically as others of similar intelligence and background.

The differences in the research may be attributed to the differences in populations studied, or criteria of definition of educational disability used.

It is not clear as to whether the maladaptive behavior of emotionally disturbed children is restricted to symptoms unrelated to school work, or generalizes and results in inhibiting effects upon school work.

#### Screening for Emotional Disturbances in Children

Various instruments have been used to significantly discriminate emotionally disturbed children from normal children.

In attempting to develop a group survey technique that teachers could use to identify emotionally disturbed children, Bower, Tashnovian, and Larson (1958) collected data on pupil behavior of 192 emotionally disturbed and 4,871 children not previously identified as emotionally disturbed, in selected public schools in California. They found reading and arithmetic achievement, intelligence, sociometric status, and teacher ratings of behavior and physical factors significantly different in emotionally disturbed and normal children.

Maes (1966) studied a sample of pupils in grades 4 to 6 in the public schools of Lansing, Michigan. This group of children had been diagnosed as emotionally disturbed by the district psychological staff or the staff of the community child guidance clinic. Maes compared a sample of 20 emotionally disturbed children to 272 normal pupils and found the following variables to differentiate the two groups in decreasing order of prediction: teacher rating, intelligence, arithmetic, and self reported concepts of the self.

Third grade school children in Rochester, New York who had been previously identified in the primary grades by the school psychologists and social workers as having manifest or incipient emotional dysfunction, on a clinical judgment scale, were compared to their peer grade mates (Liem, Yellot, Cowen, Trast and Izzo, 1969). The entire

third grade consisting of 59 students was administered the criterion battery which contained: (1) a measure of ideal discrepancy, (2) a school behavior survey, (3) a teacher rating of maladaptive behavior on an adjective checklist, (4) a parent attitude test, (5) selection of roles in a class play, and (6) achievement measures. It was found that the clinical judgment of health-pathology correlated strongly with all three estimates of adjustment and weakly but significantly with the anxiety scales, with all but one of the parent measures, with four of the sociometric measures and with 17 of 19 achievement measures.

In studying the perceptions of family and school-related variables by school adjusted, school disordered and institutionalized emotionally disturbed preadolescent boys, Kauffman (1970) found that the evaluative factor of a semantic differential and the Family Relations Test were sensitive to differences in meaning and emotions related to family and school among the diagnostic groups. However, he found that the groups which experienced a greater degree of negative interaction with their environment expressed more extreme and more positive perceptions of family and school related subjects and explained this as a result of psycho-dynamic defenses and unrealistic assertions about environmental events.

Surveys of Classes for Emotionally Disturbed Children in Public School

In discussing the education of emotionally disturbed children Bower (1959) stated that most public schools dealt with their emotionally disturbed children by a policy of exclusion, although some states had legislation providing reimbursement for public school programs for such pupils. There were few programs for the early identification of emotionally disturbed children, and those programs which were then in existence often dealt with a heterogeneous group of emotionally disturbed, educationally retarded, non-successful, non-motivated school failures in a "holding action." He saw the need for a program of therapeutic intervention to help these children learn to control their impulses, learn to read, and learn to overcome their fears of school. He recommended the use of mental health consultants as part of a prevention program.

The most comprehensive study of special public school classes for the emotionally handicapped was conducted by Morse, Cutler and Fink (1964), who located a total of 117 public school programs specifically designated for the emotionally handicapped. While a basic concern for the child was operative in each program surveyed, other considerations included were the need to relieve pressure on regular classroom teachers, passage of specific state legislation to provide help and service instead of exclu-

sion for these children, pressure from parent groups, mental health personnel outside the school, and single-minded individuals, and dramatic instances of emotional handicap.

The programs surveyed differed in the type of children they were designated to serve, accepting pupils with symptoms of general adjustment difficulties, moderately psychiatrically disturbed, acting out children who disrupt regular classes, seriously psychiatrically disturbed, and recognized antisocial and delinquent children. There was also a wide diversity in the stated goals of these programs. Some of the programs attempted to expedite changes in the pupils so that they could return to regular classes. Others said that they were trying to foster normal educational achievement in emotionally disturbed children. Other school districts felt that in setting up special classes for these children they were fulfilling their responsibility which was to educate all pupils. Others states they were providing rehabilitation and remediation. Some programs merely attempted to provide a useful, secure placement for disturbed pupils, or to free the regular classroom from behavior problems. Other programs states that they were experimental in nature.

Programs surveyed were primarily designated as remedial, and were typically meant to provide a terminal experience, after which the child would return to the reg-

ular classroom. The vast majority of pupils in these classes were boys, the ratio of boys to girls being more than five to one (380 boys to 75 girls). Children in these classes typically were those who were most manifestly disturbed or disturbing in the classroom and who had been brought to the attention of the psychologist for diagnostic evaluation after the classroom teacher and principal became aware of their behavioral or educational difficulties.

The types of programs provided in these classes ranged from those which emphasized individual and parental therapy to those that were based on the systematic application of a learning theory.

Teachers perceived motivational and behavioral control as one of the main problems of the classroom. There was a great deal of diversity in techniques and methodologies used by the teachers in these programs. The class process generally resembled regular classes and covered regular school content, but there often was more emphasis corrective-teaching and academic expectations were reduced. Individual work and various motivational devices were more often used, with greater emphasis on gratification and rewards. There was a surprising lack of emphasis on specific therapeutic approaches, based on information available as a result of the diagnostic tests.

There were stated efforts to reduce anxiety, and provide ego support and success experiences. Teachers saw

interpersonal relationships between themselves and their pupils as salient, and the teachers generally had a wide degree of operating freedom. Teachers list academics as occupying more than 50% of class time in 3/4 of the programs. Activities observed in these classes were most often those expected for the age group involved and included skill learning, special projects, art and content subjects, but there was often wide latitude, and there were children lost in reverie or actually sleeping.

Some attempts used to lessen maladaptive behavior included counseling, individual or group discussion, or some form of life space interviewing, which often embodied some approach to problem solving or learning to work out one's difficulties. Another general approach emphasized individual and group responsibility of the children. The third approach attempted to modify behavior by means of indirect controls which resulted from a good program and reasonable routine.

It was found that the school administrators and special service personnel were reasonably satisfied with the programs. Although they recognized that success was not assured with every child, they took the position that these classes were justifiable, and that expansion and imaginative modification were needed.

For this survey an evaluation of success of these programs was made by retrospective reports by the pupils

and the teachers. In terms of the perceptions of the children themselves, the special class offered significantly better conditions than did the regular classes from which they came. The children saw improved relationships with teachers and peers, felt less anxiety and parental pressure, were happier, had higher morale, behaved better and experienced greater academic success than in their previous setting. There was considerable "halo effect" among these dimensions, but it was felt that a general improvement in reactions to the school situation had occurred.

There were significant changes in the perceptions of the teachers regarding the condition of their children, not only in the period in which they were in special class but also between their experience in regular class and early contact in the special class. This was seen in teachers' reports of the pupils' ability to control themselves, their affect, their academic achievement and their personal relationships. The authors suggest that these results may be a reflection that previous reports of these children made them appear worse than they were, or that the needs of the special class teacher to see improvement was great enough to distort his memory or judgment.

In general, the public school classes for emotionally disturbed children were seen to have positive effects to varying degrees. None of the programs were seen to be damaging; and the programs appeared to be good in many

specific or clinically reasonable ways. However, the survey revealed an amazing lack of specific patterns or uniformity in approach. The approaches tended to be intuitive rather than systematic, reflecting confusion on the part of educators and clinicians. Criteria for success or failure of the programs were very subjective. The authors of the survey conclude with a plea for the development of a systematic coordinated approach for the education of emotionally disturbed children.

A survey conducted in Michigan indicated that very few districts there conducted specialized programs for their emotionally disturbed children and the majority of programs in existence consisted of the "special class" type. Administrative personnel were responsible for their additional duties, and although they had little experience in working with emotionally disturbed children, were often assigned to direct these classes. Psychologists, psychiatrists, and visiting teachers were usually also limited in the time they had available to devote to the program. Availability of state monies and grants was the most significant factor in the establishment of these classes (Angel-latti, 1968).

Descriptions of Special Programs for Emotionally Disturbed  
Children

Reviewers of the research (Glavin & Quay, 1969;

Graubard & Miller, 1968; Balow, 1966; Morse & Dyer, 1963) have stated that although numerous studies have appeared recently dealing with the treatment of emotionally mal-adjusted children, many of them have been descriptions of projects, clinical case studies, anecdotal records and hypothesized methodologies without tight supportive research data.

In a specially designed adjustment classroom for emotionally disturbed children in Ottawa, Canada, where the emphasis is said to be academic, the children received individual tutoring at the beginning of the program. Such tutoring usually started below ability level as measured by standardized tests in order to assure a pattern of success (Pimm, 1967). There is also used an intensive program of reinforcement for appropriate behavior, and unacceptable behavior is prevented and extinguished through conditioning techniques.

The Elgin special class was one of the first in Illinois. Children between the ages of 6 to 10 are admitted on the basis of a diagnostic workup including a determination of capacity for learning, level of achievement, evaluation of perceptual abilities, and a plan for remediation based on the program are stated in terms of reconditioning of deviate, non-integrative classroom behavior, as well as attainment of academic achievement commensurate with ability. Although parents are often involved in therapy, the emphasis of this

program is upon individual remedial instruction. The rationale for this emphasis is that new and flexible behavior patterns learned result in more integrative adjustment (Kelly, 1967; Lathem, 1966).

One major hypothesis concerning emotionally disturbed children is that these children lack order or structure in their environment and in their emotional-educational life (Davids, 1964). Haring and Phillips (1962) based a technique on increasing the definiteness and structure of the daily classroom experience to remedy this condition. Teachers were carefully oriented to structure the classroom environment and daily routine. Specific individual assignments were given by the teacher for each individual child, separate booths were provided so that a child could work with a minimum of distraction, work had priority over play and recreation, materials were kept out of sight to minimize distractions, and free roaming around was kept to a minimum. This technique was based on previous research (Phillips & Haring, 1959) showing that children in such an educationally and socially structured classroom achieved significantly better on the California Achievement Test than a control group of children in a permissive, non-structured classroom atmosphere. Such children also made better progress in social emotional development, as rated on 26 behavioral items.

Such a technique of removing distractions by reducing extraneous stimuli and reducing the learning space

to a small area by means of cubicles to alleviate the distractibility and hyperactivity of emotionally disturbed children was also incorporated into a special educational program in Carmel, New York (Smith, 1967). Such special classes for emotionally disturbed children in New York provide "structured" classrooms where children are expected to learn appropriate behaviors in part by behaving appropriately. Little emphasis is placed upon consultative assistants from personnel with a mental health orientation, because of the belief that the ultimate responsibility for education and the alleviation of factors that interfere with education belongs to educators (Smith, 1967). This is similar to ideas expressed by Reger (1967). Emphasis is placed on close contacts between teacher and parent and individualized programming of instruction. Goals of the program are reintegration of these children into regular class. Follow-up studies will reportedly be difficult because no base data is available and comparisons between populations will be difficult to make.

Marrone and Anderson (1970) describe county classes for emotionally disturbed in Montgomery County, Pennsylvania which provide special staff training of selected teachers, and the availability of a psychologist who also serves as a supervisor of special education, and a psychiatrist to visit each of these classes one day a week, and provide group therapy sessions with them. Chemotherapy is frequently

employed. Behavior modification programs with primary and secondary reinforcers are also used. The educational program itself is designed to provide individualized prescribed instruction and used multi-modal techniques. Parental involvement is initiated by social workers. During the course of this program as many as 35% of the children have been successfully reintegrated into regular class.

The Syracuse Scholastic Rehabilitation Program "attempts to rehabilitate emotionally disturbed children by means of environmental modification of instruction and classroom structure." Its staff includes special educators, social workers, psychiatrists and psychologists. Purposeful programming includes planned controls, rewards and activities and opportunities for emotional unblocking by helping the child develop new and appropriate patterns of mastery (Radin, et al., 1966).

The pilot program consists of two classes, limited to 10 children each, designed to be taught by special education teachers in a public school setting. The primary class includes grades 1 to 3, and the intermediate grades include grades 4 to 6. The Administrative Director is an educator who is advised by a group of educational and clinical administrators.

The multi-disciplinary approach includes an educational program, and a clinician whose role it is to counsel parents and often provide individual therapy to

child. Often the "life space" interview, and isolation of the child in the classroom or removal of the child in the classroom or removal of the child from the room is used. Academic progress and social potential of children involved in this program are significantly higher than that of a control group of disturbed children in the regular school.

Medication, particularly methylphenidate (a stimulant) was found to significantly increase accuracy of a learning task and increase attention and cooperative behavior in a class for emotionally disturbed children (Sprague, Barnes and Werry, 1970). In this study each of the twelve children served as his own control, using methylphenidate (stimulant), thioridazine (tranquilizer), and placebo in a highly structured laboratory situation. Questions that remained unanswered were the relevance of laboratory measures of learning performance to "real life" situations of the children. Einsenberg and others (1963) observed a significantly greater reduction in deviant behavior in a drug therapy group (dextroamphetamine) of institutionalized delinquent boys than in placebo and control groups. Helper, Wilcott and Garfield (1963) tested the effect of chlorpromazine on laboratory and memory on a group of elementary school aged disturbed youngsters. Inconsistent results suggested that the drug impairs attention span. However, no drug effect was found on the memory tests.

More recently, professional psychiatrists, psychologists and educators have come to see that education and therapy of emotionally disturbed children are not mutually exclusive processes but that "reality intervention," i.e., the impact of the school environment itself, and teacher interaction with the child can be therapeutic (Knoblock, 1968; Fenichel, 1968).

Hirschberg (1953) describes the school experiences' thrust in the total treatment of the emotionally disturbed child as "planned ego development," since it is oriented to reality, and aims towards the development of skills and mastery, can offer gratification at varying degrees of ability, aspirations, interests and thus aid in the development of self esteem, and it offers opportunities for group participation and identity. Hirschberg feels that it is the teacher's job to support healthy defense patterns in the child, help him tolerate reality pressures, focus on the "situational present" and help the child to adapt and learn to lessen the child's anxiety through the educative process. Although his position is basically a theoretical one with few suggestions of how to implement such a program, he does suggest such things as elasticity of the program to meet the individual's interest span, level of ability and specific handicaps, and allowing the child to be honest in his expression of feelings, although demanding

control of certain actions.

A person's self concept, as well as his behavior in the interpersonal environment and his perception of others is largely determined by the way other people respond to him. Individual behavior is always linked to the behavior of others, and the key to behavioral change lies in creating a shift in the perception of interpersonal interactions (Secord and Backman, 1961). This is similar to recent emphasis on expectancy theories (Rosenthal, 1966; Rosenthal & Jacobson, 1968). Therefore, we should look for clues to the child's behavior in the group process and dynamics. The basis of the milieu approach (Redl, 1968) is in the interaction between child and adult. It emphasizes the importance of person-to-person interaction. To deal effectively with children, the adult must have an empathic potential, and be able to see and relate to the deeper feeling of the child. The teacher attempts to modify behavior and growth within an interpersonal relationship. Children react to her total manner. Much of her success depends upon such intangibles as sensitivity, spontaneity, and empathic qualities. Any process that helps to correct or reduce a child's distorted perceptions, disturbed behavior or disordered thinking, and that results in a greater mastery of self and one's surrounding is a therapeutic process. The learning-teaching process for disturbed children should encompass the increased awareness of self, others,

and environmental interactions (Seagull and Johnson, 1968). Feelings should be nurtured in the classroom in such a way that the child can learn to own up to his feelings without guilt.

Various approaches of intervention have been expounded to help modify the behavior of an emotionally disturbed child. One of these is Life Space Interviewing (Morse, 1963; Morse and Small, 1959; Redl, 1959), which is designed to exploit an event or behavioral episode experienced by an emotionally disturbed child. The behavior is examined and sometimes it is interpreted by the child with the teacher's help. Increased understanding and insight offer corrective feedback to the child so that he will modify his behavior to avoid future painful peer encounters. Emphasis is placed upon environmental experiences and upon how the child reacts to and copes with these experiences.

The life space interview includes (1) a discussion of the actual situation, (2) listening to what the child says, (3) helping the child put into words what he wants to say, but cannot, such as, "you were very disappointed, weren't you?"; being aware of the type of thinking demanded by a particular situation; (4) helping the child with plans for specific steps to improve the situation; and (5) giving the child an opportunity to ask questions (Bernstein, 1963; Newman, 1963).

There is a small but rapidly expanding accumulation

of data which indicates that behavioral modification principles that have been demonstrated in learning laboratories are also applicable to managing and modifying the behavior of children in classrooms. Such principles are based upon the concept that behavior, both normal and abnormal is learned. Behavior is maintained by its effect upon the environment. Those behaviors which change the external environment in turn change the subsequent state and behavior of the individual.

Children who exhibit deviant behavior cause pain to themselves and to others who interact with them. One of the main tasks of the special education teacher is to reduce deviant behavior and develop socially approved behavior. Behavioral modification techniques are an example of one approach that can provide the teacher with systematic skills which she can utilize to modify deviant behavior and encourage more acceptable, appropriate types of behavior (Whelan & Haring, 1966; Grossberg, 1964). These include such techniques as extinction, positive reinforcement, discrimination learning, desensitization and modeling (Clarizio and Yelon, 1967).

There are records of the successful utilization of token reinforcement resulting in an abrupt reduction of deviant behaviors and evidence suggesting that the children's appropriate behavior generalized to other school situations (O'Leary and Becker, 1967). The teacher in such a class

is considered to be a behavioral engineer whose task it is to provide tangible rewards, social attention, task completion, sensory stimulation, social approval and task accuracy and success (Hewett, 1967). These techniques have also been taught to and used successfully by parents (Schell & Adams, 1968).

In order to develop a technique which would be effective in modifying the behavior of an emotionally disturbed child, we must consider the major characteristics of such a child. Children categorized as emotionally disturbed exhibit low frustration tolerance, self-preoccupation, short attention span, impulsivity, perservation, disorganized thinking and a wide assortment of disruptive, disturbed and disturbing behavior (Fenichel, 1968; Hirschberg, 1953). It is hypothesized that these behaviors are in and of themselves incapacitating and disturbing (Clarizio and Yelon, 1967). These symptoms being important in their own right deserve direct attention. Bad symptoms alienate the child from other children and from adults either as sources of security or as sources of learning (Hobbs, 1966). The removal of one symptom is likely to result in the removal of other symptoms by reducing the child's overall anxiety and improving his feelings of well being and self-esteem (Fenichel, 1968). Hence, attention is being paid to attempts to producing behavioral changes without the use of individual psychotherapy.

Hewett (1968) sees the emotionally disturbed child primarily as a learning problem. The teacher can help such a child by finding ways of combining tasks, rewards and structure in such a way that each child can grow into an effectively functioning individual. He sees the special class as a means to help the child improve his coping behavior and academic functioning so that he can return to and perform in a regular class. He proposed a school centered, developmental strategy and outlines the steps the child must learn in order to become a successful creative learner as follows: (1) He must pay attention, (2) He must respond to others, (3) He must follow instructions, (4) He must freely and accurately explore his environment, (5) He must learn how to function appropriately with peers and adults.

Hewett (1964) maintains that effective educational programs for children with learning disabilities depend on the establishment of a point of meaningful contact between a pupil and his teacher. The most primitive levels on which a teacher may interact with a student is the primary task level at which he may appeal to the pupil's need desire for candy or money (operant conditioning). The second level is the acceptance task level where the teacher communicates complete acceptance of the child, and establishes a relationship still primarily on the child's terms. The order task level is one where the em-

phasis is on obtaining more appropriate behavior but academic deficiencies are still accepted. At the exploratory level, the teacher offers the child a wide variety of multi-sensory experiences. The relationship task level has been achieved when the teacher has increased her value as a social reinforcer, and this leads to the mastery task level where practical application of basic skills are stressed. The highest level on the hierarchy is the achievement task level where the child is self-motivated and socially well-integrated.

The Santa Monica Project (Hewett, Taylor, and Artuso, 1969) included 54 emotionally disturbed children who were assigned to 6 project classrooms. Here there was a rigid adherence to an engineered classroom design and systematic reliance on the giving of checkmarks. There was an attempt to increase student task attention and academic functioning level in both reading and arithmetic. Conventional grades, verbal praise, rewarding privileges and complimentary written comments were used. Task attention was facilitated by the experimental condition, and also by removal of it. This is explained by the belief that teacher effectiveness was increased as a social reinforcer through systematic associations with student success, and primary rewards, and by the fact that the building of fundamental skills greatly aids the disturbed child in achieving further school success. Arithmetic, but not

reading improvement resulted from the experimented treatment. The investigators feel that the basic learning competencies that resulted from the experimental condition more directly and immediately apply to arithmetic than to reading.

In an attempt to increase the attending behavior of students in an experimental special class for conduct problem children, Quay, Werry, McQueen and Sprague (1966) devised a situation such that reinforcement could be given to each individual child if he kept his eyes on the teacher. A box containing a light was placed on each child's desk. The light could be flashed on by the experimenter when the pupil was paying attention. Candy was given at a later time for each time the light was flashed. The results of this technique, after 52 days of reinforcement suggests that the method was having positive results. The group mean for the entire period was 9.09, and for the last 20 days, it was 11.43.

The same authors (Quay, et al., 1966) shaped the behavior of a six year old child, shifted him from primary to symbolic reinforcements, increased "delay of gratification" and his ability to work in an intermittent schedule. They also demonstrated the training of two social skills by having him imitate a "recreational specialist" in a role-playing technique.

Reading was taught to resistant, inattentive non-

socialized and supposedly unteachable subjects with neurological, intellectual, emotional handicaps in an experimental reading program by programming structure and reinforcement (Hewett, Mayhew, and Rabb, 1967). The goal of the program was to establish a 155 word basic sight vocabulary. The vocabulary was presented to the child in a series of programmed lessons involving the use of a teaching machine, under the supervision of an individual teacher. Extrinsic motivation, such as candy, was also used. Twenty-six subjects involved in this study included eight neurologically impaired children, four mentally retarded children, three autistic children, ten emotionally disturbed children, and one normal nonreading girl of four years. All of the children made steady progress.

The importance of the teacher-pupil relationship is seen as an important component of special classes for the emotionally disturbed. General principles stressed are that teachers should be accepting of students, and teacher behavior should be directed towards immediate pupil achievement. Morse et al. (1964) feels that the teacher-pupil relationship includes many of the same components as the psychotherapist's relationship with his client. Wilderson (1966) found that teachers trained extensively in child and educational psychology concepts had higher agreement with the criterion group of psychotherapists on the ideal teacher-pupil relationship than did teachers not so trained.

In many of the special class programs for emotionally disturbed youngsters the primary intervention technique used by the teacher was individual attention provided by the teacher rotating from student to student, or "sequential tutoring" (Morse, 1965). This means of intervention allowed the teacher to exert a central control in the classroom, to assume a dominant position by standing over the child, to be in the best position for surveillance, and to employ control by proximity, since moving in the direction of the trouble may have served to alleviate it. It also served to allay the teacher's anxiety, and she felt that such an approach resulted in maximum benefit to each child.

Brendtro and Stern (1967) felt that such an approach may cause the teacher, in her movement and verbalizations, to act as a distractor in the classroom. It may also make pupils feel uncomfortable to have their inadequacies revealed to their peers in this manner. Such a teacher may find herself in the position of giving assistance to a highly reluctant child and thereby increase his negativism. Disturbed children do not respond positively to being watched. This type of teacher-pupil interaction may also serve to reward, attention-seeking behavior, and give social reinforcement, a significant reward, for the inappropriate behaviors of being unable to handle work assignments.

A modification of sequential tutoring is described by Brendtro and Stern (1967) who suggest that the teacher be centrally located, and the the child initiate contact by completing his work and coming up to receive the next task. This way the area is relatively quiet, it is almost impossible for peers to monitor the discussion, the child comes to the teacher (reducing his resistance to receiving help), the child works independently and not under constant surveillance, the child gets systematic feedback and social reinforcement upon completion of a unit of work (coming up to teacher's desk).

Kounin, Friesen and Norton (1966), after observing elementary school classrooms containing one or more emotionally disturbed children, concluded that those teachers who were successful in managing the behavior of non-disturbed children in a classroom were also successful in managing the behavior of disturbed children in a classroom. The teacher's degree of success in managing the behavior of the emotionally disturbed children is related to her ability to ~~manage~~ manage the classroom as a whole (Kounin and Obradovic, 1968). They conclude that specific teaching techniques can be delineated to determine how children behave in the classroom. These group management techniques work as well on disturbed as on non-disturbed children. Categories of techniques used by the teachers included the manner of initiating and sustaining movement in the group, the degree

to which the teacher communicates to the group that she knows what they are going, her ability to avoid satiation in the children in her groups, her ability to provide variety of activity, and utilize challenge, the degree to which the teacher demonstrates she is "tuned in" on what is going on, and the degree to which she is able to attend to two issues when confronted with the necessity to handle more than one emergency at a time.

#### The Efficacy of Special Classes for Emotionally Disturbed Children

There is lack of consistency in the literature regarding the efficacy of special classes for emotionally disturbed children.

Behavior adjustment and academic functioning of 126 pupils in Michigan who had returned to regular class after an average of  $1\frac{1}{2}$  years of being in special classes for the emotionally disturbed were improved over the levels noted at entrance into special class (McKinnon, 1969). The parents of fifty-two percent of the children who had been in these psycho-educationally oriented special classes, staffed by certified teachers of the emotionally disturbed, expressed positive feelings toward the special class and felt that it had been helpful to them. Greatest achievement gains were made by pupils who had less

learning disability, were younger at the beginning of placement, were more dependent at the end of placement, had higher intelligence, and came from higher socio-economic classes.

The most positive behavior changes occurred in pupils who had the greatest learning disability, were younger at the beginning of placement, had the greatest lack of self-confidence at the end of placement, and came from higher socio-economic classes. The results support the hypothesis that younger children, with supportive environments, when helped before failure experiences effect their expectancies, are most amenable to intervention.

Similar improvement in academic and self concepts were found in elementary school disturbed children who spent half a day in an educotherapy classroom where the classroom setting and curriculum were designed specifically to help each individual child, and there was a ratio of one teacher to six children (John, 1968).

Vacc (1968) reported differences in the achievement and social acceptance between emotionally disturbed students in special and regular classes of Chautauqua County, New York. He found that, while the special class children made changes in overt behavior in a positive direction, the disturbed children in the regular classes showed changes in the negative direction, as measured by a behavior rating scale. These results support the hypothesis that special

class placement can be beneficial in effecting improvement in behavior.

However, DeVries (1970) found no significant differences between the 20 emotionally disturbed pupils placed in the special public school program in Southeast J.H.S. and 20 who remained in a traditional school setting, on measures of academic achievement, behavioral change and teachers' ratings. He also reported that the teachers' perceptions of behavior changes, as measured by a pupil behavior inventory did not correlate with the childrens' performance on the California Test of Personality.

#### Programs for Emotionally Disturbed Children Not in Special Classes

In order to determine the effectiveness of a program designed for the early detection and prevention of emotional disturbances, sixty-five children who had taken part in an experimental school were compared to sixty-five control children. The prevention program involved first grade diagnostic evaluation, social work interviews with mothers, consultative services, after school activity programs, and parent teachers discussion groups. At the end of three years, the experimental subjects scored higher on 14 of 20 criteria measures such as grade point ratios, achievement measures, teacher evaluations, peer evaluations, and self report techniques. The result indicated that the experi-

mental program was moderately successful in controlling pathology, and was more successful in the early detection of problem children (Cowen, Zax, Izzo & Trost, 1966).

The classroom behavior of 20 normal and 40 disturbed children from a low socio-economic school was objectively rated by observers using the Quay-Werry Observational frequency counting technique. The measure discriminated significantly between the normal and disturbed children in all categories except one (turning around). Twenty of the 40 children were given an intensive period of treatment by a team consisting of the principal investigator, the social worker, and the psychiatrist, assisted by the school nurse. Two to three hours a week was spent preparing an individual treatment approach for each child based on all available background information (Minde and Werry, 1969). Treatment was variable but included home visits by the social worker, home visits by the nurse, provision of an empty classroom with a teacher who could intervene with a child in times of a serious disturbance or with medication, and general planning of disciplinary action by the school administration. Almost daily meetings were held with regular classroom teachers to explain and discuss the behavior of individual children and to plan remediation methods. Teaching methods were adjusted, more emphasis was placed on immediate rewards, teachers' expectations of pupils' academic performance was lowered, and more realistic learning models were

suggested. Twenty-five eleventh-grade students from local high schools volunteered to be tutors and give each treatment child 2 to 3 hours of general enrichment tutoring each week. All these tutors received ten hours of initial training by special adjustment teachers, remedial therapists, social workers, and psychiatrists in order to prepare them for working with these children. Four children were given tranquilizing medicine, and these were seen by a psychiatrist. All the children were reevaluated at the end of treatment as well as 1, 3 and 12 months later. There was no overall treatment effect. Limitations were seen inherent in the school system, because of the shortness of duration, and the inability of the teachers to change their behavior towards the children. It was also felt that treatment should have involved the entire family. The results of this study indicate that the intensive efforts made by the treatment team failed to produce changes in the functioning of disturbed low socio-economic children. One possible explanation of failure was that the treatment effect was too small to compensate for other variables such as socio-economic status, home environment, and the unsuitability of the school curriculum for children from such backgrounds.

Knoblock and Garcia (1965) attempted to improve the education of disturbed pupils in regular classes by providing psychological and social work consultation services to administrators and to teachers. Emphasis was in program

control at local school level and on teacher understanding of pupil behavior and providing intervention techniques. The program produced positive evaluations at the end of the year, as judged by teacher's evaluation of the project, and the observations of the consultants.

Small group therapy sessions during the summer were designed to help children identified as emotionally disturbed, improve their awareness, increase communication and better direct their impulses, in one Kansas school district. In addition, parents were involved in group discussions regarding consistent behavioral management of their children. Mental health workers met with teachers, prior to and during the school year to formulate plans to deal with the children's emotional problems (Plank, 1969). Achievement and IQ differentiated between those children who had been exposed to treatment prior to school and those children who had been identified after school entry. Achievement and IQ scores of emotionally disturbed children who received the program of intervention were higher than the scores of those emotionally disturbed children who did not attend group sessions. Teachers judged the behavior of the children who had received early treatment to be more appropriate than that of the untreated group. The results were seen as partial substantiation of the effectiveness of early treatment for the emotionally disturbed children. Counseling was also used to help children who exhibit behavioral difficulties.

Alper and Kranzler (1970) compared counselor's using client-centered counseling to those using the behavioral approach of behavioral modification in dealing with the behavior problems of elementary school children. Thirty-six subjects were randomly assigned to one of four treatment groups, which included client-centered counseling, precision teaching, an attention placebo, and a no-treatment control. No significant differences were found between the treatment groups on measures of out-of-seat behaviors, sociometric choices, Self Social Symbols Task scores and arithmetic computation rates. The results of this study indicated that neither client-centered counseling nor behavioral approaches were more effective in dealing with behavioral problems of children than were merely paying special attention to them, or leaving them alone.

#### Residential Programs for Emotionally Disturbed Children

Attempts to remediate the problems of emotionally disturbed children have included residential centers where programs provide strong educational programs, programs of skill development, utilization of reality situations, side by side with the interpretation of emotional reactions on the unconscious level. One such a residential program described by French (1966) which made use of special education as well as psychotherapy, was considered to be successful in terms of the reintegration of the children

into peer society.

Such a program emphasized the therapeutic use of education per se. It emphasizes the importance of the experience of success in academic competency to the ego and self confidence of the youngsters. When the children learn to read and be able to cope with academic requirements as a result of special education, this leads to a feeling of competency that motivates them to deal more adequately with social and emotional expectancies.

The concept that substantial help can be extended to children by focusing on their immediate manifest problems is the basic rationale of the Dinan Evaluation Center in Bridgeport (Tolor and Lane, 1968A). This Center measures its goals in terms of improvement of functioning in the social setting. It provides a short term intervention program lasting no longer than 4 to 6 months. The program includes special education classrooms, group therapy, in-service training, teacher consultation, use of para-professionals (social counselors), and involvement of patient's parents. The program was assessed by the evaluation of each child by the social counselor who treated him. The counselor indicated the progress of the child on a four point scale from 'minimal progress' to 'great progress.' Of 56 clients, 40% were judged to have been helped to some degree (Tolor & Lane, 1968B).

Project Re-Ed, a combined demonstration, training,

and research endeavor sponsored by George Peabody College for Teachers and the State Departments of Mental Health in Tennessee and North Carolina is a residential treatment program for emotionally disturbed children staffed entirely by educators. It is an approach that views the child's disturbance as an ecological condition, and de-emphasizes psychotherapeutic approaches based on the unconscious or intra-psychic life of the child. It utilizes a special educational program based on remedial instruction and social learning experiences. The rationale of this approach is based on the concept that a child's emotional adjustment is a direct result of his upbringing. When this has been chaotic or disruptive it results in an emotionally disturbed child. Therefore, it is pertinent to work on disturbances within the system (Rhodes, 1967; Hobbs, 1966; Lewis, 1966).

In a permissive, accepting school setting, groups of eight children from the ages of 6 to 12, are under the responsibility of two teacher counselors. These carefully selected adults have had nine months of graduate training in a program which included study of: (1) the characteristics of disturbed children, (2) specialized methods of teaching (3) the use of consultants from mental health and education fields, (4) various sport skills and (5) an intensive practicum. Each school also has a principal, an assistant principal and liason social workers and teachers,

and a secretarial and housekeeping staff. There are also medical, psychiatric, psychological and social worker consultants available to the staff.

The child is viewed as part of a small social system, and parents are involved and helped to assume responsibility. Liason personnel maintain communication with the child's school and community.

Reeducation is based on the importance that each event has for the child each day, and he is helped to attain mastery in academic and physical skills. Six months is set as the expected average stay. The adult tries to inspire trust and to help the child experience success. The teacher intervenes when the child exhibits maladaptive behavior and helps the child control his behavior by verbal instruction. The child is encouraged to express his feelings verbally. The group is used as a source of motivation, instruction and control. Ceremonies and rituals are used to give order, stability and confidence. Field trips are also made in the community (Hobbs, 1966). Re-ED was judged to be effective by ratings of concerned observers such as mothers, fathers, teachers, Re-ED staff and other important persons in the ecological space of the child.

A theme that recurs again and again in the literature is that the special school placement needs to be a positive reconditioning experience. Approaches have gone from permissive supportive (Bettelheim, 1950), to structured

(Haring and Phillips, 1962). Reger, (1965), Quay (1963), and Labenne (1967) speak of the need for different class structures which are necessary to meet the needs of groups demonstrating specific pathologies.

There are various systems of classification of emotionally disturbed children. Quay (1963) classified them along the dichotomous lines of the personality problem child and the conduct problem child. Labenne (1967) breaks them up into three classifications: (1) the primitive neglected pupil (2) the neurotic externalizing child, and (3) the affectionless personality pupil. Because each of these systems involve a different constellation of behavioral problems, a rationale for a specific methodology of remediation can be derived and experimentally tested.

Quay (1968) offers a conceptual framework for a basis of grouping children according to their special needs in terms of educationally relevant variables, so that their defects can be ameliorated by particular classroom technologies. The parameters he uses are modalities of learning such as visual, auditory, tactile, motor, verbal, primary, social and information by functions of class room learning such as orientation, perception, organization, failure of storage, delay of response, effect and delay and amount and ratio of reinforcement. He feels that if children are assessed and homogeneously grouped according to such a

framework, it would become feasible to experiment with technology specifically designed to modify the various dysfunctions of the learning process. Similar approaches have been suggested by Rubin, Simson and Betwee (1966), and Hewett (1968).

#### Critique of Literature Reviewed

A review of the literature of emotionally disturbed children has indicated that various educational and intervention approaches have been tried. Many of these seem to be isolated attempts at intervention rather than a systematic research approach based on past successes. Such problems as inadequate criterion measures, use of control groups, adequate sampling, differential treatment and definition of terms need more attention.

There are differing estimates of the incidence of emotional disturbance in children because of lack of agreement as to definition (Abrahamson, 1955; Bower, 1961; Stennett, 1966). Although underachievement is generally assumed to be related to emotional disturbance, this too has been refuted in the literature (Werry & Quay, 1968; Hirschberg, 1953; Stennett, 1966; Stone & Rowley, 1964).

Various criteria and instruments have been found to significantly differentiate emotionally disturbed from normal children, making it possible to screen for emotional disturbances (Bower, Tashnovian, & Larson, 1958; Maes,

1966; Liem, Yellot, Cowen, Trost & Izzo, 1969).

The greatest difficulty seems to be in the area of approaches, interventions, and treatments for emotionally disturbed children. Although many specific programs are described, there are no clear cut patterns of successes. Even extensive programs including a team approach of a social worker, psychiatrist, and school nurse, preparation of an individualized treatment program, a "cooling off" room, and general planning of disciplinary action by school administrators failed to show significantly successful results (Minde & Werry, 1969).

Many programs are a combination of what might be termed "common sense" approaches, remedial teaching (Pimm, 1967) and an emphasis of good teacher-pupil relationships (Hirschberg, 1953). Morse (1965) emphasizes "sequential tutoring," where the intervention is based on the teacher rotating from student to student to provide individualized attention. This technique has been used by good teachers for many years. Another such "common sense" approach is the adaptation of this technique by Brendtro and Stern (1967) who advocate the control and attention provided by a centrally located teacher.

Programs such as the "life space interview" and "milieu therapy" emphasize such generally well known educational principles as teacher empathy, understanding and helping the child cope with his environment, and rename

them with such phrases as "reality intervention" and "planned ego development" (Knoblock, 1968; Fenichel, 1968).

A great deal has been written about the use of behavior modification approaches with emotionally disturbed children. Although this approach holds promise, only limited successes have been reported (Hewett, 1964; 1968; Clarizio & Yelon, 1967; Whelan, 1968).

The number of studies of the efficacy of special classes for emotionally disturbed children is limited (McKinnon, 1969; John, 1968; Vacc, 1968; DeVries, 1970), and more needs to be done in this area.

In general, there is a great need for planned, programmatic research in this area.

#### History of Self Confrontation Technique:

Pioneer work in the technique of self image confrontation was carried out by Cornelison and Arsenian (1960) in utilizing still photographs shown to a group of psychotic patients. These patients all recognized themselves in the photographs and paid greater attention than they ordinarily gave to other people and events. Some showed dramatic improvement in overcoming their psychotic disorganization after the viewing sessions. Although the investigators used a limited sample and had no matched control, the results of the observation on this sample suggested that photographic self images may afford an ad-

junct to psychotherapy with seriously disturbed patients.

Paredes, Ludwig, Hassenfeld and Cornelison (1969) used sound, color motion pictures of 55 alcoholics taken of themselves while under the influence of a small amount of alcohol as a self image feedback technique. The pattern of their responses to the confrontation indicated various degrees of cooperation and self understanding. Their elicited responses indicated various degrees of dissatisfaction with their body image and social messages conveyed by their appearance. This self confrontation was felt to be a tool useful for the therapist to help the patient achieve positive social consequences.

A patient suffering from anorexia nervosa was presented with 54 self image experience sessions during her 16 month hospitalization (Gottlieb, Bockup, and Cornelison, 1969). Improvement in her condition was seen to be related to the continued and repeated self image confrontations by means of sound motion picture films.

#### Videotape Recordings in Hospital Settings:

The use of videotape in psychiatry is spreading rapidly and there are over 60 medical schools in the U.S. which have developed or are in the process of installing videotape laboratories (Berger, 1970A).

Psychotherapy supervision via videotape recordings is considered by Hirsch & Fried (1970) to be the most

effective way of sensitizing resident psychiatrists to patterns of behavior and for establishing a learning alliance between the resident and supervisor. It has also been used as a teaching technique by means of videotape simulation and role playing (Froelich, 1970), and by case demonstrations via videotape (Trethowan, 1970).

Published reports about self confrontation techniques differ greatly in quality. Many are clinical studies which are subjective and descriptive in nature. Others offer ad hoc theoretical rationalizations of the technique. Videotape gives a unique opportunity to see ourselves immediately as others see us and to observe the way we actually interact with others. This offers promising results for changes in interpersonal interactions (Alger, 1969; Holzman, 1969).

A controlled study comparing three groups of hospitalized women exposed to (a) videotaped recordings of themselves, (b) audio-video recordings of another person and (c) no recordings, gave clinical evidence that those patients who observed their own videotapes became more aware of their negative self feelings, experienced a decrease in these feelings, and became more accepting of themselves, were able to enter into a closer relationship with their interviewers, and were able to disclose personal feelings more readily (Paredes, Gottheil, Tausig, and Cornelison, 1969). However, the psychological data did

not confirm the clinical impressions. Differences between the pretest and the posttest means on such variables as the Raven Progressive Matrices, the Draw-A-Person, the Barron Ego Strength Scale and the MMPI revealed no statistical differences between the experimental group and a control group.

It was felt that when the format of the videotape interview was changed to allow discussion of issues relevant to the patients' problems, the interaction was more meaningful, and more expressive behavior was elicited. It was noticed that when the time lapse between taped recording and playback was lengthened to several days, the subjects were more involved at the time of playback. Good cooperations and spontaneity could be elicited from the patients if it were made perfectly clear to them that their behavior was being recorded.

Geertsma and Reivich (1965; 1969) were impressed with the appearance in the patient of greater objective self evaluation and involvement in the psychotherapeutic exploration with the use of videotape feedback than would have been expected without the technique. They also reported considerable individual differences in response to the technique according to the psychopathology of the patient and suggested that clinicians who use videotape for therapeutic purposes be prepared to take an active role in helping patients relate to the significant as-

pects of the playback.

Immediate self image confrontation was suggested for use with schizophrenic and neurotic in-patients by Boyd and Sisney (1967). Since these patients have markedly distorted self images, self confrontation should lead to cognitive dissonance. This should cause the distorted self image to change in the direction of increased reality.

Stoller (1967) conducted group therapy with chronic schizophrenic patients on closed circuit T.V., broadcast to the wards of the hospital setting, especially the home wards of the group members. He felt that the exposure involved and the excitement would provide an enhancement for the persons involved, in such a way that the group participants would conduct themselves in a creditable manner. He found that this procedure resulted in an increased involvement of the patients, and an enhanced response to the group therapy. They also received recognition from their home wards and the benefit of the resultant change in the staffs' perception of them, because their actual behavior contradicted the staffs' expectations most vividly. Concrete evidence of movement was apparent, not only in the manner in which the group functioned but also in individual acts outside the group, such as increased awareness and participation in ward activities. Psychotic verbalizations decreased in frequency and spontaneity increased.

With another group, the first four sessions taped were played back and discussed at the next session. This was done because Stoller (1969) felt that the availability for immediate self viewing and self evaluation of one's impact on others was maximized by this modality. He felt that when self viewing is done in a passive manner, patients seem to concentrate on aspects of their physical appearance, but when feedback is focused by the therapist on what he considers to be significant aspects of their interaction, it provides the patient an opportunity to see themselves in a meaningful framework. Stoller (1970) also comments upon the impact of such a procedure upon the therapist who can make gains toward greater openness and its effect in the marathon and encounter group. (Stoller, 1970A). Videotape has also been used to enhance the therapeutic value of psychodrama (Goldfield & Levy, 1968).

Moore, Chernell & West (1965) did an experimentally designed controlled study of eighty psychiatric inpatients at the University of Mississippi Medical Center, to see whether seeing oneself on videotape would have a marked and beneficial effect on their improvement. These patients, of varying diagnostic categories, were interviewed by psychiatrists in front of concealed television cameras. Of these, 40 saw themselves on the television screen immediately after the first interview and after each sub-

sequent interview. The experimental groups showed significant improvement as gauged by independent observers who did not know which of the patients had received treatment. The experimenters were not involved in a therapeutic way with the patients on the units. The main finding of this study was that the patients in the experimental group showed significantly more improvement as measured by clinical judgment as a result of one added factor in their therapeutic regimen, i.e., video therapy experience.

Other Uses of Self Confrontation:

The playback of videotape recordings made during therapy with such natural groups as couples or families provides an opportunity for insights to develop about the "cueing" and other communicational behavior such as body movements and gestures (Alger & Hogan, 1969). It provides the viewer with an opportunity to completely separate the observing-self from the participating-self, and allows him to become a partner with the therapist in the function of therapy. When he is able to observe his behavior instead of having it pointed out to him, he becomes more personally involved and more readily integrates his new awareness. Used in marriage counseling, it had been found to help both spouses to communicate more directly about their anxieties and make them more sensitive to communication patterns of interaction. There are also some dramatic results of the realization of their own behavior. After use for four

years with 75 families and married couples Alger and Hogan (1969) feel that this technique has made a significant contribution to therapy, by increasing involvement, clarifying complex behavior patterns and resulting in a significant major influence on a person's adaptation over a long period of time.

Videotape playback has been found to have meaningful impact in family therapy by Perlmutter, Loeb, Gumpert, O'Hara and Higbie (1967), when the family is uncommunicative but may be helped by the impact of the objective feedback of interactions, or when one or more members are threatened by their communications, such as non-verbal cues to a child by his mother, and when diagnostic information about the interpersonal relationship is sought.

Kaswan and Love (1969) compared confrontation procedures, utilizing videotapes taken in the waiting room during the families' initial visit to a clinic, where children were referred because of severe behavioral or emotional difficulties, to treatments of child psychotherapy and parent counseling. Only preliminary results are available, but the results indicated that the greatest improvement in children's school adjustment and remediation of behavior difficulties is shown by the group using a combined family confrontation and school consultation format.

### Reactions to Self Confrontations:

Most of the work done with self confrontation techniques was done in hospital settings and deal with psychotic patients. However, Nielson (1962) studied the behavior of 22 Harvard students who were exposed to a self confrontation experience.

First the students were asked to write a composition about their personal philosophy. Then an experimenter met with each student and challenged them point by point, forcing them to alter their thinking and beliefs and defend their positions. This was filmed and reshown to the students. It was found that the film stimulated affective involvement of the students, and they seemed to be particularly receptive to modifications in their ideas and behavior following self confrontation and discussion of the experience.

Bahnson (1969) in his work with children and adults suggests that self confrontation evokes a narcissistic response which is seen as the pleasure of exhibition. However, this rarely appears singly, but soon combines with its opposite which is self criticism and self punishment. The degree of reaction and its manifestation differ with the personality and psychopathology of the individual as well as with the age and sex of the viewer.

Younger children were excited and pleased at viewing themselves and expressed frank narcissism. Their at-

tention focused on the body and unmodified drive states.

Older children still experienced themselves in terms of physical body concepts, but were concerned with the way they appeared to others, reflecting approaching social awareness. Older children and adolescents made use of denial as a defense with which to handle these self perceptions. Adults perceived self confrontations as a situation calling for self criticism. They tend to react to the experience by making a conscious cognitive evaluation of themselves. The effect of the audio-visual self confrontations depends upon the level of development and varied from possible negative disintegration of the perceived self to therapeutic insight in patients with good ego capacity. In adults, self confrontation was seen as a self-critical process with the implied goal of correcting unacceptable behavior in order to achieve concurrence between the ideal and the consciously perceived self. This results in a self improving struggle. For many adults the technique was supportive in that it reassured them that they were successful in controlling and handling aspects of themselves that were unacceptable or unflattering.

#### Interpersonal Process Recall

Interpersonal Process Recall (IPR) is a process by means of which a person is helped to see himself as he actually behaves in a reality situation, and in relation

to others around him, such as his peers and teachers. It can be used to focus attention on the child's actual behavior and help him examine his perception of it, as well as analyze its actual consequences. He can be helped to focus upon what went wrong, and what he might do to improve it. Thus his behavior can be examined and interpreted. He can actually see himself as responds to others, and observe their response to him. There is a growing conviction that this technique permits a breakdown of the usual defenses in interpersonal communication (Walz and Johnston, 1963; Kagan, Krathwohl, and Miller, 1963). This technique is a means of providing immediate self-confrontation and encourages a more intensive involvement in the process which is being videotaped. It seems to clarify complex behavior patterns and sequences in the actual context of their occurrence and is useful in relating verbal and non-verbal levels of communication (Alger and Hogan, 1969).

IPR was originally developed for use in counselor training. It has been found to be helpful because it allows the counselor and client to become aware of self-behavior. The subject then can see himself during the recall, and observe how he responded and reacted, and he is encouraged to recall his feelings. Case studies indicate the procedure stimulated the client to perceive, differentiate and gain insight into his reactions to others.

Success of use of counselor training by means of IPR was measured by expert observers of counselors to rate how well (a) he could focus much of his attention on his client's affect, (b) he would listen carefully to his client and convey to his client that he is trying to understand, (c) he could be specific and frank instead of manipulative or evasive, and (d) his responses would encourage the client to explore further and to assume an active role in the counseling process. The counseling student would be rated in "affect," "understanding," "specific," and "exploratory." He was also rated on an empathy IPR scale (Greenberg, Kagan & Barnes, 1969). IPR also made the students aware of the two possible negative reactions to their counselees: feigning clinical naivete and "tuning out" in order to avoid dealing with issues that were difficult to face. IPR helped the counselor be aware and sensitive to his own feelings and to his inappropriate behavior (Kagan, 1970; Kagan, Krathwohl & Miller, 1963).

The use of IPR has been successful with effecting changes in the counselor's preception of themselves as a result of video viewing of their interviews. They expressed greater confidence in their interviewing and greater awareness of their personal qualities.

There is also evidence that IPR accelerates the rate of the client's improvement in therapy. Characteristics of client growth that seem to result from IPR are: (1)

the client admits to his discomfort, (2) the client commits himself to change, (3) the client differentiates stimuli, (4) the client behaves differently (Kagan, Schauble, Resnikoff, Danish & Krathwohl, 1969; Resnikoff, Kagan, Schauble, 1970).

A technique that simulates different kinds and intensities of emotional stress has been developed by Kagan & Schauble (1969). Clients are confronted with film of an actor looking directly at them with a provocative gesture or statement. This encourages an emotional response. The client is videotaped during these viewings. This videotape is then played back for a personal counseling session (Danish & Kagan, 1969).

Hypnotic procedures were used in such a way that a client could conduct his own recall through post hypnotic suggestion. This was done in order to ascertain the validity of the insights obtained during recall (Woody, Kagan, Krathwohl & Farquhar, 1965). During the self interrogation under hypnosis the client stopped the recorder more often, had more affect, used more emotion laden words and had more intense facial expressions. However, the kind of insights about his dependency, social inadequacy, sexual uncertainty and ambivalence that the client demonstrated under hypnosis were the same as those expressed in the "recall" session. This is evidence of the validity of the recall interview.

The Use of IPR with Children:

A thorough search of relevant literature sources, and discussions with Kagan failed to reveal any studies of the use of IPR as a therapeutic technique for use with young elementary school age children or disturbed children in special classes. One study was found where audio-video-tapes were used as a means of observation of a disturbed young child in order to help the psychologist make a difficult diagnosis (Haworth & Menolascino, 1967).

Use of IPR in the Classroom:

Reichord & Reid (1969) questioned the use of video-tape recording in a classroom because of its distraction potential with both teachers and pupils. It was felt that if the distraction responses remained inordinately high during successive taping sessions, this might seriously interfere with the normal classroom activities. The camera was positioned in the classroom at an angle which would record an angular front view of the students and an angular front view of the teacher. It could be seen by the subjects by a headturn. They taped an intermediate classroom of mentally retarded students for 35 minutes each morning for six days and maintained each tape for counting the frequency of distraction responses. Significant reduction in distractions occurred after the third day. The curve of distractions noted a rapid decline distractions after the

third day, followed by a gradual decline to a relatively fixed level of distractions. It was concluded that the distracting influence of videotaping equipment and personnel in a classroom decreases with passage of time.

Rationale of IPR for Use with Emotionally Disturbed Children:

In summary, Kagan (1967) states that in order for an individual to change, he needs some insight into his own feelings and behavior. Most therapeutic relationships contain interventions which represent confrontation. Basically the therapist says, "Your previous experiences have taught you to be fearful, anxious, sick. Getting well requires that you face up to the situation and change" (Garner, 1970). Very often when these behaviors and non-verbal cues are interpreted by an observer, the individual concerned assumes that this feedback involves personal judgments. Even when professionals try to interpret non-verbal communication, its interpretation is more often an art than a science. The only person who can accurately tell what emotions he was feeling at a particular instance is that person himself. One means of doing this is by introspection. However, it is difficult to introspect and interact with another person in a normal manner at the same time.

Kagan, Krathwohl & Farquhar (1965) suggested that it would be better to interact at one time, and to introspect at another. They felt that if the original interaction

could be captured on tape, and then played back, there would be enough cues to stimulate recreation of the original situation, and that the person involved could then explore in depth his thoughts, feelings, changes in thoughts and feelings and meaning of various gestures and expressions. When this was actually done, during the feedback, individuals were able to recall what was going on in their minds at significant points, in rich detail. This method was found to provoke accurate and detailed imagery of the videotaped events.

Berger (1970) says there is a sense of unanimity amongst workers who utilized videotape confirmation that it results in heightened insight, which is that people learn more of what is unknown about themselves but known to others. Attitudes, and behavior patterns can often be changed or modified by increasing the knowledge patients obtain about themselves in relationship to their environment and self concepts can be clarified and altered.

On the other hand, Woody (1969) would include techniques of stimulated recall via videotape as behavioral modification materials, for the method contains components of both insight and action. Basically the counselor uses the technique to prompt his client to remember, recall vividly, reexamine or relive a clinically significant event. The counselor's determination of the technique to be used, his ability to stop or proceed to another recall situation

and the likelihood that he practices selective reinforcement in the process are all in accord with behavioral modification principles.

Since the goal is to permit understanding in the client, any decision to change is left to the client. Woody (1969) concedes that recall by means of videotaping represents an "eclectic composite for a psychobehavioral integrative approach."

The applications of this process has also been found to be useful in group counseling (Stoller, 1967). The use of this technique has freed the subject to overcome and recognize their fears about revealing themselves, sharing their feelings, aspirations and weaknesses.

The use of IPR has been seen to stimulate insight, self-awareness, expression of feelings, and helps each individual to overcome fears of self-revelation, and form more meaningful interpersonal communication. Not only have the effects of this method been clinically seen to be quite significant, but they have also been seen to produce a major influence on a person's adaptation for an extended period of time (Alger and Hogan, 1969).

To summarize, the diagnosis of "emotional disturbance" is used for children who display disruptive behavior, have misconceptions about themselves, make inaccurate assessments of reality situations, and fear interpersonal communication. This results in more maladaptive behavior and

an inability to perform adequately in related areas such as school achievement.

The importance of need for programs for the emotionally handicapped child has been demonstrated by the identification of the number of such programs in schools (Bower, 1960). In order to meet the individual needs of emotionally disturbed children various techniques have been found effective. These include teaching machines (Quay, 1963), self sustaining structured programs (Haring & Phillips, 1962), multi-level group projects (Morse, 1968; Rhodes, 1967), teacher control by proximity, milieu therapy (Redl, 1968) and behavior modification (Hewett, 1967). After extensive reviews of the literature Barlow (1966), Glavin and Quay (1969), and Graubard and Miller (1969) report that the majority of publications have been prescriptions, subjective descriptions, and clinical studies.

To summarize, much of the research on special classes for emotionally disturbed children suggests that with age and/or special elementary class experience there is usually some decrease in the incidence of disturbed behavior and some improvement in socially appropriate responses (Spivack and Swift, 1966). There are indications that special class placement, good teachers and individually planned educational approaches can be beneficial (Smith, 1967; Haring and Phillips, 1962; Radin, et al., 1966).

Overall observations about classroom experiences for

disturbed children indicate that the techniques used lack the depth and finesse of intervention which current theory suggests in terms of curricular and social experiences (Morse, 1968).

Kagan believes that the IPR approach offers great promise for effecting positive changes in the self concepts and behavior of emotionally disturbed children.

## Chapter III

### Methods

#### Sample Selection

This project was conducted in the school system of Camden City, N.J. This necessitated working with intact classes. There are a total of eleven classes for Emotionally Disturbed children in Camden. Eight of these classes are located in the Catto School, which houses these special classes exclusively. Three of the classes are located in the Camden Home for Children, a residential community endeavor. The Camden Home classes contain only children who are living at the Home and who are also classified as Emotionally Disturbed. Other children at the Home go to regular classes in the local public school. All these special classes are part of the Camden public school system. A total of 9 classes were randomly chosen for this study. These included six classes in Catto School and three in the Camden Home for Children. Of these, two classes in Catto and one class in Camden Home for Children were randomly assigned as a control group (See Table 1). In each of the experimental classes, 4 of the eight children, or half the class were randomly assigned to the experimental treatment, that is, to be exposed to IPR, and the other half were assigned to the control treatment, where they received traditional counseling.

The Emotionally Disturbed children in this sample were

Table 1Selection of Classes to be Included in Study

	<u>Total No. of Classes Housed</u>	<u>No. of Classes Included in Study</u>	<u>No. of Ex- perimental Class</u>
Catto School	8	6	4
Camden Home for Children	3	3	2

Table 2Racial & Sex Balance in Sample Population

<u>Race &amp; Sex</u>	<u>Sample Population</u>	<u>Population After Attrition</u>
Negro Male	42	32
White Male	27	26
Other Male	3	3
Negro Female	5	5
White Female	<u>2</u>	<u>1</u>
	79	67

so classified by a team staffing, after diagnostic testing and evaluation by a School Psychologist. The Staff consists of a Psychologist, Supervisor of Special Education, Social Worker, Guidance personnel and the referring school representatives. Due to the nature of the population many, but not all of these children exhibited aggressive, hostile acting out behaviors, or delinquent, socially maladjusted behavior patterns. Many of these children came from chaotic home environments or broken families. The students in the Camden Home for Children have been placed there by the intervention of the New Jersey State Bureau of Children's Services or other community agency.

Seventy-nine children between the ages of 8-15 were included in this study. Although a maximum of eight children is permitted in each such special class, due to expectation of attrition, 9 or 10 are sometimes included in the class rolls at the beginning of the year. All the children in the randomly selected classes were included in our sample. This included 26 students receiving IPR experimental treatment, 26 receiving traditional counseling and 27 in the control group. Of these, 72, or 91% were males, and seven, 9% were females.

Of the 79 children, 38 or 57% were black, 26 or 39% caucasian, and 3 or 4% other. These three students included 2 of Puerto Rican background and the offspring of an interracial, black-white union.

According to a recent survey this racial balance is

is very representative of the City of Camden. (A Proposal to Install and Operate a Personnel Development and Demonstration Program in Camden, New Jersey City School System, 1969.) (See Table 2)

Over the year, there was attrition of twelve students. Three of these children were placed in foster homes out of the Camden School district, 3 moved out of the city, 4 were so disruptive that they were excluded from school, one was committed to a hospital setting and one returned to regular classes. Other children placed in these classes during the school year were not included in our study. The analysis of the data includes only those 67 students on whom both pre and post data were available. In this group there were 62 males and 6 females. This sample population contained 38 or 57% black, 26 or 39% white and 3 or 4% other. Of these, 22 received IPR experimental treatment, 21 received traditional counseling and 24 composed the control group.

#### Procedure

##### Design:

Nine classes of elementary school aged emotionally disturbed children were used for this study. These children were classified as emotionally disturbed after being referred for a psychological examination by their respective teacher and principal, given a battery of individual tests by the school psychologist, and recommended to be placed in a Special Class for Emotionally Disturbed Children by a

Child Study Team.

Each class contained a state mandated maximum of eight children. In six of these classes, four of the eight students were randomly selected to be exposed to IPR techniques. The other four were given conventional counseling. By giving one half of each class the treatment of being exposed to IPR, and using the other half as a control, i.e., no IPR, we hoped to obviate the teacher variable, and the variable of different class management technique from contaminating the study. The three other classes were not given any counseling and comprised a second control group.

Twice a month, beginning in November, each of the six experimental classrooms was taped by a video camera brought into the classroom, for 30-40 minutes. Three times each month, each IPR child was released from his classroom for one half hour to spend time with the IPR specialist. This was either a psychologist or guidance counselor who had been trained in the technique of IPR. Those children randomly selected for IPR treatment viewed and discussed the video tape of his class. The tape was stopped either by the student, when he observed some of his own behavior which he wished to discuss, or by the IPR specialist when he observed some behavior which he felt was pertinent. The child was encouraged to respond to what he observed, to relate his feelings at the time of taping as he recalled them, and to react verbally to what he saw. This was in accordance to the concept of Kagan and his associates (1963),

to help the child develop insights, accept his feelings, and be better able to establish meaningful interpersonal communication. Those children in the experimental classrooms not selected to participate in IPR treatment accompanied the IPR specialist to an office to spend one half hour talking about how he was functioning in class, and how well he was progressing academically. The teachers were not informed as to which of the children received each treatment. Taking each of the children out of the classroom for individual attention, and not informing the teacher, was an attempt to obviate the Hawthorne Effect (Sax, 1968).

In October and November, 1969, all nine classes received pretests. Each of the classes was given the Self Concept Scale, The Way I Feel About Myself, the Semantic Differential, and the California Test in Reading and Arithmetic. So that the sequence of the test administration did not affect the responses of the subsequent test, the children were administered these tests in different random order. Teachers filled out a Behavior Rating Scale for each youngster.

In May of 1970 all the subjects were administered post tests of the Self Concept Scale, The Way I Feel About Myself, the Semantic Differential, and the California Test in Reading and Arithmetic, again in a different random order. The teacher filled out a post measure of the Be-

havior Rating Scale for each youngster.

Observers trained in the use of the Quay-Werry instrument (Werry & Quay, 1969), a frequency count of Disruptive Behavior, made three observations of 10-15 minutes each, of each child in October before the beginning of treatment. These observers made 6 observations of each child during treatment. In May 1970, after completion of treatment, 3 more observations were made of each child.

IPR Personnel:

Specialists trained in the technique of IPR included two school psychologists, eight guidance counselors and the acting supervisor of Guidance in the Camden School system.

Of a total of 13 elementary school guidance counselors assigned to 24 elementary schools, 8 were selected, so that not more than one counselor would be required to leave any school for more than one half day each week. Of a total of 5 School Psychologists, only 2 could be spared to work on this project. The Acting Supervisor of Guidance worked on this project so as to be in a position to continue this type of in-service counselor's training for future use with regular class children.

Each of these professionals held at least provisional certification in his field. All had previously been a guidance counselor in public school, and all had previous teaching experience. Of the 9 persons in guidance, 5 had 1-2 years of counseling experience, 2 had four years, and

2 had 10 or more years. This group consisted of 4 white females, 2 black females, 3 white males and 2 black males.

Both School Psychologists had participated in a Workshop in the summer of 1968, under the leadership of Dr. Norman Kagan, one of the original developers of the technique of IPR.

The training of the IPR Specialist for the Camden City Project took place September 24th through September 30th and October 1, 6 and 13, 1969. This training was done by the Director of Special Services, who is an expert on IPR as developed by Dr. Kagan, under whose tutelage he studied at Michigan State University. The training which took place for a total of 32 hours included lectures, readings, and demonstration of IPR recall sessions in an audio-visual studio. The trainees were given supervised practice sessions in the studio with Emotionally Disturbed Children. These were observed behind a two way mirror, and discussed with the Director and other trainees. Each IPR Specialist was then assigned either 4 or 5 children, 2 or 3 of them were to be exposed to IPR, and the others to receive traditional counseling. In this way, half of each counselor's load consisted of experimental children receiving IPR treatment, and half of control children receiving traditional counseling.

Audio Video Recording:

From November 10, 1969 - April 30, 1970, audio-

video tapes were scheduled to be taken in the experimental classes three times a month, for a maximum of 18 sessions of each class. Due to conditions of weather, special school programs, school trips, illness and other priority needs of the school system, there was a total of eleven audio-video tapes taken of each class during the six month period.

The Audio-Video Specialist, who was a trained Guidance Counselor was given a list of children receiving IPR. After becoming familiar with the identification of the children in each class he concentrated his efforts on getting as much interactions of these experimental children on tape for the counselors to use in the recall sessions. In this way, most proficient use was made of each taping, getting a maximum of footage of the experimental children interacting with classmates and teachers, or working independently.

In order to obviate as much as possible the effect that the audio-video equipment and Specialist would have in the classroom, the audio-visual specialist came into the classroom with his equipment several times prior to actual filming for use by the counselors. According to teachers' oral reports, after the first 2 or 3 sessions, the children, for the most part, behaved as they normally did in the classroom.

In the case of those children who continued to "perform" for the camera, this behavior was discussed and in-

terpreted by the IPR Specialist and child during the Recall sessions.

Interpersonal Process Recall Technique:

Interpersonal Process Recall is a technique by means of which a youngster can see himself as he actually behaved in a reality situation, and observe his own interactions with significant others in school, such as his teacher and his peers. It is an attempt "to capture the relevant stimuli in a situation in such a way that it could be recreated at a later time to help an individual relive it." Video tape permits such a presentation of the original experience, both verbal and non-verbal, for recall sessions. The original experience is taped and then presented to the subject, asking him to recall what was going on in his mind at that time.

In Camden, tapes were made by bringing the camera into the classroom at various times of the day. Interpersonal Process Recall (IPR) is the name given to the interview session when the IPR Specialist and child view the video tape on a TV screen. A control switch allows either the counselor or child to stop the video tape machine. The child is asked questions which may be categorized along such dimensions as: (a) personal thoughts ("What were you thinking at that time?"), (b) personal feelings, ("What were you feeling then?", "When else do you feel as you were

feeling there?", "What else makes you feel like that?", "How did you feel when the teacher (classmate) said (did) that?", (c) perceived feeling of the teacher to the client ("What do you think the teacher felt?", "What do you think the teacher thought of you then?"), (d) perceived feeling of classmates to the client, (e) perceived thought of the teacher by the client, (f) perceived thoughts of classmates by the client, (g) anticipated reactions of the teacher, and (h) anticipated reactions of classmates.

The introductory session using IPR may proceed with the counselor conveying his expectation of the child's response thus by: "As you sit in the classroom, so many things go through your head that you can't remember them all. If I asked you to tell me what goes on with you in the classroom, you'd remember a few things, but not many. I am going to show you a video tape. On this video tape, when you see yourself, you are going to find out that you can remember all kinds of things in fantastic detail. You are going to remember what you were thinking and what you were feeling, and what you wanted other people to think, and we are going to talk about it."

As the sessions progress, the youngster is encouraged to take more responsibility for controlling the tapes, stopping them at times that are meaningful to him. Those parts that are relevant may be replayed. Because of the length of the tapes and time necessary for recall, in-

terrogation and discussion, the same tape may be used more than once. When there is a great deal of fear or anxiety involved, it may be beneficial to present the stimulus a second time. At other times, the client may request to review a particular tape again. Throughout the sessions the counselor plays an active role in guiding the youngster to learn by discovery and self recognition. He is encouraged to recall feelings and interpret behavior.

#### Counseling Sessions:

Beginning November 15, the IPR Specialist went to the schools and began counseling with their assigned children. Each counselor had 4 to 5 children for whom he was responsible. Each counselor worked with approximately the same number of youngsters receiving IPR as with control children receiving traditional counseling.

Each counselor allowed himself one-half day each week to devote to this project. His stated goal was to meet with each of his counselees three times each month. Although counselors occasionally came at unscheduled times to see students who had poor attendance, it was difficult to meet the stated goal in all cases. Because of excessive absences due to prolonged truancy, illness and school suspensions (which occurred most often with the older children in the sample) it was not possible to see all the children

regularly. The IPR Specialists met with children receiving the experimental treatment from 6-20 sessions, for an average of 13.6 meetings per child. The IPR Specialists met with the traditionally counseled group from 7-20 times for an average of 14.2 sessions per child. This difference, though not significant, may be a reflection of the greater flexibility involved in traditional counseling, when it is not required to have special equipment set up for the sessions.

Each child randomly selected to receive IPR treatment was shown a video tape of his class by the IPR Specialist. The tape was stopped either by the student when he wished to comment upon or discuss some behavior he observed, or by the counselor when he felt some behavior to be pertinent to the personality and behavior dynamics of the youngster. Although the IPR Specialist took a more active role in the early sessions, the objective was to try to get the counselee to take more responsibility in the sessions and to become a more active participant. The child was encouraged to respond to what he observed, to relate his feelings at the time of the taping and to respond verbally to what he saw. The counselor structured the recall sessions by asking such questions as:, "What are you feeling here?", "What is going on inside you?". If the counselee was not sophisticated enough to respond to such questions, he was encouraged to talk about where

else he felt the same way he was feeling on the video tape, with such leading questions as, "Is it like that when your mother yells at you?", "Is it like that when a kid hurts you?", "What does it feel like?". The counselor avoided interpreting the behavior by such comments as "you look angry." In this way the youngster was directed to discover things about himself, develop insight and recognize and accept his feelings without the counselor labeling it for him. The client was encouraged by the involvement and excitement of his counselor and praise when he began to express his feelings and hidden thoughts. The counselee is also encouraged to recognize and state his expectations of others, and how he thinks they perceive him by such questions as "What do you think X . . . is thinking? . . . feeling?" He was also encouraged to recognize his fears and aspirations by responding to: "What would you like your teacher to think of you as you were sitting there?"

By means of this type of interrogation the counselor attempted to help the child develop self concepts and establish meaningful interpersonal communications. These sessions lasted for one-half hour at a time.

Each child in the experimental classrooms who was randomly selected to receive traditional counseling met with the counselor to discuss his behavior in school and his academic progress. If he had other worries or problems he wished to discuss with the counselor he was free to do so.

These sessions differed according to the individual skill and philosophy of the counselor, but in all cases, they afforded an equal time and opportunity to be released from the classroom and to interact individually with an interested, understanding school professional. Before this project was initiated, no counselors had been assigned to work with the children in the Emotionally Disturbed Classes.

#### Instruments

1. The Children's Self Concept Scale, developed by Lipsitt (1958) consists of 22 trait descriptive adjectives, of which 19 are rated positive and 3 are rated negative (A copy of this instrument can be found in Appendix A). The subject rates himself on a 5 point scale ranging from "not at all" to "all of the time." It was standardized on a population of 298 fourth, fifth and sixth graders. Test-retest reliability correlations by sex and grade varied from .73 to .91. They were said to be significant at the .01 level of confidence. Positive self concepts are indicated by high scores.

This test was used in recent studies by Mayer (1966) in the investigation between self concepts of mentally retarded children and time of placement in special class and by Mann, Beaber and Jacobson (1969) in measuring the effect of group counseling on the self concepts of mentally re-

tarded boys.

In this dissertation it is referred to as Self Concept Scale. It was administered to the children in the small classroom groups by the teachers, under the supervision of the author. Each statement was read aloud to make sure that inability to read would not be a factor in the obtained score, and the group was carefully monitored to make sure that the process was understood by all.

2. The Way I Feel About Myself by Piers and Harris (1964) is a general measure of self concept which contains 80 simple declarative statements concerning the self. A copy of this instrument can be found in Appendix B. The subject answers these by circling yes or no. The statements are so worded that a positive self concept may sometimes be indicated by a yes answer and other times by a no answer. Each score is the number of responses made which indicate a positive self concept. Greater positive self concepts are shown by high scores. This instrument was standardized on a large number of children of 4th, 6th and 10th grade. Eighty-eight of the students were retarded children whose mean IQ was 69.6. The authors report that a cross section of socioeconomic levels was used. The Kuder Richardson formula 21 was used to test internal consistency by grade and age and showed a correlation of .78 to .93. A factor analysis of the present 80 item scale on 457 sixth grade children resulted in six clearly interpretable factors: (1) behavior (loading .53-.66), (2) general and academic status

(loading .53-.66), (3) physical appearance and attributes (loading .40-.74), (4) anxiety (loading .49-.57), (5) popularity (loading .49-.62) and (6) happiness and satisfaction (loading .42-.65). This scale was also used in the studies previously described by Mayer (1966) and Mann, et al. (1969).

For this dissertation the test was administered by the teachers in small groups under supervision. According to the procedure followed in the normative study (Piers and Harris, 1964) each question was read aloud to the group so that inability to read would not be a factor in the scores obtained.

3. The Semantic Differential was developed by Osgood (1957) as a way of observing and measuring the psychological meaning of things, usually concepts. Concepts such as father, home or democracy have both denotative meanings and connotative meanings. The Semantic Differential measures the connotative meanings of concepts in "semantic space." Research has shown that most educational concepts like school, curriculum, teacher, principal and so on can be categorized to three factors or dimensions which are: evaluation, potency and activity (Kerlinger 1967). This is done by differentiating each such concept along a continuum between bi-polar adjective pairs such as good-bad, fast-slow, strong-weak. An actual Semantic Differential consists of a number of scales, each of which

is a bipolar adjective pair together with the concept to be rated. Nine scales are usually used, chosen from a list of 50 prepared by Osgood. Three scales represent each factor. Each scale is highly "loaded" on one factor and not on the others. These scales are related to a number of concepts relevant to the research problem.

In this study the following concepts were measured: (1) my principal, (2) my classmates, (3) staying after school, (4) the school office, (5) my teacher, (6) my classroom, (7) homework, (8) school books, (9) the school yard, (10) recess, (11) Catto School (Camden Home School), (12) school work.

The scales, which are 5 point rating scales, used to measure Evaluation are: happy-sad, awful-nice, bad-good. To measure activity we used dull-sharp, hot-cold, fast-slow. To measure potency, weak-strong, hard-soft, and small-large were used. These scales were chosen because they had high "loadings" on each of the dimensions they represent according to Osgood (1957). A copy of the Semantic Differential used may be found in Appendix C.

The concepts used for this study are relevant to attitudes related to school, school materials and activities. In this way it was hoped to measure the change in students' attitudes towards school as they reflected changes due to the IPR experimental treatment.

4. The Behavior Problem Checklist is a three point

rating scale for 55 relatively frequent problem behaviors exhibited by children and adolescents (Appendix D). Its development by Peterson and Quay has included factor analytic studies of problem behavior in public elementary school children both in regular (Peterson; 1961, Quay & Quay, 1965), and emotionally disturbed classes (Quay, Morse & Cutler, 1966), institutionalized juvenile delinquents (Quay, 1964, 1966) and children in a child guidance clinic (Peterson, Becker, Showmaker, Luria & Hellmer, 1961). The Checklist is rated on a 3 point scale denoting no problem, mild problem and severe problem, and was rated, in this study, by the teacher. The problem behavior dimensions have been factored to the four dimensions of conduct disorder (psychopathy, unsocialized aggression), personality disorder (neuroticism, anxious - withdrawn), inadequacy - immaturity, and socialized subcultural delinquency.

Inter-teacher reliabilities found on a sample of 125 kindergarten children were .77 for conduct problem dimension and .75 for the personality problem dimension (Peterson, 1961). Ratings obtained from 2 teachers of a sub-sample of seventh and eighth graders, who averaged only one hour per day contact with students rated, ranged from .58-.71 for conduct problems and .22-.31 for personality problems (Quay & Quay, 1965).

5. The Deviant Behavior Frequency Count is a frequent counting method of observing the classroom behavior

of school children. The technique as developed by Werry and Quay (1969) is one in which one child is observed for a period of time, which is broken down into subunits or cells, of a few seconds duration. During this time, the behaviors are noted as occurring or as not occurring. The child is observed when the child is in a task situation, where he is doing independent work and the task is clearly defined, "during individual, academic seat work." According to the method used by Werry & Quay (1969), the child is observed, at various times of the day, for a period of 15 minutes. The duration of each cell of observation is 20 seconds. The observers are instructed not to interact with teachers or children but to regard themselves as "pieces of furniture," so that the children become habituated to the observers and behave as they do under normal circumstances.

The instrument consists of three categories of behavior: (a) deviant behaviors, (b) attending or work behaviors and (c) teacher-pupil interactions. Each of these behaviors is subdivided further, giving a total of 14 separate items, as seen in Table 1.

Reliability was reported by Werry & Quay (1969) based on 145 pooled pair observations by six observers obtained over the 1966-67 school year. It was calculated by means of the Pearson product moment correlation coefficient ( $r$ ) and by a mean ratio agreement obtained by dividing the

Table 3

Deviant Behavior Frequency Count  
Inter-Rater Reliability

	Mean Paired Inter-Rater Reliability	Inter-Rater Reliability Reported by Werry and Quay (1969)
Deviant Behaviors:		
No Deviant	90.4	79.9
Out of Seat	74.0	86.6
Physical Contact	100.0	95.9
Noise	81.5	70.2
Turns	76.5	73.2
Vocalization	84.5	76.9
Isolation	100.0	98.2
Other	78.8	70.1
Teacher-Pupil Contacts:		
Teacher Initiated+	75.0	84.7
Pupil Initiated+	100.0	77.8
Teacher Initiated-	95.9	100.0
Pupil Initiated-	100.0	84.2
Attending Behavior:		
Attending	92.5	89.1
Irrelevant Activity	81.0	82.2
Daydreaming	50.0	94.5

smaller of each pair of observations by the bigger, converting to percent, and then calculating the mean for the 145 paired observations. The Pearson product moment correlation coefficient ranged from .78 to .99 (Werry and Quay, 1969) (not considering daydreaming which was .19). The mean percentage of ratio agreement ranged from 70.1 to 100.0.

Werry & Quay, in comparing normal children to "conduct problem children between the ages of 7½ to 11, found that the conduct problem children had a tendency to be somewhat more deviant, noisier and more passive aggressive as measured by this frequency count. They also found this technique could be used as a means to detect medication effects in the classroom (Werry & Quay, 1969).

In Camden, during the August of 1969, a Consultant of the Temple University Staff who has trained Quay-Werry Observers for a Temple University Program, gave a training workshop on the use of the technique of the Deviant Behavior Frequency Count. Under his direction, three school psychologists and four guidance counselors were trained as Quay-Werry Observers. Of this group three guidance counselors and one school psychologist served as Quay-Werry Observers for this project. An additional two Guidance Aides, were trained by a School Psychologist in this technique. The training sessions also served as a review and additional practicum for 3 Guidance Counselors. The training sessions

consisted of lecture, demonstrations of the techniques of observations and supervised observational sessions in classrooms for a total of 10 days or 40 hours of actual training.

Inter-rater reliability was established by means of the mean ratio agreement of paired observations as recommended by Werry & Quay (1969). The mean ratio of agreement ranged from .78 to 1.00 (excluding daydreaming on which there was .50 agreement), and compare favorably to that reported by Werry & Quay (1969) as set out in Table 3.

The trained observers then observed the children in the experimental classrooms three times from October 17, 1969 until November 14, 1969 in order to establish a baseline, pre-measure of the frequency of deviant behavior exhibited by the sample children. The observers rated the children six times from November 14, 1969 until April 30, 1970, during IPR sessions. Three more observations were made of each child in May 1970 after completion of IPR sessions and counseling, as a post measure.

Copies of the instruments used and instructions for the Deviant Classroom Behavior Frequency Count may be found in the Appendix E.

6. The California Achievement Test (CAT) is considered to be a well constructed set of tests to measure reading, arithmetic and language arts (Mervin, 1965).

The 1957 edition provides scores for parts, sections and total battery converted to grade placement scores. The Kuder-Richardson reliabilities for the total reading total arithmetic, and total language scores are satisfactory and generally fall between .86 and .96. They are lower for some subtests. Validity data is given in terms of correlations with other test scores, item analysis statistics and other criteria (North, 1965).

## CHAPTER 4

### ANALYSIS OF RESULTS

#### Self Concept:

The Children's Self Concept Scale (Lipsitt, 1958) and the Way I Feel About Myself (Piers & Harris, 1964) were administered to the three treatment groups before and after treatment, as a measure of self concept, in order to test the first hypothesis.

H1: Children exposed to IPR will have more positive self concepts than children not so exposed, as measured by a Self Concept Scale (Lipsitt), and the Way I Feel About Myself Instrument (Piers & Harris).

The results of each of the above tests was analyzed separately by a one way analysis of covariance (BMD 04V, Dixon, 1970), using the pretest of each instrument as its covariate. Only subjects for whom both pre and post test scores were available were used.

Table 4 shows the means and standard errors of each of the treatment groups on the Self Concept Scale.

The analysis of covariance on the Self Concept Scale is shown in Table 5. No significant differences were found between the three groups.

Table 6 shows the mean scores of the three groups

TABLE 4

## Mean Scores on the Self Concept Scale

Group	N	Pretest	Posttest	Adjusted Posttest	
		M	M	M	SE
IPR	21	80.2857	82.2381	82.0304	2.5263
Traditionally Counselled	20	78.3500	81.6500	81.7589	2.5864
Control	22	78.4091	85.6364	85.7356	2.4660

TABLE 5

Analysis of Covariance of Three Groups on  
Self Concept Scale

Source	SS	df	MS	F
Total	8099.9648	61		
Error	7888.5508	59	133.7042	
Treatment	211.4141	2	105.7070	0.791 N.S.

on The Way I Feel About Myself Instrument.

The analysis of covariance between the three treatment groups on the Self Concept Scale presented in Table 7, shows significant differences among the treatment groups on self concept (  $p < .025$  ).

TABLE 6  
Mean Scores on The Way I Feel About Myself

Group	N	Pre-Test	Post Test	Adjusted Post Test	
		M	M	M	SE
IPR	20	50.5000	58.8000	58.5551	2.3809
Traditional Counselled	21	50.3810	49.1429	48.9482	2.3232
Control	21	48.9048	53.8095	54.2374	2.3256

TABLE 7  
Analysis of Covariance of Three Groups On  
The Way I Feel About Myself

Source	SS	df	MS	F
Total	7520.7422	60		
Error	6570.2891	58	113.2808	
Treatment	950.4531	2	475.2266	4.195*

\*  $p < .025$

The Scheffe post hoc test was applied to the results to determine among which of the groups significant differences exist (Glass & Stanley, 1970). A comparison was made between the IPR group and each of the other two treatment groups, as well as between the IPR group and the Non-IPR group (a combination of the traditionally counselled group and the control group). Table 8 presents the differences between the means of these groups. There were no significant differences between the IPR group and the control group, although the difference between the IPR group and the traditionally counselled group was significant ( $p < .05$ ). The difference between the IPR group and the Non-IPR groups would have been significant at the .10 level of confidence, but had to be rejected at the .05 level of confidence. However, this does give evidence of the trend that the self concept of the IPR group, as measured by The Way I Feel About Myself Instrument, was more positive than the self concept of the Non-IPR group.

TABLE 8  
Mean Differences Between Treatment Groups  
on The Way I Feel About Myself

	Group II & III Non IPR	Group II Traditionally Counselled	Group III Control
Group I: IPR	6.9623	9.6069*	4.3177
Group II: Trad. Counselled			-5.2892

\*  $p < .05$

Attitudes:

A Semantic Differential was administered twice to all the children in the three treatment groups to test the second hypothesis.

H2: Children exposed to IPR will have more positive attitudes towards school than children not so exposed, as measured by a Semantic Differential.

Twelve concepts were measured on factors of evaluative, activity and potency. Three of the concepts measured were people related to school: (1) my principal, (2) my classmates, (3) my teacher. Four of the concepts measured were school places: (1) Catto School, (2) the school office, (3) my classroom, (4) the school yard. Five of the concepts measured were related to school work: (1) homework, (2) school books, (3) school work, (4) recess and (5) staying after school. The concept "staying after school" also served as a quality control item, as the expectation is to have negative attitudes towards this concept.

The results were analysed factor by factor by a one-way analysis of covariance similar to a model used by Yamamoto, Thomas & Karnes (1969). Each person's score on each factor was a simple sum over the individual scales belonging to that factor. Therefore, the factor score range on each factor: evaluative, activity and potency was 3 to 27 for each of the twelve concepts measured. (Yamamoto, et al.,

1969). A score of fifteen represented a neutral attitude.

The semantic differential pre measures which were given by the teachers were improperly administered, and therefore, they were discarded. The post tests were administered by the guidance counselors. The pre-tests scores of the Way I Feel About Myself instrument were used as a covariate.

Table 9 presents the means and standard errors of the three treatment groups on the evaluative factors of the Semantic Differential instrument, after these scores were adjusted for the covariates. The analysis of covariance results for the three groups on the evaluative factor for concepts relating to the people related to school is summarized in Table 10. Significant differences were found among the treatments groups only on the concept of "my principal" and "my classmates" ( $p < .01$ ).

In order to ascertain among which treatment groups the significant differences exist, a Scheffe post hoc test (Glass & Stanley, 1970) was carried out. A comparison was made between the IPR group and each of the other two treatment groups, as well as between the IPR group and the Non-IPR group (a combination of the group receiving traditional counseling and the control group). Table 11 presents the differences between the groups. As predicted, the attitudes of the IPR group was significantly higher on the evaluative factor towards "my principal" than the control group, and

TABLE 9

Adjusted Mean Scores of Factor of Evaluative on Semantic Differential for ThreeTreatment Groups:

Concept	Group Receiving IPR		Group Receiving traditional counseling		Control Group	
	Mean	SE	Mean	SE	Mean	SE
Number	20		21		21	
My Principal*	25.3328	1.2914	21.6927	1.2601	20.2761	1.2614
My Classmates*	22.1612	1.3554	17.5406	1.3225	18.7821	1.3239
My Teacher	25.0950	1.2321	21.5198	1.2023	21.5802	1.2035
Catto School	18.8970	1.8322	16.9976	1.7878	16.8147	1.7896
School Office	22.0580	1.4738	18.6652	1.4381	20.8987	1.4396
Classroom	21.1074	1.5874	17.7678	1.5489	19.2728	1.5505
School Yard	20.6781	1.4221	20.7921	1.3877	18.3716	1.3891
Homework	18.7312	1.5917	16.7549	1.5531	19.3106	1.5547
School Books	21.9521	1.4421	18.6762	1.4071	18.7027	1.4086
School Work	21.4929	1.5943	19.9468	1.5556	19.2028	1.5572
Recess	23.4790	1.3215	20.7928	1.2895	21.9891	1.2908
Staying After School	9.5167	1.3123	11.9814	1.2805	8.8598	1.2818

\* p &lt; .05

TABLE 10

Analysis of Covariance of Three Groups on Evaluative  
Factor: Semantic Differential

<u>People Related to School</u>					
<u>Concept</u>	<u>Variance</u>	<u>S</u>	<u>df</u>	<u>MS</u>	<u>F</u>
	Total	2209.5436	60		
My Principal	Error	1932.9214	58	33.3262	
	Treatment	276.6223	2	138.3111	4.150*
My Classmates	Total	2362.1224	60		
	Error	2129.2685	58	36.7115	
	Treatment	323.8539	2	116.4269	3.171*
My Teacher	Total	1929.6703	60		
	Error	1759.5617	58	30.3373	
	Treatment	170.1086	2	85.0543	2.804NS

\*  $p < .05$

than the Non-IPR group (  $p < .05$ ). The attitudes of the IPR group towards "my classmates" was significantly higher than that of the traditionally counseled group ( $p < .05$ ) and would have been higher than that of the Non-IPR group at the .10 level of confidence, but had to be rejected at the .05 level of confidence. On all three of the persons related to school, the group exposed to IPR treatment had higher mean scores on the evaluative factor than either of the other two treatment groups, or the combination of them.

A summary of the analysis of covariance on the evaluative factor for school places is presented in Table 12, and for school work is presented in Table 13. None of the concepts of school places or school work were statistically significant on the evaluative factor of the Semantic Differential. However, the mean score on the evaluative factor of three of the four places related to school: Catto, school office, classroom, and school yard, is highest for the group exposed to IPR treatment (see Table 9). The group exposed to IPR also had higher mean scores on the evaluative factor for all the concepts related to school work, except for "staying after school," and "homework" (see Table 9).

Table 14 presents the means and standard errors of scores of the three treatment groups of the activity factor of the Semantic Differential.

TABLE 11

Difference Between Treatment Groups With  
Significant Differences on the Evaluative Factor

---



---

My Principal

Group	Group II & III Non-IPR	Group II Traditionally Counseled	Group III Control
IPR Traditionally Counseled	4.3484*	3.6401	5.0567* 1.4166

My Classmates

Group	Group II & III Non-IPR	Group II Traditionally Counseled	Group IV Control
IPR Traditionally Counseled	4.000	4.6206*	3.3791 -1.2415

\* p < .05

TABLE 12

Analysis of Covariance of Three Groups on Evaluative  
Factor: Semantic Differential

<u>School Places</u>					
<u>Concept</u>	<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
	Total	3944.7918	60		
Catto School	Error	3890.8208	58	67.0831	
	Treat- ment	53.9710	2	26.9855	.402NS
	Total	2640.1199	60		
School Office	Error	2517.5594	58	43.4062	
	Treat- ment	122.5605	2	61.2802	1.412NS
	Total	3034.9966	60		
Classroom	Error	2920.5379	58	50.3541	
	Treat- ment	114.4588	2	57.2294	1.137NS
	Total	2421.7216	60		
School Yard	Error	2344.2210	58	40.4176	
	Treat- ment	77.5005	2	38.7503	.959NS

TABLE 13

Analysis of Covariance of Three Groups on Evaluative  
Factor: Semantic Differential

<u>School Work</u>					
<u>Concept</u>	<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
	Total	3011.5353	60		
Homework	Error	2936.4586	58	50.6286	
	Treatment	75.0767	2	37.5384	.741 NS
	Total	2554.4250	60		
School Books	Error	2410.3653	58	41.5580	
	Treatment	144.0597	2	72.0299	1.733 NS
	Total	3001.4746	60		
School Work	Error	2945.9617	58	50.7923	
	Treatment	55.5229	2	27.7614	.547 NS
	Total	2098.3413	60		
Recess	Error	2024.2496	58	34.9009	
	Treatment	74.0917	2	37.0459	1.061 NS
	Total	2109.2722	60		
Staying After School	Error	1996.0577	58	34.4148	
	Treatment	113.2145	2	56.6072	1.645 NS

The group receiving IPR treatment had higher mean scores on all the concepts on the activity factor except for the concept "staying after school," for which it had the lowest score.

A summary of the results of an analysis of covariance between the three treatment groups on the activity factor

TABLE 14

Adjusted Mean Scores of Factor of Activity on Semantic Differential for Three Treatment Groups

Concept	IPR		Groups Traditional Counseling		Control	
	Number	20	21	21	21	21
	Mean	SE	Mean	SE	Mean	SE
My Prin- cipal	18.3552	1.1908	17.0439	1.1620	17.2846	1.1632
My Class- mates	20.6120	1.1387	18.4381	1.1111	18.1218	1.1123
My Teacher	21.8869	1.0338	20.7038	1.0088	19.9753	1.0098
Catto School	16.9933	1.4552	16.3280	1.4200	16.6308	1.4214
School Office	19.7930	1.3652	15.7564	1.3321	17.2979	1.3334
Classroom*	21.0173	1.1477	17.9661	1.1199	16.3984	1.2100
School Yard	19.3701	1.3700	17.3572	1.3368	15.8142	1.3382
Homework	17.5488	1.1318	16.6736	1.1044	16.4228	1.1055
School Books*	20.2732	1.152	14.7882	1.1467	15.6182	1.1479
School Work	17.2900	1.2894	16.3254	1.2581	15.8746	1.2594
Recess	19.3802	1.2097	16.4129	1.1804	12.9393	1.1816
Staying After School	11.6865	1.2017	14.7988	1.1726	13.9760	1.1738

on the concepts of People related to school is shown in Table 15. None of the differences on the factor of activity for people related to school were significant.

TABLE 15

Analysis of Covariance of Three Groups on Activity  
Factor: Semantic Differential

<u>People Related to School</u>					
<u>Concept</u>	<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
My Principal	Total	1663.5070	60		
	Error	1643.6940	58	28.3396	
	Treatment	19.8130	2	9.9065	.350NS
My Classmates	Total	1577.5383	60		
	Error	1502.9282	58	25.9126	
	Treatment	74.6101	2	37.3051	1.440NS
My Teacher	Total	1276.6623	60		
	Error	1238.7565	58	21.3579	
	Treatment	37.9058	2	18.9529	.887NS

Table 16 presents the summary of the analysis of covariance between treatments groups on the activity factor for school places. Differences in attitudes between treatment groups as reflected by the factor of activity was seen in the concept of "classroom" ( $p < .05$ ).

The Scheffe post hoc test (Glass & Stanley, 1970) was done to see among which groups the significant differences exist. A comparison was made between the IPR group and each of the other treatment groups, as well as between the IPR group and the Non-IPR group (a combination of the traditionally counseled group and the control group). Table 17 presents the differences between the groups on the activity factor for the concept "classroom." The group receiving IPR had significantly higher mean scores for activity for "classroom" than did either the control group, or the Non-IPR group ( $p < .05$ ).

TABLE 16  
Analysis of Covariance of Three Groups on Activity  
Factor: Semantic Differential

<u>School Places</u>					
Concept	Source	S	df	M	F
Catto School	Total	2459.0439	60		
	Error	2454.5035	58	42.3190	
	Treatment	4.5405	2	2.2702	.054 N
School Office	Total	2329.5236	60		
	Error	2160.0876	58	37.2429	
	Treatment	169.4360	2	84.7180	2.275NS
Classroom	Total	1751.1974	60		
	Error	1526.6928	58	26.3223	
	Treatment	224.5046	2	112.2523	4.265*
School Yard	Total	2305.0596	60		
	Error	2175.3950	58	37.5068	
	Treatment	129.6646	2	64.8323	1.729NS

\* $p < .05$

TABLE 17

Mean Differences Between Treatment Groups  
on the Activity Factor: Classroom

Group	Group II & III Non-IPR	Group II Tradition- ally Counseled	Group III Control
I: IPR	3.8351*	3.0512	4.6189*
II: Tradition- ally Counseled			1.5677

\*  $p < .05$

Table 18 presents a summary of the analysis of covariance between treatment groups on the activity factor for school work. Significant differences in attitudes between treatment groups as reflected by the factor of activity was seen in the concept "school books" ( $p < .01$ ). The Scheffe post hoc test (Glass & Stanley, 1970) was done to seem among which of the groups significant differences occurred. A comparison was made between the IPR group and each of the other treatment groups, as well as between the IPR group and the Non-IPR group. Table 19 presents the differences among these groups on the activity factor for the concept "school books." The group receiving IPR treat-

TABLE 18

## Analysis of Covariance of Three Groups on Activity

Factor: Semantic Differential

<u>School Work</u>					
<u>Concept</u>	<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Homework	Total	1498.9839	60		
	Error	1484.7866	58	25.5998	
	Treatment	14.1973	2	7.0987	.277NS
School Books	Total	1956.0273	60		
	Error	1600.7887	58	27.5998	
	Treatment	355.2386	2	177.6193	6.436**
School Work	Total	1948.2234	60		
	Error	1926.9560	58	33.2234	
	Treatment	21.2674	2	10.6337	.320NS
Recess	Total	1797.9970	60		
	Error	1696.0784	58	29.2427	
	Treatment	101.9187	2	50.9593	1.743NS
Staying After	Total	1779.7686	60		
	Error	1673.8685	58	28.8598	
	Treatment	105.9001	2	52.9500	1.835NS

\*\* p &lt; .01

ment had higher mean scores on the activity factor for "school books" than did any of the other treatment groups, or the combination of them ( $p < .05$ ).

TABLE 19

Mean Differences Between Treatment Groups which  
Showed Significant Differences on the Activity Factor

	School Books		
	Group II & III Non-IPR	Group II Traditionally Counseled	Group III Control
Group I: IPR	5.0700*	5.4850*	5.6550*
Group II: Traditionally Counseled			- .8300

Table 20 presents the means and standard errors of scores of the three treatment groups of the potency factor of the Semantic Differential, after adjustment for the covariates. The mean scores of the group exposed to IPR are greater for all the concepts on the potency factor except for the concept of "recess," and for the concept "staying after school" for which it is significantly lower ( $p < .05$ ).

A summary of the results of the analysis of covariance between the three treatment groups on the potency

TABLE 20

Adjusted Mean Score of Factor of Potency on Semantic Differential for Three Treatment Groups

Concept	IPR		Groups Traditionally Counselled		Control	
	(N=20) M	SE	(N=21) M	SE	(N=21) M	SE
My Principal	18.4149	1.3124	16.2976	1.2806	17.6406	1.2819
My Classmates	19.0524	1.2022	17.6288	1.1731	18.7022	1.1743
My Teacher	21.9992	1.2739	20.2375	1.2430	19.5728	1.2443
Catto School	19.0062	1.3651	16.2430	1.3320	17.3701	1.3334
School Office	17.4166	1.1785	16.1560	1.1499	17.1615	1.1511
Classroom	19.7068	1.1543	17.2912	1.1263	17.3690	1.1275
School Yard	21.3877	1.3858	19.3712	1.3522	10.1167	1.3536
Homework	17.8722	1.2595	16.0255	1.2290	17.6199	1.2303
School Books	17.9106	1.3149	16.9132	1.2831	16.7910	1.2844
School Work	16.0758	1.3177	16.5045	1.2858	17.0423	1.2871
Recess	17.8018	1.2008	15.9538	1.1717	16.5206	1.1729
Staying After School*	12.3950	1.0256	16.5199	1.0008	15.7706	1.0018

factor is shown for people related to school on Table 21, and for school places in Table 22. None of these concepts were statistically significant.

TABLE 21

Analysis of Covariance of Three Groups of Potency  
Factor: Semantic Differential

<u>People Related to School</u>					
<u>Concept</u>	<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
My Prin- cipal	Total	2043.4842	60		
	Error	1996.2254	58	34.4177	
	Treatment	47.2589	2	23.6294	.687NS
My Classmates	Total	1698.0546	60		
	Error	1675.3057	58	28.8846	
	Treatment	22.7489	2	11.3745	.394NS
My Teacher	Total	1944.8457	60		
	Error	1880.9373	58	32.4300	
	Treatment	63.9084	2	31.9542	.985NS

TABLE 22

Analysis of Covariance of Three Groups on Potency

Factor: Semantic Differential

		<u>School Places</u>			
<u>Concept</u>	<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Catto	Total	2238.6940	60		
	Error	2159.8113	58	37.2381	
	Treatment	78.8826	2	39.4413	1.059NS
School Office	Total	1628.1803	60		
	Error	1609.7903	58	27.7550	
	Treatment	18.3900	2	9.1950	.331NS
Classroom	Total	1620.7928	60		
	Error	1544.2769	58	26.6255	
	Treatment	76.5158	2	38.2579	1.437NS
School Yard	Total	2288.6523	60		
	Error	2225.8083	58	38.3760	
	Treatment	62.8440	2	31.4220	.819NS

A summary of the results of an analysis of covariance between the three treatment groups on the potency factor is shown for school work in Table 23. Significant differences were found among the treatment groups for the concept of "staying after school" ( $p < .05$ ). The Scheffe post hoc test was done to determine among which groups significant differences exist (Glass & Stanley, 1970). The differences among groups is shown in Table 24. A comparison was made between the IPR group and each of the other treatment groups, as well as between the IPR group and the Non-IPR group (a combination of the traditionally counseled group and the control group). The group exposed to the IPR treatment had significantly lower scores on the concept "staying after school" on the potency factor than did any of the other treatment groups, or the combination of them ( $p < .05$ ).

#### Behavior:

In order to test the third hypothesis the Behavior Problem Checklist and the Quay Werry Deviant Behavior Frequency Count were used. The results of each of these instruments were analysed separately.

H3: Children exposed to IPR will exhibit less disruptive behavior than children not so exposed. This will be evaluated by teachers on a checklist, and measured by the observations of trained observers on the Quay-Werry Instrument.

TABLE 23

Analysis of Covariance of Three Groups on Potency  
Factor: Semantic Differential

<u>School Work</u>					
<u>Concept</u>	<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Homework	Total	1880.3747	60		
	Error	1838.7787	58	31.7031	
	Treatment	41.5960	2	20.7980	.656NS
School Books	Total	2019.3742	60		
	Error	2004.0613	58	34.5528	
	Treatment	15.3129	2	7.6564	.222NS
School Work	Total	2022.0832	60		
	Error	2012.4841	58	34.6980	
	Treatment	9.5991	2	4.7995	.138NS
Recess	Total	1707.8353	60		
	Error	1671.3060	58	28.8156	
	Treatment	36.5293	2	18.2647	.634NS
Staying After School	Total	1415.5544	60		
	Error	1219.2389	58	21.0214	
	Treatment	196.3154	2	98.1577	4.669*

\*p < .05

TABLE 24

Differences Between Treatment Groups on Potency Factor  
for Staying After School

Group	Groups II & III Non-IPR	Group II Traditionally Counseled	Group III Control
I: IPR	-3.7502*	-4.1249*	-3.3756*
II: Traditionally Counseled			.7493

\*  $p < .05$

Table 25 presents the means and standard errors of the three treatment groups, after adjusting with the covariates. An analysis of covariance was performed on the Behavior Problem Checklist, using the pretest score as the covariate (BMD 04V, Dixon, 1970). Table 26 presents a summary of the analysis of covariance. The differences between groups were not significant.

TABLE 25

Table of Mean Scores of Treatment Groups on Behavior Problem Checklist

Group	N	Pre-test	Post-test	Adjusted Post-test	
		M	M	M	SE -
Exposed to IPR	22	36.1818	28.9091	29.1341	3.7402
Traditionally Counseled	20	44.2000	35.0500	32.9836	4.0504
Control	23	31.4348	33.4783	35.0599	3.7381

TABLE 26

Analysis of Covariance Between Treatment Groups on Behavior Problem Checklist

Source	SS	df	MS	F
Total	19158.9219	63		
Error	18757.0195	61	307.4919	
Treatment	401.9023	2	200.9512	0.654NS

Twelve observations using the Quay Werry Deviant Behavior Frequency Count were made of each child in the group receiving IPR and in the group receiving traditional counseling. Three observations were made prior to treat-

ment, 6 during treatment and 3 after treatment. The data was analysed factor by factor using a Repeated Measure Analysis of Variance (BMD 08V, Dixon, 1970). Four time intervals were used, using the sum of three observational periods, that is, a simple sum of the three pre-treatment observations, a simple sum of the observations 4-6, a simple sum of the observations 7-9, and a simple sum of the 10-12 or post treatment measures.

Table 27 presents the mean scores of each of the two groups for each of the four time intervals for the frequency of "attending behaviors," and the four types of "teacher-pupil" contact. The Quay Werry consists of three types of attending behaviors: (1) attending, (2) irrelevant activity, and (3) daydreaming. Since the interrater reliability for "daydreaming" was low, this was included in "irrelevant behavior," which then became perfectly negatively correlated with "attending behavior." An analysis of variance with repeated measures was run for "attending behavior." A summary of the analysis of variance is presented in Table 28. There were no significant differences seen between groups in "attending behavior," but both groups did steadily increase in the frequency of attending behaviors from the beginning to the end of treatment.

Separate analysis of variance with repeated measures were run for each type of teacher-pupil interaction. A summary of the analysis of variance is presented in Table 29.

TABLE 27

Means of Two Treatment Groups

For Four Periods of Observation

Quay-Werry Deviant Behavior Frequency Count

Behavior	Group	Oct.	Nov.-Jan.	Feb.-Apr.	May
Attending Behavior	Group receiving trad'l counseling	49.52381	52.85714	54.00000	52.80952
	Group Receiving IPR	51.47619	54.85714	57.95238	60.76190
Positive Teacher Initiated Contact	Group Receiving trad'l counseling	7.95238	5.76190	5.0000	3.80952
	Group receiving IPR	6.95238	6.95238	4.90476	3.76190
Positive Pupil Initiated Contact	Group Receiving trad'l counseling	5.52381	5.57143	4.00000	3.23810
	Group receiving IPR	5.95238	6.23810	3.95238	3.47619
Negative Teacher Initiated Contact	Group receiving trad'l counseling	.23810	.61905	.23810	.47619
	Group receiving IPR	.42857	.42857	.19048	.28571
Negative Pupil Initiated Contact	Group receiving trad'l counseling	2.09524	.57143	.38095	1.14286
	Group receiving IPR	1.19048	1.14286	.14286	.47619

TABLE 28

Repeated Analysis of Variance Between Two Groups  
For Four Observational Periods on  
Quay Werry Deviant Behavior Frequency Count

<u>Attending Behavior</u>				
<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between Subjects				
Treatment	660.0536	1	660.0536	1.0222NS
Subjects within groups	25827.5476	40	645.6889	
Within Subjects				
Time	992.1607	3	330.7202	1.3017NS
Treatment X time	250.0179	3	83.3393	.3280NS
Time X subject within groups	30486.0714	120	254.0506	

There are significant differences in the time factor for the frequency of positive teacher initiated contacts, positive pupil initiated contacts, and negative pupil initiated contacts. All of these contacts decreased in frequency from pretreatment to post treatment observations. No significant differences were found between treatment groups, nor were any interaction effects found to be statistically significant.

Table 30 presents the mean frequencies of each of the two groups, for each of the four time intervals for "no

TABLE 29

Repeated Analysis of Variance between Two Groups  
 For Four Observational Periods on  
 Quay Werry Deviant Behavior Frequency Count

<u>Positive Teacher Initiated Contact</u>				
<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between Subjects				
Treatment	.0060	1	.0060	.0001
Subjects within groups	1627.5952	40	40.6899	
Within Subjects				
Time	323.8274	3	107.9425	5.8933**
Treatment X Time	25.4940	3	8.4980	.0271
Time X Subject within groups	2197.9286	120	18.3161	
<u>Positive Pupil Initiated Contact</u>				
Between Subjects				
Treatment	4.3393	1	4.3393	.1109
Subjects within groups	1563.9048	40	39.0976	
Within Subjects				
Time	203.6369	3	67.8790	4.5832**
Treatment X time	2.8750	3	.9583	.7359
Time X Subject within groups	1777.2381	120	14.8103	

\*\* p < .01

TABLE 29 (continued)

Repeated Analysis of Variance between Treatment  
Groups for Four Observational Periods on  
Quay Werry Deviant Behavior Frequency Count

<u>Negative Teacher Initiated Contacts</u>				
<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between Subjects				
Treatment	.1488	1	.1488	.0536NS
Subjects within groups	110.9524	40	2.7738	
Within Subjects				
Time	2.0655	3	.6885	1.2032NS
Treatment X Time	1.0179	3	.3393	.9529NS
Time X Subject within groups	68.6667	120	.5722	
<u>Negative Pupil Intitated Behavior</u>				
Between Subjects				
Treatment	4.0238	1	4.0238	.4539NS
Subjects within groups	354.5476	40	8.8637	
Within Subjects				
Time	40.6905	3	13.5635	3.5886*
Treatment X time	13.2619	3	4.4206	1.1695NS
Time X Subject within groups	453.5476	120	3.7796	

\* p < .05

TABLE 30

Means of Two Treatment Groups

For Four Observational Periods

Quay Werry Deviant Behavior Frequency Count

Behavior	Group	Oct.	Nov.-Jan.	Feb.-Apr.	May
No Deviant	Group receiving trad'l counsel.	29.52381	33.71429	34.47619	37.71429
	Group receiving IPR	25.52381	31.09524	39.57143	40.33333
Noise	Group receiving trad'l counsel.	28.33333	25.09524	21.95238	20.09524
	Group receiving IPR	26.95238	24.38095	20.09524	18.42857
Turning	Group receiving trad'l counsel.	14.85714	11.57143	9.04762	7.33333
	Group receiving IPR	11.28571	12.85714	8.00000	8.61905
Vocalization	Group receiving trad'l counsel.	26.04762	21.19048	20.76190	13.57143
	Group receiving IPR	19.23810	21.57143	13.80952	13.52381

TABLE 30 (continued)

Means of Two Treatment Groups

For Four Observational Periods

Quay Werry Deviant Behavior Frequency Count

Behavior	Group	Oct.	Nov.-Jan.	Feb.-Apr.	May
Out of Seat	Group receiv. trad'l counsel.	18.42857	14.19048	13.71429	11.04762
	Group receiv. IPR	17.85714	15.95238	15.42857	9.80952
Physical Contact	Group receiv. trad'l counsel.	4.28571	2.85714	1.47619	1.38095
	Group receiv. IPR	2.71429	2.47619	2.33333	1.23810
Other	Group receiv. trad'l counsel.	29.71429	29.19048	27.38095	30.23810
	Group receiv. IPR	38.33333	31.76190	24.85714	27.33333

deviant" behavior and for the six types of deviant behavior observed. A separate analysis of variance with repeated measures was run for each of these categories (Dixon, 1970). A summary of the results of the analysis of variance is shown in Table 31. The frequency of "no deviant behavior" increased from pretreatment to posttreatment observations ( $p < .01$ ). The frequency of noise, turning, vocalizations, out of seat activity, and physical contact all decreased from pretreatment to posttreatment observations. No statistically significant differences were found between treatment groups, nor were any interaction effects observed.

#### Achievement:

The California Achievement tests were administered to the children in the three treatment groups twice to test the fourth hypothesis.

H4: Children exposed to IPR will gain more in reading and arithmetic than children not so exposed. This will be measured by scores on the California Achievement Test in Reading and Arithmetic.

Table 32 presents the means and standard errors of the scores on the achievement tests for the three treatment groups. The results of each test was analysed separately by a one way analysis of covariance (BMD04V, Dixon, 1970). The pretest score of each of the tests of: arithmetic, total reading, vocabulary, and comprehension were used as a covariate for that test. The summary of the analysis of

TABLE 31

Repeated Analysis of Variance Between  
Two Groups for Four Observational  
Periods on Quay-Werry Deviant Behavior Frequency Scale

---

<u>No Deviant Behavior</u>				
<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
<b>Between Subjects</b>				
Treatment	3.1488	1	3.1488	.0763
Subjects within groups	33605.5952	40	841.2649	
<b>Within Subjects</b>				
Time	3312.4464	3	1104.1488	7.0820**
Treatment X Time	581.4940	3	193.8313	1.2433
Time X Subject within groups	18707.3095	120	155.8942	

Noise

<b>Between Subjects</b>				
Treatment	82.8810	1	82.8810	.0066NS
Subjects within groups	17426.4524	40	435.6613	
<b>Within Subjects</b>				
Time	1778.4762	3	592.8254	6.3746**
Treatment X time	7.8810	3	2.6270	.0282NS
Time X Subject within groups	11159.6429	120	92.9970	

\*\* p < .01

TABLE 31 (continued)

Repeated Analysis of Variance Between Treatment Groups  
for Four Observational Periods on  
Quay Werry Deviant Behavior Frequency Scale

<u>Turning</u>				
<u>Source</u>	<u>SS</u>	<u>df</u>	<u>Ms</u>	<u>F</u>
<b>Between Subjects</b>				
Treatment	11.0060	1	11.0060	.064NS
Subjects within groups	6887.2619	40	177.6815	
<b>Within Subjects</b>				
Time	832.2083	3	277.4028	6.7115**
Treatment X time	169.1607	3	56.3869	1.3642NS
Time X Subject within groups	4959.8810	120	41.3323	
 <u>Vocalizations</u> 				
<b>Between Subjects</b>				
Treatment	473.3571	1	473.3571	1.7232
Subjects within groups	10987.4286	40	274.6857	
<b>Within Subjects</b>				
Time	2153.7619	3	717.9206	7.5789**
Treatment X time	522.5952	3	174.1984	1.8389
Time X Subject within groups	11367.1429	120	94.7262	

\*\* p < .01

TABLE 31 (continued)

Repeated Analysis of Variance between Two  
Groups for Four Observational Periods on  
Quay-Werry Deviant Behavior Frequency Scale

Source	<u>Out of Seat</u>			
	SS	df	MS	F
<b>Between Subjects</b>				
Treatment	7.2917	1	7.2917	.0270
Subjects within groups	10789.4762	40	269.7369	
<b>Within Subjects</b>				
Time	1267.0179	3	422.3393	8.0624**
Treatment X Time	75.6845	3	25.2282	.4816
Time X Subject within groups	6286.0476	120	52.3837	
 <u>Physical Contact</u>				
<b>Between Subjects</b>				
Treatment	4.0238	1	4.0238	.2346
Subjects within groups	685.9524	40	17.1488	
<b>Within Subjects</b>				
Time	113.5476	3	37.8492	3.5854*
Treatment X Time	31.3571	3	10.4524	.9625
Time X Subject within groups	1303.0952	120	10.8591	

\*\* p < .01

\* p < .05

TABLE 31 (continued)

Repeated Analysis of Variance Between Two  
Groups for Four Observational Periods on  
Quay-Werry Deviant Behavior Frequency Scale

Source	Other Deviant Behavior (Non-Specific)			
	SS	df	MS	F
Between Subjects				
Treatment	87.1488	1	87.1488	.1008NS
Subjects within groups	34579.3810	40	864.4845	
Within Subjects				
Time	1380.3512	3	460.1171	2.0149NS
Treatment X Time	917.7798	3	305.9266	1.3396NS
Time X Subject within groups	27402.6190	120	228.3552	

covariance is presented in Table 33. The mean scores of all the achievement tests ranged from four to seven months in the six month time period of treatment, but there were no significant differences between treatment groups.

Correlations of Tests Used:

The 17 test and subtest variables were intercorre-

TABLE 32

Mean Scores of California Achievement Tests							
Test	N	Pre-test	Post-test	Gain	Adjusted		
		M	M		Post-test		
Arith- metic	Group recv. IPR	21	2.3857	2.8762	.4905	3.6297	0.2035
	Group recv. trad'l counseling	20	3.2650	3.6200	.3550	3.4641	0.2035
	Control	22	3.6727	4.2955	.6228	3.7179	0.1969
Reading	Group receiv. IPR	21	2.1667	2.9095	.7428	3.7563	0.1385
	Group recv. trad'l counseling	20	3.0850	3.5200	.4350	3.3730	0.1378
	Control	22	3.5727	4.1682	.5955	3.4934	0.1340
Compre- hension	Group receiv. IPR	21	2.0238	2.7381	.7143	3.4032	0.1955
	Group recv. trad'l counseling	20	2.7100	3.3150	.6050	3.2922	0.1965
	Control	22	3.3000	3.9500	.6500	3.3358	0.1906
Vocab- ulary	Group receiv. IPR	21	2.2333	2.8762	.6429	3.7375	0.1600
	Group recv. trad'l counseling	20	3.2550	3.6200	.3650	3.3857	0.1593
	Control	22	3.6045	4.2955	.6910	3.6863	0.1541

TABLE 33

Analysis of Covariance of Three Groups on  
California Achievement Test

Test	Source	SS	df	MS	F
Arith- metic	Total	49.4492	61		
	Error	48.7610	59	0.8265	
	Treat- ment	0.6882	2	0.3441	0.416NS
Total Reading	Total	23.8570	61		
	Error	22.3663	59	0.3791	
	Treat- ment	1.4915	2	0.7458	1.967NS
Comprehension	Total	45.6753	61		
	Error	45.5510	59	0.7721	
	Treat- ment	0.1243	2	0.0621	0.080NS
Vocabulary	Total	31.2764	61		
	Error	29.8215	59	0.5054	
	Treat- ment	1.4548	2	0.7274	1.439NS

lated with each other (BMD02D, Dixon, 1970). The achievement tests, Self Concept Scale, The Way I Feel, and Behavior Problem Checklist were given to all pupils in each of the three treatment groups. Only those subjects for whom all posttest scores were available were used for this analysis. The intercorrelations are reported in Table 34. As can be expected, the four tests of achievement correlated highly with each other, and each of the tests correlated with its own factors. The Self Concept Scale, and The Way I Feel About Myself, which were both used to measure self concept correlated highly with each other ( $p < .01$ ). Neither of these instruments correlated with the Behavior Problem Checklist. Both measures of self concept had a high correlation with achievement ( $p < .01$ ). The Behavior Problem Checklist did not correlate with any of the achievement scores.

The observations of behavior were correlated with the various test variables (BMD02D, Dixon, 1970). Since only those pupils in the IPR and traditionally counseled groups were observed, this observational data was compared to the test scores of those pupils on which all the posttest data was available. The correlations are reported in Table 35. Attending behavior correlated with achievement scores, as well as with the factor of "personality" on the Behavior Problem Checklist ( $p < .05$ ). Observed daydream-

TABLE 34  
Intercorrelations Between Tests and Variables Used in this Study

	2	3	4	5	6	7	8	9
1. Vocabulary	.9370**	.9769**	.8697**	.2188	.3199*	.2165	-.0517	.2005
2. Comprehen.		.9818**	.9029**	.1190	.2523	.1191	-.1399	.1510
3. Reading			.9014**	.1721	.2942*	.1659	-.1088	.1820
4. Arithmetic				.1291	.3085*	.0451	-.1285	.1920
5. Teacher Checkl.					.7574**	.8310**	.7498**	.7707**
6. Conduct (T.C.)						.3867**	.2898*	.6107**
7. Personality (TC)							.6362**	.6112**
8. Inadequacy (TC)								.4279**

	10	11	12	13	14	15	16	17
1. Vocabulary	.2631	.2315	.4767**	.2814*	.2362	.2345	.1472	.2297
2. Comprehension	.2629	.2744*	.4899**	.2719	.1840	.2410	.2195	.2574
3. Reading	.2858*	.2738*	.5066**	.2938*	.2094	.2527	.2036	.2719
4. Arithmetic	.2524	.3197*	.4363**	.3256*	.1843	.3721**	.2481	.3484*
5. Teacher Checkl.	.0349	-.1167	-.1144	-.1349	-.0069	.1156	.0000	.1259
6. Conduct (TC)	.0984	.0113	.0303	-.0561	-.0292	.1509	-.0277	.1104
7. Personality (TC)	.1026	-.2074	-.0717	-.1750	.0389	.0555	-.0534	.1244
8. Inadequacy (TC)	-.1141	-.1564	-.2420	-.1223	-.0143	.0192	.0409	-.0413
9. Soc. Delinq. (TC)	.0417	.0877	.0238	-.1467	.0290	.2571	.1918	.2382
10. Self Concept Scale		.4075**	.2625	.2285	-.0261	.1030	.0902	.2287
11. Way I Feel			.6122**	.4574**	.2256	.6244**	.4854**	.4623**
12. Gen Academic-WIF				.4536**	.1742	.5417**	.3674**	.4416**
13. Behavior-WIF					.3730**	.4521**	.2645	.3540**
14. Anxiety-WIF						.2519	.2209	.2193
15. Popularity-WIF							.2812*	.4796**
16. Phy. Appeara-WIF								.3082*

137

N-55

\*p < .05

\*\* p < .01

TABLE 35

## Correlation Between Observed Behavior and Tests Used

	Attend- ing	No Devi- ant Be- havior	Out of Seat	Physi- cal Con- tact	Noise	Turn- ing	Vocal- izat- ions	Daydream- ing
1. Vocabulary	.3091*	.4428*	-.1266	-.1227	-.1368	.2279	-.1071	-.3749*
2. Comprehension	.3607*	.2996	-.0238	-.0217	-.1727	.1504	.0128	-.3567*
3. Reading	.3289	.3716*	-.0821	-.0418	-.1710	.1741	-.0418	-.3640*
4. Arithmetic	.4459*	.2677	-.1332	-.1120	-.1099	.1407	.0119	-.4058*
5. Teacher Checklist	-.0925	.2749	.1243	-.0841	.1880	.0133	-.1460	-.1016
6. Conduct (TC)	-.0735	.1806	.1793	-.0389	.1764	.0143	.1222	-.0867
7. Personality (TC)	-.1044	.3898*	-.0452	-.0786	.2444	.0223	-.3493*	-.0830
8. Inadequacy (TC)	-.0924	.1301	.1073	-.1681	.0705	-.0693	-.1522	-.0651
9. Soc. Delinq. (TC)	.1398	.3325	.1375	.0214	.0725	.0606	-.1756	-.2134
10. Self Concept Scale	.1068	.3289	.0204	-.1220	-.1144	.3453	-.1902	-.3794*
11. Way I Feel	.0973	.0886	.0877	-.0366	-.2316	.1012	-.0751	-.1632
12. Gen Academ-WIF	.1774	.2605	.0152	.0151	.0228	-.0276	-.2651	-.2292
13. Behavior-WIF	.0365	-.1629	-.0087	-.1615	.0430	.3044	.0631	-.0877
14. Anxiety-WIF	.2474	.1997	.0642	.0444	-.0064	-.1289	.0934	-.3244
15. Popularity-WIF	.1299	.1779	.0077	-.0742	.1001	.1416	.0275	-.1953
16. Phy. Appear.-WIF	.1837	.1954	.0546	.1190	.1367	-.1493	-.1339	-.2378
17. Happiness-WIF	.2304	.3021	.0149	.0443	.1227	.1166	-.2813	-.4541*

138

N=34

\* p &lt; .05

TABLE 35 (continued)

## Correlation Between Observed Behavior and Tests Used

	Positive Teach. Initiated	Positive Pupil Initiated	Neg. Teacher Initiated	Neg. Pupil Initiated
1. Vocabulary	-.2231	.2057	-.2053	-.1022
2. Comprehension	-.0775	.1797	-.0761	.0092
3. Reading	-.1530	.1562	-.1136	-.0535
4. Arithmetic	-.0679	.2347	-.0573	.0129
5. Teacher Checklist	-.1340	-.1738	-.2416	-.2280
6. Conduct (TC)	-.1175	-.0583	-.1387	-.1488
7. Personality (TC)	-.2389	-.2438	-.2398	-.2998
8. Inadequacy (TC)	.0551	-.0383	-.2665	-.0127
9. Soc. Delinq. (TC)	-.1500	-.2784	-.2364	-.2613
10. Self Concept Scale	-.3108	-.0233	-.0486	-.2630
11. Way I Feel	-.1168	.0655	-.1158	-.0911
12. Gen. Academ-WIF	-.2619	.0511	-.1752	-.0626
13. Behavior-WIF	.1764	.2135	-.2003	-.1693
14. Anxiety-WIF	.2217	-.2147	-.4379*	.0589
15. Popularity-WIF	-.0766	.1282	-.2530	-.0392
16. Phy. Appear-WIF	-.0827	.1760	-.3101	-.0180
17. Happiness-WIF	-.1764	-.1857	-.1564	-.1958

N=34

\*  $p < .05$

ing behavior correlated negatively with achievement scores, as well as with The Self Concept Scale, and the "Happiness" factor on The Way I Feel About Myself instrument ( $p < .05$ ). The Teacher Checklist of Behavior Problems did not correlate with any of the categories of observed behavior on the Quay Werry Frequency Observation Scale.

## CHAPTER 5

### CONCLUSIONS

#### Discussion of Obtained Results

##### Self Concept:

It was hypothesized that IPR would effect positive changes in the self concepts of those children who were exposed to it, as compared to children not so exposed. Two scales were used to measure self concept in this study: The Way I Feel About Myself Scale and the Self Concept Scale. The experimental group which received IPR treatment showed significantly higher self concept scores as measured by The Way I Feel About Myself instrument than the group which received traditional counseling, but the difference between the IPR group and the control group was not significant. When the three treatment groups were compared on the Scheffe post hoc test, the difference between the IPR group and the Non IPR group (which included the group receiving traditional counseling and the control group) did not reach significance at the .05 level ( $p < .10$ ). Neither IPR nor traditional counseling were shown to be more effective than no counseling in improving self concepts. However, mean scores of the three treatment groups

give evidence of a trend toward higher self concepts in the IPR group.

The mean score on self concept of the IPR group was higher than that of the control group, which had no counseling, which in turn, was higher than that of the group which received traditional counseling. Although the differences between each of the counseled groups and the control group was not significant, the difference between the IPR group and the group which received traditional counseling was statistically significant. The implication of this trend raises some interesting questions about the effectiveness of elementary school guidance counseling. In a review of a series of counseling outcome studies, Kranzler (1968) reports that none of the studies found differences between children who received counseling and those who did not. Traux (1963) and Bergin (1963) present evidence that although there is usually no difference between the means of counseled and uncounseled populations, there is a difference between the variances, with the variance of the treated group frequently being the larger. The conclusions that they draw from this data is that people are affected by counseling such that while some people are helped by counseling, other are worse off after receiving counseling than if they had been left alone. However, in the present investigation, significant dif-

ferences in variances were not found.

Matthes, Kranzler and Mayer (1968) found that children receiving counseling from counselors who were unconditionally accepting, made significantly less improvement in peer relationships than those children who did not. They suggested that children who receive a high degree of acceptance from counselors, who represent high status adults, may be thereby reinforced for their inappropriate social behavior. Since their inappropriate behavior is accepted by their counselors the children feel no need to consider other possible ways to improve their peer relationships.

The work of Bahnson (1969) is of value in considering the apparently discrepant results obtained in this study, that the IPR group had higher self concepts than the counseled group, but not more positive than the control group. In his study of children, adolescents and adults he found that the effects of self confrontation via videotape varied considerably with the personality structure, age, sex, and ego strength of the individual. To some, the film image represented an extension of the self, while others were concerned with the way they appeared to others, indicating more concern with social awareness. Some persons used denial and other defenses because they could not cope with a disturbing perception of themselves, while others perceived the film image as

a self critical process directed towards a struggle to "improve" themselves. He warns against a "blanket" description of the results of self image confrontation. Since the groups used in this study consisted of pre-established intact classes, the emotionally disturbed children were largely heterogeneous in regard to age and type of maladjustment exhibited. It is possible that many different reactions occurred in response to the IPR treatment, but were obliterated by group data.

Truax and Carkhuff (1965) found that whereas client self exploration was positively related to client improvement in adults, it was negatively related to positive personality change in a group of adolescents. Similarly, Leventhal and Kranzler (1968) reported negative relationships between client intrapersonal exploration and constructive personality changes in fourth, fifth, and sixth grade students. Although these relationships were not significant, it brings into question the effectiveness of this type of intervention with younger children. The rationale for IPR is based on a "self exploration" or "insight" approach. These findings suggest that many techniques which explore interpersonal feelings, of which IPR is one example, may indeed be less effective with children than it has been found to be with adults.

It may also be that a specific type of emotionally disturbed child is more amenable to IPR. Smith (1970)

used community helpers to interact with elementary school children in the expectation that the experience of a warm, empathic, genuine relationship would contribute to the children's sense of worth and bring about positive changes in their behavior in school. He found that the children who were the most immature and inadequate, as defined by the Quay Peterson Behavioral Checklist, displayed the greatest overall improvement. His results confirmed that the kind of social reinforcement provided by interaction with a warm supportive adult failed to improve the adjustment of children with severe "conduct disorders." Since many of the students in this study were aggressive, hostile boys, it may be that many techniques, including IPR, have little effect upon such individuals. The above study suggests the IPR may prove to be more effective with withdrawn, immature personalities.

#### Attitudes:

The attitudes of the children in the three treatment groups toward people related to school, places in the school, and school work were measured by a semantic differential. The three factors of evaluative, activity and potency were used. Since it was hypothesized the IPR would effect more positive "attitudes" than non IPR, we should direct our attention primarily on the factor of "evaluative," which measures this dimension (Prothro & Keehn, 1957). On this

dimension, significant differences between treatment groups were found for two of the three people related to school, "principal," and "classmates." Attitudes of the IPR group towards "my principal," was significantly higher than that of the control group, and the Non-IPR group. The attitudes of the group exposed to IPR was significantly higher than that of the traditionally counseled group on attitudes towards "my classmates."

While the attitude towards "teacher" was not significantly different between treatment groups, it should be noted that the mean value of the IPR group was so high, 25.0950, where 27.0000 was the highest possible score, that it was near the ceiling for all groups, and therefore difficult for any changes that did occur to be seen as statistically significant. The attitudes of the group exposed to IPR was thus significantly higher than those of the control groups in two of the twelve concepts measured.

Higher scores on the factor of "evaluative" can be understood in terms of "favorableness" (Solarz, 1969). Of the twelve concepts used on the semantic differential, eleven of them were either positive or neutral, and only one, "staying after school" was negative. On nine of the eleven positive or neutral concepts which included the persons related to school, places related to school, and school work, such as homework, school books and recess,

differences between the three groups were in the expected direction; the mean of the IPR group being greater than that of the traditionally counseled group, which was in turn, greater than that of the control group. Although these differences were not significant, there was a trend in the IPR group to show more positive attitudes.

The meaning of the dimensions of activity and potency must be looked at from the point of view of the bipolar adjectives used, since these factors were empirically and not theoretically derived (Osgood & Suci, 1969). There were significantly higher scores on the activity factor for the concept "classroom" in the IPR group than in the control group, and in the Non-IPR group. The group receiving IPR had significantly higher mean scores on the activity factor on the concept "school books" than did any of the other groups. The bi-polar scales used to measure activity were Dull-Sharp, Hot-Cold, Fast-Slow. It measures the direction and intensity of motor responses to words and has been behaviorally validated (Solarz, 1969). It would seem that the group exposed to IPR saw "classroom," and "school books" as more exciting and active, as measured by these bi-polar scales on the semantic differential, than the group not exposed to IPR.

It is also interesting to note, that the mean scores for all eleven of the twelve positive or neutral concepts on the Semantic Differential, on the activity factor, of

the group receiving IPR were higher, though not significantly, than the means of the groups not exposed to IPR. In conclusion, it may be said that IPR had some effect in changing the pupils perceptions of the "activity" of at least two of the twelve school related concepts.

The potency factor can be best understood in terms of the bi-polar scales of Weak-Strong, Hard-Soft, and Small-Large. This is the least meaningful factor of our group of subjects (see Table 14) as many of the mean scores were near the center of the scale (score of 15 is neutral), and not at the extremes, as was true in the factors of evaluative, and activity. Extremity of meaning is positively correlated with meaningfulness of the concept to the individual (Staats & Staats, 1959), and ratings near the center are indicative that the scale was not sensitive to the distinctive character of the words or concept being measured. Although the mean scores were not extreme, the group receiving IPR had significantly lower mean scores on the potency factor on the concept "staying after school," than did either of the other two treatment groups, or the combination of them. Therefore, it can be said that the children exposed to IPR saw the negative concept of "staying after school" as weak, soft and small to a greater degree than did the other children, and perhaps saw staying after school as less potent and less threatening a concept, than did the children not exposed to IPR.

In summary, it must be pointed out that significant differences in attitudes towards school were found in only 5 of 36 comparisons. Such differences may be contributed to factors of chance. Thus the potency of IPR technique as a technique for change of attitudes is open to question.

Behavior:

Changes in children's behavior were measured by teachers on a Behavior Problem Checklist, and by trained observers. The teachers' evaluation of children's behavior failed to show any significant differences among treatment groups. It should be noted that interrater teacher reliability on this instrument ranges from .75 to .77 for personality problem dimension, from .58 to .71 on the conduct problem dimension (Peterson, 1961), and from .22 to .31 on the personality problem dimension (Quay & Quay, 1965). Such variability in teacher's agreement may effect the sensitivity of this instrument to changes that may have occurred in our study. Notwithstanding the relatively poor reliability coefficients, the mean adjusted post test

scores of our three treatment groups were in the expected direction, with the IPR group being rated as having the fewest and least severe problem behaviors. The mean of the IPR group was lower than that of the group receiving traditional counseling, which in turn had lower mean scores than the control group. While none of the differences were significant, it is interesting to note, that whereas both counseled groups showed a decrease in behavior problems, as measured by this checklist, the control group actually increased in the mean score on this checklist.

Trained observers used the Quay Werry Frequency Count of Deviant Behaviors to observe the children who received IPR, and those who received traditional counseling. The control group was not rated by observers on this instrument. There were no significant differences between the two groups on the amount of attending behaviors that the children exhibited, nor on the amount of deviant behaviors noted, nor were there statistically significant interaction effects. However, statistically significant differences were found in behavior of both groups of children from the beginning to the end of treatment, a six month period. The number of positive teacher initiated contacts, positive pupil initiated contacts and negative pupil initiated contacts were all found to decrease from the beginning to the end of the year. This decrease in teacher-pupil interactions was a change in the positive

direction, since such interactions have been generally considered to result from disruptive, deviant behavior on the part of the pupils. That is, both positive and negative teacher-pupil interactions often result from the pupil's demanding or disturbing behavior (Quay and Werry, 1969).

Both groups showed a decrease in such deviant behaviors as noise, turning, vocalizations, out of seat behavior, and physical contact from the beginning to the end of treatment.

The most parsimonious explanation of these results would be that they are due to maturation, that is, just the process of maturation alone could possibly account for the decrease in deviant behavior in the classroom. Similar findings have been reported by Quay and Glavin (1970). They found that both their experimental resource room group, and their control group improved in behavior over the school year, and interpreted this to be a sign of "spontaneous improvement." Considering that the control children used in their study were in a variety of different classes, they concluded that all children improve as the school year progresses, independent of what treatment they get. Lewis (1965) in reviewing follow up studies comparing future adjustment of children who received psychotherapy with that of children who applied for and did not receive

therapy, found that maturation accompanying the passage of time and not psychotherapy was the crucial factor in appropriate adult functioning.

Another explanation of these results could be that attendance in special classes using a variety of techniques results in the decrease in the amount of deviant behaviors. This would support the findings of surveys of special classes (Morse, Cutler, & Fink, 1964; Smith, 1967; Kelley, 1967) that attendance in special classes for the emotionally disturbed is beneficial. Similarly Vacc (1968) found that emotionally disturbed children in regular classes achieved less well on achievement measures, made significantly less positive overt behavior changes, and were more rejected than those children who had attended special class. This may be due to the reduction of pressure to conform to high levels of behavior, and the reduction of stress on academic achievement. It may also be the result of more patience and supportive teaching.

There were no significant differences between the IPR and traditionally counseled groups in behavioral improvement. However, there were trends that indicated greater overt behavioral improvement, and improved self concepts in the IPR group. It is possible that some behavioral changes did occur, which might show greater impact after they have become more deeply imbedded. If

changes in attitudes and self concepts do lead to changes in behavior and interpersonal relationships, as hypothesized by Kagan and others (1967), then after a person has changed his self concept he must learn to live with his new self. He must also have an opportunity to present this new image to others. It may take a while for others to recognize the change, and to bring their expectations of his behavior into line with this new presentation of self. If changes in behavior occur as a result of perceived expectations of others, significant differences in overt behavior may be seen after a greater passage of time. It is also possible, of course, that the slight differences between the two groups was merely the result of chance. However, such questions can only be answered through appropriate following studies. This is obviously an area that may be looked at in greater detail in the future.

In our study of emotionally disturbed children we found that physical aggression was an extremely infrequent behavior just as Quay and Werry (1969) did. It is also noteworthy that the standard deviations are in many cases almost as large as the means. This is also in accord with reported results of Werry and Quay (1969), attesting to the great variations in the scores of individual children. These large differences could hide the effect of the time-treatment interactions. The "normal" children in the

study by Werry and Quay (1969) were found to spend 75% of their time working. At the end of the year, the children in our sample spent between 59% to 64% of their time "working," that is, that they had their eyes on their work during their independent seat work for that amount of time. In comparing "normal" to emotionally disturbed children, Quay and Werry (1969) found that whereas the normal children spend about 74% of their time attending to their work, the emotionally disturbed children before treatment, spent 54% of their time attending to their work. At the end of treatment the emotionally disturbed children in both the IPR and traditionally counseled groups spent between 59% to 66% of their time attending to their work.

Both groups of children, those exposed to IPR, and those given traditional counseling were found to decrease in the frequency of specific deviant behaviors, and in the amount of teacher-child interaction from beginning to end of treatment as measured by observers using the Quay Werry Frequency scale. Significant differences failed to be seen between those children exposed to IPR and those children receiving traditional counseling. This could also be accounted for by the great variability among the children within each group, or may be a result of insufficient time for the changes in self concept and attitudes to affect others' expectations of behavior, and re-

sult in changes in the deviant behavior, or due to the inadequacies of both methods of counseling.

Children receiving IPR treatment had a higher mean score in attending behavior than the children receiving traditional counseling (see Table 27), and also a greater mean number of "no deviant" behaviors (see Table 30). However these differences were not significant. Overall, this study failed to demonstrate the effectiveness of IPR over traditional counseling or over a control group which received no counseling, as a means of changing the behavior of emotionally disturbed children.

Achievement:

No significant differences in achievement was seen between the three treatment groups on the California Tests of Achievement, in total reading, comprehension vocabulary, or total arithmetic scores.

The expectation that an intervention program for emotionally disturbed children result in changes in academic achievement is based on the assumption that emotionally disturbed children underachieve due to their emotional problems. It should be noted that, during the six months between the pre test and the post test on the achievement measure the pupils gained between .4 to .7 grade placement scores in 6 to 7 months. This represents a "normal" growth in achievement. Although it has been common clinical be-

lief that the emotionally disturbances of children has its inhibiting effect on academic work, and that, therefore, disturbed children function below their intellectual potential (Eysenck, 1947; Rosen, 1929; Salzinger, 1957; Miller, 1933), others (Wolf, 1965) who studied the academic performance of emotionally disturbed children have found that they do not have poorer academic achievement than normal children, but rather that the teachers rate them lower on academic grades due to lack of effort, and the general negative "halo effect." It is Wolf's (1965) contention, that the lower grades received by emotionally disturbed children are more a reflection of the teacher's reaction towards the child's behavior than the fact that he is actually underachieving on a standardized test.

Since the children in all three groups made "normal" academic progress within the six month period studied, there was, of course, no difference in achievement gains of the experimental group as a result of IPR. Similar results were found by Broedel, Ohlson, Proff, & Southard (1965), who reported that increased acceptance of self and others was accompanied by poorer achievement in a group of group counseled underachievers. Winborn and Schmidt (1965) found that a control group had a higher grade point average than underachieving gifted college freshmen who were given short term group counseling.

### Traditional Counseling:

This study also failed to demonstrate the effectiveness of traditional elementary school guidance counseling. No significant differences were found between the group receiving traditional counseling, and the control group, which received no counseling, in any of the criterion measures. This is similar to the findings of Kranzler (1968) in his review of outcome studies of the effectiveness of elementary school guidance counseling. In a series of five studies, which included hundreds of elementary school students as subjects, about half of whom received counseling, either in groups, or individually, or both, no evidence was provided to indicate that there were significant differences between those students that were counseled and those that were not. Similar failure to show the effectiveness of traditional counseling were reported by Lewis (1970), Alper and Kranzler (1970), Mayer, Beggs, Fjellstedt, Forhertz, Nighswander, and Richards (1970), Matthes, Kranzler, and Mayer (1968), and Smith (1970).

### Conclusions

IPR is a technique seen by its originators (Kagan & Krathwohl, 1967) as a means of effecting changes in self concepts as a result of helping a child in "self discovery" and the development of "insight." This has not been demon-

strated in our study of six classes of emotionally disturbed children in the public school system in Camden, New Jersey. However, the data did bring to light some trends worthy of further consideration.

IPR was not shown to be more effective in improving the self concept of emotionally disturbed children, than leaving them to the normal routine of the emotionally disturbed class, although there were some trends observed in the expected direction. A comparison of the groups on the Scheffe post hoc test, showed the difference between the IPR group, and the Non-IPR group, which included the group receiving traditional counseling and the control group, to be significant at the .10 level, although it had to be rejected at the .05 level. The mean of the IPR group was higher than that of the control group on self concept scores, which was, in turn, greater than that of the group receiving traditionally counseling. However, neither of these differences were significant.

In self reported attitudes, as measured by a semantic differential, children exposed to IPR had more positive evaluative attitudes towards the principal than did children in both groups which were not exposed to IPR. The IPR group also had higher evaluative attitudes towards "classmates" than did the traditionally counseled group. Differences in attitudes of the IPR group towards the other concepts related to school were not significant.

There was a significant difference between the IPR and Non-IPR groups in the activity factor in the "classroom," and "school books," and a significantly lower mean score in the potency factor of the concept of "staying after school" in the IPR group as compared to the Non-IPR groups. Significant differences occurred only in one or two concepts in each of the dimensions. These differences may be the result of chance factors.

Children exposed to IPR did not show significant changes in behavior compared to children not so exposed, as measured by teachers' ratings on a Behavior Problem Checklist, or as measured by observers on the Quay Werry Deviant Behavior Frequency Count. Children in both IPR and the traditionally counseled groups did significantly change their behavior over the time period, as measured by the frequency of deviant behaviors observed, from the beginning of treatment to its cessation. This may be the result of maturation, or as a result of the totality of "special class" environment, as discussed previously. The term maturation is used here to cover all those biological or psychological processes which systematically vary with the passage of time, independent of treatment. Physical

growth, ego development, "spontaneous remission," the cumulative effects of learning processes and environmental changes, all occur irrespective of the treatment effects. Because this study deals with such a deviant sample, there is also a possibility that the results reflect "regression towards the mean."

There were no significant changes in achievement among the three treatment groups. All three made academic progress within normal expectancies over the time period observed.

In this study, in none of the criterion measures used, were significant differences found between the group receiving traditional counseling, and the control group, which received no counseling.

#### Recommendations and Needs for Further Studies

1. Although the data did not statistically support the experimental hypothesis that IPR would effect changes in self concepts, behavior and achievement, there were trends observed in improvement in the experimental group. In order to see whether or not these observations are indeed borne out, a longitudinal replication of this study should be undertaken.

2. Smith (1970) found that interaction with supportive, empathic adults was more effective with immature-

inadequate personality types than with the aggressive types of individuals that largely comprised the population of this study. A study of the use of IPR technique could be attempted with such withdrawn emotionally disturbed children to see if it is more effective with this specific type of emotional disorder.

3. The results of the IPR technique have been found to differ with age, sex, personality type, and socio-economic status (Bahnson, 1969). Lower class children, such as those who constituted the sample used in this study, have many conditions operating upon them which may tend to obviate those results attempted by IPR. It may be that children who come from more supportive, cooperative middle-class homes may be able to derive greater benefit from IPR. This study could be replicated in suburban and middle class school districts to see whether IPR is effective in changing self concepts, attitudes and behavior in these children.

4. In this study, tapes were made of each child in the classroom and played back in individual sessions. It would be interesting to see if this technique could be applied in group playback. Since classes of emotionally disturbed children are normally small, often limited to approximately eight students, it might be possible to use IPR taping of the classroom for playback to a small group,

such as half the class at a time. In this type of process, one could attempt to foster group interaction and empathetic support among group members. It could be hypothesized that such group recall would effect changes in students' attitudes, behavior and self concepts.

5. In this study no attempt was made to measure changes in the attitudes of the counselors who learned to use IPR techniques. It is possible that the attitudes of the guidance personnel, especially their 'expectancies' might play a primary role in helping to effect changes in the pupils. In order to compare the attitudes of the IPR personnel vs. traditional counselors, this study could be replicated in order to test the hypothesis that understanding of the IPR process and technique leads to more diversified counseling techniques and greater counselor insights into the nonverbal behavior of children.

6. In this study school counselors were given two weeks of training in the use of IPR techniques. It may be that this might have only been sufficient to produce a technician, and not a person greatly skilled in the use of IPR. It may be that it takes a person who is highly committed to IPR to be able to use it effectively.

#### Summary

IPR was used as an intervention approach with emotionally disturbed children in six classes to see if

it would positively effect changes in self concepts, attitudes towards school, behavior, and academic achievement. Three additional classes were used as a control group. In the experimental classes, half of each class was exposed to IPR, and the other half received traditional counseling. Sixty seven students were maintained throughout the treatment period of six months; of these, 22 recieved IPR, 21 received traditional counseling, and 24 comprised the control group. Those children who were exposed to IPR did not have more positive self concepts, as measured by The Way I Feel About Myself, than did the control groups, although there was some evidence of a trend in the expected direction. Although IPR exposed children had more positive self concepts than those who were traditionally counseled neither counseled group was better than the control.

Those children who were exposed to IPR tended to show more positive attitudes towards school than children not so exposed only in 5 of 36 comparisons. Both counseled groups (IPR and the traditionally counseled) improved over the period of treatment by exhibiting less frequent deviant behaviors. As a result, both of these groups required less teacher-pupil intervention. There were no differences found in deviant behavior between these two

groups (the control group was not observed in their overt behavior), nor were any interaction effects observed. We cannot say that this improvement was due to counseling rather than maturation since the control also improved. There were no differences among all three groups in teacher reported behavior improvement. All three groups made from four to seven months progress on the California Achievement Tests of reading and arithmetic during the six months over which treatment took place. There were no differences found in academic progress among the three groups. Traditional counseling was not found to be better than the control group in any of the criterion measures.

Although this study has not established the efficacy of IPR for general classroom use with emotionally disturbed children, certain replications are suggested to see if IPR could be more effective with children who exhibit specific types of emotional disturbances. Other possible uses of IPR with children, and in school settings, were recommended for possible study.

## REFERENCES

- Abrahamson, D., Status of mental hygiene and child guidance facilities in the public school in the United States, Journal of Pediatrics, 1955, 46, 107-118.
- Alger, I. Therapeutic use of videotape playback. Journal of Nervous and Mental Disease, 1969, 148, 430-437.
- Alger, I., & Hogan, P. Enduring effects of videotape playback experience on family and marital relationships. American Journal of Orthopsychiatry, 1969, 39, 86-93.
- Alper, T.G., & Kranzler, G.D. A comparison of the effectiveness of behavioral and client-centered approaches for the behavior problems of elementary school children. Elementary School Guidance and Counseling, 1970, 1, 35-43.
- Angellotti, A.T. An investigation into the factors influencing the administration of programs for the emotionally disturbed. Ann Arbor, Michigan, Dissertation Abstracts, 1968, 29, 78-A.
- A Proposal to Install and Operate a Personnel Development and Demonstration Program in Camden, N.J. City School System. Camden, N.J., Camden City School System, 1969.
- Bahnson, C.B. Body and Self Images associated with audiovisual self confrontation. Journal of Nervous and Mental Disease, 1969, 148, 262-280.
- Balow, B. The emotionally and socially handicapped. Review of Educational Research, 1966, 36, 120-133.
- Berger, M.M. Confrontation through videotape. In Berger, M.M. (Ed.), Videotape Techniques in Psychiatric Training & Treatment. New York, Brunner Mazel Publishers, 1970, pp. 18-35.
- Berger, M.M., (Ed.) Videotape Techniques in Psychiatric Training and Treatment. New York, Brunner Mazel Publishers, 1970.
- Bergin, A.E. The effects of psychotherapy: negative results revisited. Journal of Counseling Psychology, 1963, 10, 244-250.
- Bernstein, M. The life space interview in the school setting workshop 1961, American Journal of Orthopsychiatry, 1963, 33, 717-719.

- Bettelheim, B. Love Is Not Enough. Glenco, The Free Press, 1950.
- Birch, J.W. Special classes and schools for maladjusted children. Exceptional Children, 1956, 22, 333-337.
- Bortner, M., & Birch, H.G. Patterns of intellectual ability in emotionally disturbed and brain-damaged children. The Journal of Special Education, 1969, 3, 351-369.
- Bower, E.M. Early Identification of Emotionally Handicapped Children in School. Springfield, Ill. Charles C. Thomas, 1960.
- Bower, E.M. The Education of Emotionally Handicapped Children. Sacramento: California State Department of Education, 1961.
- Bower, E.M. The emotionally handicapped child and the school: an analysis of programs and trends. Exceptional Children, 1959, 26; 182-188.
- Bower, E.M.; Tashnovian, P.; and Larson, C. A Process for Early Identification of Emotionally Disturbed Children. Sacramento: California State Department of Education. 1958.
- Boyd, H.S., & Sisney, V.V. Immediate self-image confrontations and changes in self concept. Journal of Consulting Psychology, 1967, 31, 291-294.
- Brendtro, L.K., and Stern, P.R. A modification in the sequential tutoring of emotionally disturbed children. Exceptional Children, 1967, 33, 517-521.
- Broedel, J.; Ohlsen, M.; Proff, F.; & Southard, C. The effects of group counseling on gifted underachieving adolescence. In Kornrich, M. (Ed.) Underachievement. Springfield, Illinois, 1965.
- Bruner, J.S. Towards a Theory of Instruction. Cambridge, Mass. Belknap Press of Harvard University Press, 1966.
- Clarizio, H.F.; and Yelon, S.L. Learning theory approaches to classroom management: rationale and intervention techniques. The Journal of Special Education, 1, 267-273.
- Cornelison, F.S., Jr., & Arsenian, J. A study of the response of psychotic patient to photographic self image experience. Psychiatric Quarterly, 1960, 34, 1-8.

- Cowen, E.L.; Zax, M; Izzo, L.D.; & Trost, M.A. Prevention of emotional disorders in the school setting: a further investigation. Journal of Consulting Psychology, 1966, 30, 318-387.
- Danish, S.J.; & Kagan, N. Emotional simulation in counseling and psychotherapy. Psychotherapy, Theory, Research & Practice., 1969, 6, 261-263.
- Davids, A. Stability of personal and social preferences in emotionally disturbed and normal children. Journal of Abnormal & Social Psychology, 1964, 69, 556-559.
- DeVries, R.H. A special educational program for the emotionally handicapped child. Dissertation Abstracts, 1970, 30, 4270-A.
- Dixon, W.M. (Ed.) BMD Biomedical Computer Programs, Los Angeles, University of California Press, 1970.
- Donahue, G.T., & Nichtum, S. Teaching the Troubled Child. New York, The Free Press, 1965.
- Eisenberg, L.; Lachman, R.; Holling, P.A.; Lochner, A.; Mizelle, J.D.; & Conners, K. A psycho-pharmacologic experiment in a training school for delinquent boys. American Journal of Orthopsychiatry, 1963, 33, 431-447.
- Ellis, R.; James, Y.; Pintar, B.; and Beebe, M. A diversified elementary school program for the emotionally disturbed in Hellmuth, J. (Ed.), Educational Therapy Vol. 1., Seattle, Washington: Special Child Publications. 1966.
- Eysenck, H. Dimensions of Personality. London: Kegan, Paul. 1947.
- Fenichel, C. Psycho-educational approaches for seriously disturbed children in the classroom in Knoblock, P. (Ed.) Intervention Approaches in Educating Emotionally Disturbed Children. Syracuse, N.Y.: Syracuse University Press. 1968.
- French, E.L. Therapeutic education: practice in a residential treatment center for emotionally disturbed adolescents in Hellmuth, J. (Ed.), Educational Therapy: Vol. 1. Seattle, Washington: Special Child Publications, 1966.

- Froelich, R.E.; Teaching sychotherapy to Medical Students Through Videotape Simulation. In Berger, M.M. (Ed.) Videotape Techniques in Psychiatric Training & Treatment. New York: Brunner, Mazel, Publishers, 1970.
- Garner, H.H.; A review of confrontation psychotherapy from hypnosis to the problem solving technique. In Berger, M.M. (Ed.) Videotape Techniques in Psychiatric Training and Treatment. New York, Brunner, Mazel, Publishers, 1970.
- Geertsma, R.H.; & Reivich, R.S. Auditory and visual dimensions of externally mediated self-observation. Journal of Nervous and Mental Disease, 1969, 148, 210-223.
- Geertsma, R.H., & Reivich, R.S. Repetitive self-observation by videotape playback. Journal of Nervous & Mental Disease, 1965, 141, 29-41.
- Glass, G.V., & Stanley, J.C.; Statistical Methods in Education and Psychology, Englewood Cliffs, N.J., Prentice Hall, Inc. 1970.
- Glavin, J.P. Spontaneous improvement in emotionally disturbed children. Dissertation Abstracts, 1968, 29, 3503-A.
- Glavin, J.P. & Quay, H.C. Behavior disorders. Review of Educational Research, 1969, 39, 83-102.
- Goldfield, M.D., & Levy R. The use of television videotape to enhance the therapeutic value of psychodrama. American Journal of Psychiatry, 1968, 125, 690-692.
- Gottlieb, E.; Backup, C.E., & Cornelison, F.S. Denial of self-image confrontation in a case of anorexia nervosa. Journal of Nervous and Mental Disease, 1969, 148, 238-250.
- Graubard, P.S. The extent of academic retardation in a residential treatment center. Journal of Educational Research, 1964, 58, 78-80.
- Graubard, P.S. & Miller, M.B. Behavior disorders. In Johnson, G.O. (Ed.) Exceptional Children Behavioral Research. Counsel for Exceptional Children, 1968.
- Greenberg, B.S.; Kagan, N.; & Barnes, J. Dimensions of empathetic judgment of clients by counselors. Journal of Counseling Psychology, 1969, 4, 303-308.

- Grossberg, J. Behavior therapy: a review. Psychological Bulletin, 1964, 62, 73-88.
- Haring, N., & Phillips, E.L., Educating Emotionally Disturbed Children. New York: McGraw Hill, 1962.
- Haworth, M.R., & Menolascine, F.J. Videotape observations of disturbed young children. Journal of Clinical Psychology, 1967, 23, 135-140.
- Helper, M.M. Welcott, R.C., & Garfield, S.L. Effects of chlorpromazine in learning and related processes in emotionally disturbed children. Journal of Consulting Psychology, 1963, 27, 1-9.
- Hewett, F.M. Educational engineering with emotionally disturbed children. Exceptional Children, 1967, 33, 459-467.
- Hewett, F.M. A hierarchy of educational tasks for children with learning disorders. Exceptional Children, 1964, 31, 207-214.
- Hewett, F.M. The Emotionally Disturbed Child in the Classroom, Boston, Allyn & Bacon, 1965.
- Hewett, F.M.; Mayhem, D.; & Robb, E. An experimental reading program for neurologically impaired, mentally retarded and severely emotionally disturbed children, American Journal of Orthopsychiatry, 1967, 37, 35-48.
- Hewett, F.M.; Taylor, F.D.; Artuso, A.A. The Santa Monica project: Evaluation of an engineered classroom design with emotionally disturbed children. Exceptional Children, 1969, 35, 523-529.
- Hirsch, H., & Freed, H., Pattern sensitization in psychotherapy supervision by means of videotape recording. In Bergen, M.M. (Ed.) Videotape Techniques in Psychiatric Training and Treatment. New York, Brunner, Mazel Publishers, 1970.
- Hirschberg, J.C. The role of education in the treatment of emotionally disturbed children through planned ego development. American Journal of Orthopsychiatry, 1953, 23, 684-690.
- Hobbs, N. Helping disturbed children: psychological and ecological strategies. American Psychologist, 1966, 21, 1105-1115.

- Holzman, P.S. On hearing and seeing oneself. Journal of Nervous & Mental Disease, 1969, 148, 198-205.
- John, R.O., Segregated class placement vs. heterogeneous class placement of emotionally and perceptually handicapped children. Dissertation Abstracts, 1968, 29.
- Kagan, N., & Schauble, P.G. Affect simulation in interpersonal process recall. Journal of Counseling Psychology, 1969, 16, 309-313.
- Kagan, N.; Schauble, P.G.; Resnikoff, A.J.; Danish, S.J.; & Krathwohl, D.R. Interpersonal process recall. The Journal of Nervous and Mental Disease, 1969, 148, 365-374.
- Kagan, N., & Krathwohl, D.R. Studies in Human Interaction. East Lansing, Michigan. Michigan State University Educational Publication Services, 1967.
- Kagan, N.; Krathwohl, D.R.; & Farquhar, W.W. IPR-Stimulated Recall Videotape in Exploratory Studies of Counseling and Teaching-Learning. East Lansing, Michigan State University. Educational Publication Services, 1965.
- Kagan, N.; Krathwohl, D.R.; & Miller, R. Stimulated recall in therapy using video tape - a case study. Journal of Counseling Psychology, 1963, 10, 237-243.
- Kagan, N., Television in counselor supervision-educational tool or toy. In Berger, M.M. (Ed.) Videotape Techniques in Psychiatric Training and Treatment. New York, Brunner, Mazel Publishers, 1970.
- Kaswan, J., & Love, L.R. Confrontation as a method of psychological intervention. Journal of Nervous & Mental Diseases, 1969, 148, 224-235.
- Kauffman, J.M. Perception of family and school related variables by school adjusted, school disordered, and institutionalized emotionally disturbed pre-adolescent boys. Dissertation Abstracts International, 1970, 31, 562A-563A.
- Kelly, L.K. The Elgin approach to special education for emotionally disturbed children. Exceptional Children, 1967, 33, 179-180.

- Kerlinger, F.N. Foundations of Behavioral Research. New York: Holt Rinehart & Winston, Inc. 1967.
- Knoblock, P. Intervention Approaches in Educating Emotionally Disturbed Children. Syracuse, N.Y.: Syracuse University Press. 1968.
- Knoblock, P. & Garcia, R.A. Toward a broader concept of the role of the special class for emotionally disturbed children. Exceptional Children, 1965, 31, 329-335.
- Kounin, J.S., & Obradovic, S. Managing emotionally disturbed children in regular classrooms: a replication and extension. The Journal of Special Education, 1968, 2, 129-135.
- Kounin, J.S.; Friesen, W.W.; & Norton, A.E. Managing emotionally disturbed children in regular classrooms. Journal of Educational Psychology, 1966, 57, 1-13.
- Kranzler, G.D. Elementary school counseling: an evaluation. Elementary School Guidance and Counseling, 1968, 2, 286-294.
- Labenne, W. Differential diagnosis and psychoeducational treatment for the emotionally disturbed. Psychology in The Schools, 1967, 4, 366-370.
- Lathem, L. The Elgin approach to special education for emotionally disturbed children. Exceptional Children, 1966, 33, 179-180.
- Liem, G.R.; Yellott, A.W.; Cowen, E.L.; Trost, M.A.; & Izzo, L.D. Some correlates of early-detected emotional dysfunction in the schools. American Journal of Orthopsychiatry, 1969, 39, 619-626.
- Leventhal, R.B., & Kranzler, G.D. The relationship between the death of interpersonal exploration and constructive personality change in elementary school children: an exploratory study. Elementary School Guidance and Counseling, 1968, 3, 12-19.
- Lewis, M.D. The effects of counseling and consultation upon the sociometric status and personal and social adjustment of third grade pupils. Elementary School Guidance and Counseling, 1970, 5, 45-52.
- Lewis, W.W. Continuity and intervention in emotional disturbance: a review. Exceptional Children, 1965, 31, 465-475.

- Lewis, W.W. Project Re-Ed: educational intervention in emotional disturbance. In Hellmuth, J. (Ed.) Educational Therapy. Vol. 1 Seattle, Washington: Special Child Publications, 1966.
- Lipsitt, L. P. A self-concept scale for children and its relationship to the children's form of the manifest anxiety scale. Child Development, 1958, 29, 463-472.
- Maes, W.R. The identification of emotionally disturbed elementary school children. Exceptional Children, 1966, 32, 607-609.
- Mann, P.H.; Beaber, J.D.; & Jacobson, M.D., The effect of group-counseling in educable mentally retarded boys self concepts. Exceptional Children, 1969, 36, 359-366.
- Marrone, R.T., & Anderson, N. Innovative public school programming for emotionally disturbed children. American Journal of Orthopsychiatry, 1970, 40, 694-701.
- Matthes, W.A.; Kranzler, G.D.; & Mayer, G.R. The relationship between the client's preceptions of counselor behavior and change in the client's behavior. Elementary School Guidance and Counseling, 1968, 2, 179-184.
- Mayer, C.L. A study of the relationship of early special class placement and the self concepts of mentally retarded children. Exceptional Children, 1966, 33, 77-81.
- Mayer, G.R.; Beggs, D.L.; Fjellstedt, N.; Forhertz, J.; Nighswander, J.K.; & Richards, R. The use of public commitment and counseling with elementary school children: an evaluation. Elementary School Guidance and Counseling, 1970, 5, 22-34.
- McCarthy, J.M. & Paraskevopoulos, J. Behavior patterns of learning disabled emotionally disturbed, and average children. Exceptional Children, 1969, 36, 69-76.
- McKinnan, A.J. A follow-up and analysis of the effects of placement in classes for emotionally disturbed children in elementary school. Dissertation Abstracts International, 1969, 30, 1872-A.
- Mervin, J.C., in Buros, O.K. (Ed.) The Sixth Mental Measurement Yearbook. Highland Park, N.J., The Gryphon Press, 1965.

- Miller, E. Emotional factors in intellectual retardation. Journal of Mental Science, 1933, 79, 614-624.
- Minde, K.K., & Werry, J.S. Intensive psychiatric teacher counseling in a low socioeconomic area: a controlled evaluation. American Journal of Orthopsychiatry, 1969, 39, 595-607.
- Moore, F.J.; Chervell, E.; & West, M.J. Television as a therapeutic tool. Archives of General Psychiatry, 1965, 12, 217-220.
- Morse, W.C. Intervention techniques for the classroom teacher of the emotionally disturbed. In Knoblock, P. (Ed.) Educational programming for Emotionally Disturbed Children: The Decade Ahead. Syracuse, N.Y.: Syracuse University Press, 1965, pp. 29-41.
- Morse, W.C. Public schools and the disturbed child. In Knoblock, P. (Ed.) Intervention Approaches in Educating Emotionally Disturbed Children. Syracuse, N.Y.: Syracuse University Press, 1968.
- Morse, W.C. Working paper: training teachers in life space interviewing. American Journal of Orthopsychiatry, 1963, 33, 727-730.
- Morse, W.C.; Cutler, R.L.; & Fink, A.H. Public School Classes for the Emotionally Handicapped: A Research Analysis, Washington, D.C. The Council for Exceptional Children, NEA, 1964.
- Morse, W.C., & Dyer, C.O. The emotionally and socially handicapped, Review of Educational Research, 1963, 33, 109-125.
- Morse, W.C.; & Small, E. Group life space interviewing in a therapeutic camp. American Journal of Orthopsychiatry, 1959, 29, 27-44.
- Motto, J.J. & Wilkins, G.S. Educational achievement of institutionalized emotionally disturbed children. The Journal of Educational Research, 1968, 61, 218-221.
- Newman, R.G. The school centered life space interview as illustrated by extreme threat of school issues. American Journal of Orthopsychiatry, 1963, 33, 730-733.
- Nielson, G. Studies in Self Confrontation: Viewing a Second Motion Picture of Self and Another Person in a Stressful Dyadic Interaction. Munksgaard, Copenhagen, 1962.

- North, R.D. in Buros, O.K. (Ed.) The Sixth Mental Measurement Yearbook. Highland Park, N.J.: The Gryphon Press, 1965.
- O'Leary, K.D. & Becker, W.C. Behavior modification of an adjustment class: a token reinforcement program. Exceptional Children, 1967, 33, 637-664.
- Osgood, C.E. & Suci G.J. Factor analysis of meaning in Snider, J.G., & Osgood, C.E. Semantic Differential Technique: A Source book. Chicago: Aldine Publishing Company, 1969.
- Osgood, C.E.; Suci, G.J.; & Tannenbaum, P.H. The measurement of meaning. In Snider J.G., & Osgood, C.E. Semantic Differential Technique: A Source book. Chicago: Aldine Publishing Co., 1969.
- Osgood, C.E.; Suci, G.J.; & Tannenbaum, P.H. The Measurement of Meaning. Urbana, Ill.; The University of Illinois Press, 1957.
- Paredes, A.; Gottheil, E.; Tausig, T.N.; & Cornelison, F.S., Jr. Behavior changes as a function of repeated self-observation. Journal of Nervous & Mental Disease, 1969, 148, 287-299.
- Paredes, A.; Ludwig, K.D.; Hassenfeld, N.; & Cornelison, F.S. A clinical study of alcoholics using audiovisual self image feedback. Journal of Nervous & Mental Disease, 1969, 148, 449-456.
- Pate, J. Emotionally disturbed and socially maladjusted children. In Dunn, L., (Ed.) Exceptional Children in the School, New York: Holt, Rinehart and Winston, 1963.
- Perlmutter, M.S.; Loeb, D.G.; Gumpert, G.; O'Hara, F.; & Higbie, I.S. Family diagnosis and therapy using videotape playback. American Journal of Orthopsychiatry, 1967, 37, 900-905.
- Peterson, D.R. Behavior problems of middle childhood. Journal of Consulting Psychology, 1961, 25, 205-209.
- Peterson, D.R.; Becker, W.C.; Shoemaker, D.J.; Luria, Z.; & Hellmer, L.A. Child behavior problems and parental attitudes. Child Development, 1961. 32, 151-162.
- Phillips, E.L., & Haring, N.G. Results from special techniques for teaching emotional disturbed children. Exceptional Children, 1959, 24, 64-67.

- Piers, E.V., & Harris, D.B. Age and other correlates of self concept in children. Journal of Educational Psychology, 1964, 60, 91-95.
- Pimm, B. Working with emotionally disturbed children in the public school setting. Exceptional Children, 1967, 33, 653-55.
- Plank, G.E. The early identification and treatment of emotionally disturbed children: a comparison study of the relative status of four matched groups. Dissertation Abstracts, 1969, 30, 2383-A-2384-A.
- Prothro, E.T., & Keehn, J.D. Stereotypes and semantic space. Journal of Social Psychology, 1957, 45, 197-209.
- Quay, H.C. Personality patterns in pre-adolescent delinquent boys. Educational and Psychological Measurement, 1966, 26, 99-110.
- Quay, H.C. Personality dimension in delinquent males as inferred from the factor analysis of behavior ratings. Journal of Research in Crime and Delinquency, 1964, 1, 33-37.
- Quay, H.C. The facets of educational exceptionality: A conceptual framework for assessment, grouping and instruction. Exceptional Children 1968, 35, 25-31.
- Quay, H.C. Some basic considerations in the education of emotionally disturbed children. Exceptional Children 1963, 30, 27-31.
- Quay, H.C., & Glavin, J.P. The Education of Behaviorally Disordered Children in the Public School Setting. U.S. Office of Education, Bureau of Education for the Handicapped, 1970.
- Quay, H.C.; Morse, W.C.; & Cutler, R.L. Personality patterns of pupils in special classes for the emotionally disturbed. Exceptional Children, 1966, 32, 297-301.
- Quay, H.C., & Quay, L.C. Behavior problems in early adolescence. Child Development, 1965, 36, 215-220.
- Quay, H.C.; Werry, J.S.; McQueen, M.; & Sprague, R.L. Remediation of the conduct problem child in the special class setting. Exceptional Children, 1966, 32, 509-515.

- Rabinow, B. The role of the school in residential treatment. American Journal of Orthopsychiatry, 1955, 25, 685-691.
- Radin, S.S.; Cary, G.L.; Sherwood, B.C.; Kaplan, S.E.; & Garcea, R.A. Orthopsychiatry and special services for emotionally disturbed children in the public school setting. The Journal of School Health, 1966, 36, 245-248.
- Redl, F. Designing a therapeutic classroom environment for disturbed children: the Milieu approach. In Knoblock, P. (Ed.), Intervention Approaches in Educating Emotionally Disturbed Children. Syracuse, New York. Syracuse University Press. 1968.
- Redl, F. Strategy and techniques of the life space interview. American Journal of Orthopsychiatry, 1959, 29, 1-18.
- Reger, R. A program for children with learning or behavioral problems. Psychology in the Schools, 1967, 4, 317-324.
- Reger, R. Education and behavior problem children: some trends and some problems. Psychology in the Schools, 1965, 2, 110-129.
- Reichard, C.L. & Reid, W.R. The distraction effects of video tape recording procedures in a classroom of educable mentally retarded children. The Journal of Special Education, 1969, 3, 411-417.
- Resnikoff, A.; Kagan, N.; & Schauble, P.G. Acceleration of psychotherapy through simulated videotape recall. American Journal of Psychotherapy, 1970, 24, 102-111.
- Rhodes, W.C. The disturbing child: a problem of ecological management. Exceptional Children, 1967, 33, 449-455.
- Rosen, E. A Comparison of the Intellectual Status of Neurotic and Normal Children in Public Schools. Teacher College Conference on Education, 1925, No. 188.
- Rosenthal, R. Experimenter Effects in Behavioral Research. New York, Appleton-Century-Crofts, 1966.
- Rosenthal, R., & Jacobson, L., Pygmalion in the Classroom; Teacher Expectation and Pupil's Intellectual Development. New York, Holt, Rinehart & Winston, 1968.

- Rubin, E.Z.; Simson, C.B.; & Betwee, M.C. Emotionally Handicapped Children and the Elementray School. Detroit, Wayne State University Press, 1966.
- Sax, G. Empirical Foundations of Educational Research. Englewood Cliffs, New Jersey, Prentice-Hall, Inc. 1968.
- Salzinger, K. Academic achievement in a group of mentally disturbed adolescents in a residential treatment setting. Journal of Genetic Psychology, 1957, 90, 239-253.
- Schell, R.E., & Adams, W.B. Training parents of a young child with profound behavior deficits to be teacher-therapists. The Journal of Special Education, 1968. 2, 439-453.
- Seagull, A.A., & Johnson, J.J. Second stage intervention: reality based consultation for teachers of the emotionally disturbed. In Knoblock, P. (Ed.), Intervention Approaches in Educating Emotionally Disturbed Children. Syracuse, N.Y.: Syracuse University Press, 1968.
- Secord, P.F., & Backman, C.W. Personality theory and the problem of stability and change in individual behavior: an interpersonal approach. Psychological Review, 1961, 68, 21-32.
- Shemota, H.E. Reading skills in emotionally disturbed, institutionalized adolescents. Journal of Educational Research, 1964, 58, 106-111.
- Smith, D.C. Utilization of volunteer aides in a helping relationship with children. Journal of School Psychology, 1970, 8, 202-207.
- Smith, S.A. An educational program for emotionally disturbed children. Psychology in the Schools, 1967, 4, 280-283.
- Solarz, A.K. Perceived activity in semantic altos words. In Snider, J.G., & Osgood C.E., Semantic Differential Technique: A Sourcebook, Chicago, Aldine Publishing Co., 1969.
- Spivack, G. & Swift, M.S., The Devereaux elementary school behavior rating scales: a study of the nature and organization of achievement related disturbed classroom behavior. The Journal of Special Education, 1966, 1, 71-90.

- Sprague, R.L.; Barnes, K.R.; & Werry, J.S. Methylphenidate and Thioridazine: Learning, reaction time, activity and classroom behavior in disturbed children. American Journal of Orthopsychiatry, 1970, 40, 615-627.
- Staats, A.W., & Staats, C.K., Meaning & M: separate but correlated, Psychology Review, 1959, 66, 136-144.
- Stennett, R.G., Emotional handicap in the elementary years: phase of disease? American Journal of Orthopsychiatry, 1966, 36, 444-449.
- Stoller, F.H. Afterthoughts: Group psychotherapy on television: An innovation with hospitalized patients. In: Berger M.M. (Ed.) Videotape Techniques in Psychiatric Training and Treatment. New York, Brunner, Mazel Publishers, 1970.
- Stoller, F.H., Group psychotherapy on television: An innovation with hospitalized patients. American Psychologists, 1967, 22, 158-162.
- Stoller, F.H., Videotape feedback in the group setting. Journal of Nervous & Mental Disease, 1969, 148, 457-469.
- Stoller, F.H., Videotape feedback in the marathon & encounter group. In Berger, M.M. (Ed.) Videotape Techniques in Psychiatric Training & Treatment. New York, Brunner Mazel Publishers, 1970.
- Stone, F.B., & Rowley, V.N. Educational disability in emotionally disturbed children. Exceptional Children, 1964, 30, 423-426.
- Swift, M.S., & Spivak, G. Achievement related classroom behavior of secondary normal and disturbed students. Exceptional Children, 1969, 35, 677-684.
- Tamkin, A.S. A survey of educational disability in emotionally disturbed children. Journal of Educational Research, 1960, 53, 313-315.
- Trethawan, W.H. Teaching psychiatry by closed circuit television. In Berger M.M. (Ed.) Videotape Techniques in Psychiatric Training and Treatment. New York, Brunner Mazel Publishers, 1970.

- Tolor, A., & Lane, P.A., An experimental approach to the treatment of disturbed school-age children. Journal of School Psychology, 1968, 6, 97-103.
- Tolor, A., & Lane, P.A. Some characteristics of children treated by subprofessionals at a novel therapeutic setting. Journal of School Psychology, 1968, 7, 57-62.
- Traux, C.B. Effective ingredients in psychotherapy. Journal of Counseling Psychology, 1963, 10, 256-263.
- Traux, C.B., & Carkhuff, R. Client and therapist transparency in the psychotherapeutic encounter. Journal of Counseling Psychology, 1965, 12, 3-9.
- Vacc, N.A. A study of emotionally disturbed children in regular and special classes. Exceptional Children, 1968, 35, 197-204.
- Walz, G.R., & Johnston, J.A. Counselors look at themselves on videotape. Journal of Counseling Psychology, 1963, 10, 232-236.
- Werry, J.S., & Quay, H.C. A method of observing classroom behavior of emotionally disturbed children. Exceptional Children, 1969, 35, 461-467.
- Whelan, R.J. The relevance of behavioral modification procedures for teachers of emotionally disturbed children. In Knoblock, P. (Ed.) Intervention Approaches in Educating Emotionally Disturbed Children. Syracuse, N.Y.: Syracuse University Press, 1968.
- Whelan, R.J., & Haring, N.G. Modification and maintenance of behavior through systematic application of consequences. Exceptional Children, 1966, 32, 281-289.
- Wilderson, F.B. A concept of the "ideal" therapeutic relationship in classes for emotionally disturbed children. The Journal of Special Education, 1966, 1, 91-98.
- White, M., & Harris, M. The School Psychologist, New York: Harper & Row, 1961.
- Winborn, B.B., & Schmidt, L.D. The effectiveness of short term group counseling upon the academic achievement of potentially superior but underachieving college freshmen. In Kornrich, M. (Ed.) Underachievement. Springfield, Ill., Charles C. Thomas, 1965.
- Wolf, M.G. Emotional disturbance and school achievement. Journal of School Psychology, 1965, 4, 16-19.

Woody, R.H., Behavioral Problem Children in the Schools. Recognition, Diagnosis and Behavioral Modification. New York, Appleton, Century-Crofts, 1969.

Woody, R.H.; Krathwohl, D.R.; Kagan, N.; & Farquhar, W.W. Simulated recall in psychotherapy using hypnosis and videotape. The American Journal of Clinical Hypnosis, 1965, 7, 234-241.

Yamamoto, K.; Thomas, E.C.; & Karns, E.A. School related attitudes in middle school age students. American Educational Research Journal, 1969, 6, 191-205.

APPENDIX A

Children's Self Concept Scale

Name \_\_\_\_\_ Age \_\_\_\_\_ Grade \_\_\_\_\_ Teacher \_\_\_\_\_

Put an X Mark in front of the one that comes closest to the truth about you. Mark only one of them. Do the best you can.

1. I am friendly

- not at all
- not very often
- some of the time
- most of the time
- all of the time

2. I am happy

- not at all
- not very often
- some of the time
- most of the time
- all of the time

3. I am kind

- not at all
- not very often
- some of the time
- most of the time
- all of the time

4. I am brave

- not at all
- not very often
- some of the time
- most of the time
- all of the time

5. I am honest

- not at all
- not very often
- some of the time
- most of the time
- all of the time

6. I am likable

- not at all
- not very often
- some of the time
- most of the time
- all of the time

7. I can be trusted

- not at all
- not very often
- some of the time
- most of the time
- all of the time

8. I am good

- not at all
- not very often
- some of the time
- most of the time
- all of the time

9. I am proud

- not at all
- not very often
- some of the time
- most of the time
- all of the time

10. I am lazy

- not at all
- not very often
- some of the time
- most of the time
- all of the time

go on to the next page

Name \_\_\_\_\_

11. I am loyal

not at all  
 not very often  
 some of the time  
 most of the time  
 all of the time

12. I am cooperative

not at all  
 not very often  
 some of the time  
 most of the time  
 all of the time

13. I am cheerful

not at all  
 not very often  
 some of the time  
 most of the time  
 all of the time

14. I am thoughtful

not at all  
 not very often  
 some of the time  
 most of the time  
 all of the time

15. I am popular

not at all  
 not very often  
 some of the time  
 most of the time  
 all of the time

16. I am courteous

not at all  
 not very often  
 some of the time  
 most of the time  
 all of the time

17. I am jealous

not at all  
 not very often  
 some of the time  
 most of the time  
 all of the time

18. I am obedient

not at all  
 not very often  
 some of the time  
 most of the time  
 all of the time

19. I am polite

not at all  
 not very often  
 some of the time  
 most of the time  
 all of the time

20. I am bashful

not at all  
 not very often  
 some of the time  
 most of the time  
 all of the time

21. I am clean

not at all  
 not very often  
 some of the time  
 most of the time  
 all of the time

22. I am helpful

not at all  
 not very often  
 some of the time  
 most of the time  
 all of the time

APPENDIX B

THE WAY I FEEL ABOUT MYSELF

NAME \_\_\_\_\_

AGE \_\_\_\_\_ BOY OR GIRL \_\_\_\_\_

GRADE \_\_\_\_\_ SCHOOL \_\_\_\_\_

DATE \_\_\_\_\_

WHAT DOES YOUR FATHER DO FOR A LIVING? \_\_\_\_\_

\_\_\_\_\_  
WRITE HERE THE NUMBER OF BROTHERS AND SISTERS YOU HAVE  
WHO ARE OLDER THAN YOU ARE \_\_\_\_\_

WRITE HERE THE NUMBER OF BROTHERS AND SISTERS YOU HAVE  
WHO ARE YOUNGER THAN YOU ARE \_\_\_\_\_

Ellen V. Piers and Dale B. Harris  
The Pennsylvania State University

For Research Use Only

Here are a set of statements. Some of them are true of you and so you will circle the YES. Some are not true of you and so you will circle the NO. Answer every question even if some are hard to decide. There are no right or wrong answers. Only you can tell us how you feel about yourself, so we hope you will mark the way you really feel inside.

- |     |  |     |    |     |  |     |    |
|-----|--|-----|----|-----|--|-----|----|
| 1.  | My classmate make fun of me                      | YES | NO | 14. | I cause trouble to my family             | YES | NO |
| 2.  | I am a happy person                              | YES | NO | 15. | I am strong                              | YES | NO |
| 3.  | It is hard for me to make friends                | YES | NO | 16. | I have good ideas                        | YES | NO |
| 4.  | I am often sad                                   | YES | NO | 17. | I am an important member of my family    | YES | NO |
| 5.  | I am smart                                       | YES | NO | 18. | I like being the way I am                | YES | NO |
| 6.  | I am shy   | YES | NO | 19. | I am good at making things with my hands | YES | NO |
| 7.  | I get nervous when the teacher calls on me       | YES | NO | 20. | I give up easily                         | YES | NO |
| 8.  | My looks bother me                               | YES | NO | 21. | I am good in my schoolwork               | YES | NO |
| 9.  | When I grow up I will be an important person     | YES | NO | 22. | I do many bad things                     | YES | NO |
| 10. | I get worried when we have tests in school       | YES | NO | 23. | I can draw well                          | YES | NO |
| 11. | I am unpopular                                   | YES | NO | 24. | I am good in music                       | YES | NO |
| 12. | I am well behaved in school                      | YES | NO | 25. | I behave badly at home                   | YES | NO |
| 13. | It is usually my fault when something goes wrong | YES | NO | 26. | I am slow in finishing my homework       | YES | NO |

- |   |        |   |        |
|---|--------|---|--------|
| 27. I am an important member of my class          | YES NO | 43. I have a pleasant face                          | YES NO |
| 28. I am nervous                                  | YES NO | 44. I sleep well at night                           | YES NO |
| 29. I have pretty eyes                            | YES NO | 45. I hate school                                   | YES NO |
| 30. I can give a good report in front of my class | YES NO | 46. I am among the last to be chosen for games      | YES NO |
| 31. In school I am a dreamer                      | YES NO | 47. I am sick a lot                                 | YES NO |
| 32. I pick on my brother(s) and sister(s)         | YES NO | 48. I am often mean to other people                 | YES NO |
| 33. My friends like my ideas                      | YES NO | 49. My classmates in school think I have good ideas | YES NO |
| 34. I often get into trouble                      | YES NO | 50. I am unhappy                                    | YES NO |
| 35. I am disobedient at home                      | YES NO | 51. I have many friends                             | YES NO |
| 36. I am unlucky                                  | YES NO | 52. I am cheerful                                   | YES NO |
| 37. I worry a lot                                 | YES NO | 53. I am dumb about most things                     | YES NO |
| 38. My parents expect too much of me              | YES NO | 54. I am goodlooking                                | YES NO |
| 39. I usually want my own way                     | YES NO | 55. I have lots of pep                              | YES NO |
| 40. I feel left out of things                     | YES NO | 56. I get into a lot of fights                      | YES NO |
| 41. I have nice hair                              | YES NO | 57. I am popular with boys                          | YES NO |
| 42. I often volunteer in school                   | YES NO | 58. People pick on me                               | YES NO |
|   |        | 59. My family is disappointed in me                 | YES NO |

- |   |        |   |        |
|---|--------|---|--------|
| 60. I wish I were<br>different  | YES NO | 70. I am a good<br>reader                             | YES NO |
| 61. When I try to<br>make something,<br>everything seems<br>to go wrong | YES NO | 71. I would rather<br>work alone<br>than in a group   | YES NO |
| 62. I am picked on at<br>home   | YES NO | 72. I dislike my<br>brother (sister)                  | YES NO |
| 63. I am a leader in<br>games and sports                                | YES NO | 73. I have a bad<br>figure                            | YES NO |
| 64. I am clumsy   | YES NO | 74. I am often afraid                                 | YES NO |
| 65. In games and sports<br>I watch instead of<br>play                   | YES NO | 75. I am always drop-<br>ping or break-<br>ing things | YES NO |
| 66. I forget what I<br>learn  | YES NO | 76. I cry easily                                      | YES NO |
| 67. I am easy to get<br>along with                                      | YES NO | 77. I am different<br>from other<br>people            | YES NO |
| 68. I lose my temper<br>easily  | YES NO | 78. I think bad<br>thoughts                           | YES NO |
| 69. I am popular with<br>girls  | YES NO | 79. I can be trusted                                  | YES NO |
|   |        | 80. I am a good<br>person                             | YES NO |

APPENDIX C  
SEMANTIC DIFFERENTIAL

Name \_\_\_\_\_

Teacher \_\_\_\_\_

MY PRINCIPAL

	Very	Sort of	Neither	Sort of	Very	
Happy	_____	_____	_____	_____	_____	Sad
Dull	_____	_____	_____	_____	_____	Sharp
Weak	_____	_____	_____	_____	_____	Strong
Hard	_____	_____	_____	_____	_____	Soft
Awful	_____	_____	_____	_____	_____	Nice
Hot	_____	_____	_____	_____	_____	Cold
Bad	_____	_____	_____	_____	_____	Good
Fast	_____	_____	_____	_____	_____	Slow
Small	_____	_____	_____	_____	_____	Large



Name \_\_\_\_\_

Teacher \_\_\_\_\_

STAYING AFTER SCHOOL

	Very	Sort of	Neither	Sort of	Very	
Happy	_____	_____	_____	_____	_____	Sad
Dull	_____	_____	_____	_____	_____	Sharp
Weak	_____	_____	_____	_____	_____	Strong
Hard	_____	_____	_____	_____	_____	Soft
Awful	_____	_____	_____	_____	_____	Nice
Hot	_____	_____	_____	_____	_____	Cold
Bad	_____	_____	_____	_____	_____	Good
Fast	_____	_____	_____	_____	_____	Slow
Small	_____	_____	_____	_____	_____	Large







Name \_\_\_\_\_ 193

Teacher \_\_\_\_\_

HOMEWORK

	Very	Sort of	Neither	Sort of	Very	
Happy	—	—	—	—	—	Sad
Dull	—	—	—	—	—	Sharp
Weak	—	—	—	—	—	Strong
Hard	—	—	—	—	—	Soft
Awful	—	—	—	—	—	Nice
Hot	—	—	—	—	—	Cold
Bad	—	—	—	—	—	Good
Fast	—	—	—	—	—	Slow
Small	—	—	—	—	—	Large



Name \_\_\_\_\_

Teacher \_\_\_\_\_

THE SCHOOL YARD

	Very	Sort of	Neither	Sort of	Very	
Happy	—	—	—	—	—	Sad
Dull	—	—	—	—	—	Sharp
Weak	—	—	—	—	—	Strong
Hard	—	—	—	—	—	Soft
Awful	—	—	—	—	—	Nice
Hot	—	—	—	—	—	Cold
Bad	—	—	—	—	—	Good
Fast	—	—	—	—	—	Slow
Small	—	—	—	—	—	Large

Name \_\_\_\_\_

Teacher \_\_\_\_\_

RECESS

	Very	Sort of	Neither	Sort of	Very	
Happy	_____	_____	_____	_____	_____	Sad
Dull	_____	_____	_____	_____	_____	Sharp
Weak	_____	_____	_____	_____	_____	Strong
Hard	_____	_____	_____	_____	_____	Soft
Awful	_____	_____	_____	_____	_____	Nice
Hot	_____	_____	_____	_____	_____	Cold
Bad	_____	_____	_____	_____	_____	Good
Fast	_____	_____	_____	_____	_____	Slow
Small	_____	_____	_____	_____	_____	Large



Name \_\_\_\_\_

Teacher \_\_\_\_\_

SCHOOL WORK

	Very	Sort of	Neither	Sort of	Very	
Happy	_____	_____	_____	_____	_____	Sad
Dull	_____	_____	_____	_____	_____	Sharp
Weak	_____	_____	_____	_____	_____	Strong
Hard	_____	_____	_____	_____	_____	Soft
Awful	_____	_____	_____	_____	_____	Nice
Hot	_____	_____	_____	_____	_____	Cold
Bad	_____	_____	_____	_____	_____	Good
Fast	_____	_____	_____	_____	_____	Slow
Small	_____	_____	_____	_____	_____	Large

APPENDIX D

Behavior Problem Checklist

Donald R. Peterson, Ph.D. and Herbert C. Quay, Ph.D.

Children's Research Center  
University of Illinois  
Champaign, Illinois  
Copyright Herbert C. Quay and  
Donald R. Peterson, 1967

Col. No. Please complete items 1 to 6 carefully.

- (1-8) 1. Name (or identification number) of child  
\_\_\_\_\_
- (9-10) 2. Age (in years) \_\_\_\_\_
- (11) 3. Sex \_\_\_\_\_ (Male = 1; Female = 2)
- (12) 4. Father's Occupation \_\_\_\_\_  
\_\_\_\_\_
- (13) 5. Name of person completing this checklist  
\_\_\_\_\_
- (14) 6. Relationship to child (circle one)  
a. Mother b. Father c. Teacher d. Other

\_\_\_\_\_  
(Specify)

Please indicate which of the following constitute problems, as far as this child is concerned. If an item does not constitute a problem, encircle the zero; if an item constitutes a mild problem, encircle the one; if an item constitutes a severe problem, encircle the two. Please complete every item.

## Behavior Problem Checklist (cont.)

- |      |       |  |
|------|-------|--|
| (15) | 0 1 2 | 1. Oddness, bizarre behavior                                 |
| (16) | 0 1 2 | 2. Restlessness, inability to sit still                      |
| (17) | 0 1 2 | 3. Attention-seeking, "show-off" behavior                    |
| (18) | 0 1 2 | 4. Stays out late at night                                   |
| (19) | 0 1 2 | 5. Doesn't know how to have fun; behaves like a little adult |
| (20) | 0 1 2 | 6. Self-consciousness; easily embarrassed                    |
| (21) | 0 1 2 | 7. Fixed expression, lack of emotional re-activity           |
| (22) | 0 1 2 | 8. Disruptiveness; tendency to annoy & bother others         |
| (23) | 0 1 2 | 9. Feelings of inferiority                                   |
| (24) | 0 1 2 | 10. Steals in company with others                            |
| (25) | 0 1 2 | 11. Boisterousness, rowdiness                                |
| (26) | 0 1 2 | 12. Crying over minor annoyances and hurts                   |
| (27) | 0 1 2 | 13. Preoccupation; "in a world of his own"                   |
| (28) | 0 1 2 | 14. Shyness, bashfulness                                     |
| (29) | 0 1 2 | 15. Social withdrawal, preference for solitary activities    |
| (30) | 0 1 2 | 16. Dislike for school                                       |
| (31) | 0 1 2 | 17. Jealousy over attention paid other children              |
| (32) | 0 1 2 | 18. Belongs to a gang  |
| (33) | 0 1 2 | 19. Repetitive speech  |
| (34) | 0 1 2 | 20. Short Attention span                                     |
| (35) | 0 1 2 | 21. Lack of self-confidence                                  |
| (36) | 0 1 2 | 22. Inattentiveness to what others say                       |
| (37) | 0 1 2 | 23. Easily flustered and confused                            |
| (38) | 0 1 2 | 24. Incoherent speech  |
| (39) | 0 1 2 | 25. Fighting   |
| (40) | 0 1 2 | 26. Loyal to delinquent friends                              |
| (41) | 0 1 2 | 27. Temper tantrums  |
| (42) | 0 1 2 | 28. Reticence, secretiveness                                 |
| (43) | 0 1 2 | 29. Truancy from school                                      |
| (44) | 0 1 2 | 30. Hypersensitivity; feelings easily hurt                   |
| (45) | 0 1 2 | 31. Laziness in school and in performance of other tasks     |
| (46) | 0 1 2 | 32. Anxiety, chronic general fearfulness                     |
| (47) | 0 1 2 | 33. Irresponsibility, undependability                        |
| (48) | 0 1 2 | 34. Excessive daydreaming                                    |
| (49) | 0 1 2 | 35. Masturbation   |
| (50) | 0 1 2 | 36. Has bad companions                                       |
| (51) | 0 1 2 | 37. Tension, inability to relax                              |
| (52) | 0 1 3 | 38. Disobedience, difficulty in disciplinary school          |
| (53) | 0 1 2 | 39. Depression, chronic sadness                              |
| (54) | 0 1 2 | 40. Uncooperativeness in group situations                    |
| (55) | 0 1 2 | 41. Aloofness, social reserve                                |
| (56) | 0 1 2 | 42. Passivity, suggestibility; easily led by others          |

## Behavior Problem Checklist (cont.)

- (57) 0 1 2 43. Clumsiness, awkwardness, poor muscular coordination
- (58) 0 1 2 44. Hyperactivity; "always on the go"
- (59) 0 1 2 45. Distractibility
- (60) 0 1 2 46. Destructiveness in regard to his own &/or other's property
- (61) 0 1 2 47. Negativism, tendency to do the opposite of what is requested
- (62) 0 1 2 48. Impertinence, sauciness
- (63) 0 1 2 49. Sluggishness, Lethargy
- (64) 0 1 2 50. Drowsiness
- (65) 0 1 2 51. Profane language, swearing, cursing
- (66) 0 1 2 52. Nervousness, jitteriness, jumpiness; easily startled
- (67) 0 1 2 53. Irritability; hot-tempered, easily aroused to anger
- (68) 0 1 2 54. Enuresis, bed-wetting.
- (69) 0 1 2 55. Often has physical complaints, e.g. headaches, stomach ache.

## APPENDIX E

### Deviant Classroom Behavior Frequency Count - Instructions

J.S. Werry and H.C. Quay

#### Classroom Situation for Observing

Observing should be done in a task situation where the rules are clearly defined. In general, this will be during individual, academic seat work. Activities such as story-time and most group situations generally prove unsuitable because rules tend to be relaxed and unclear. Observations should not be done when there is a prolonged period of individual instructions during which the teacher is seated beside the child since this tends artificially to minimize deviant behavior.

#### Observing Procedure

The observer must seat himself close enough to the child to be able to hear what the latter is saying and to see what he is doing on his desk without the observer making himself obtrusive. The observer must not interact with the child or the class in any way.

Observe the child (one at a time) for twenty seconds and then rest for ten seconds during which the appropriate symbols can be entered in the cells of the score sheet.

Behaviors occurring during this ten second period are never recorded. Thus there are two observations per minute. Presently there are thirty separate cells or observation, thus taking a total observing time of fifteen minutes. Timing must be exact. There is no objection to splitting the observations (i.e., part before recess and part after recess).

The scoring sheet should consist of thirty cells subdivided in half by a dotted horizontal line.

#### Definitions of Observations

There are three classes of observations: 1) deviant behavior, 2) on task behavior, and 3) teacher contact.

1. Deviant behavior (scored above the dotted line). This is defined as any behavior which contravenes any explicit rule under which the class or individual child operates. Therefore, it is imperative to determine what the rules are in a given classroom before undertaking any observations. The observer should question the teacher particularly about conditions under which it is permissible for a child to leave his seat and to speak.

When there is any doubt about a particular behavior, mark it non-deviant.

Only one symbol of a given type should appear in a cell though it is permissible to have as many different

symbols in the one cell as necessary.

It is helpful to record the deviant behaviors as they occur rather than waiting for the end of the observation period to write these down. If the on task item (see below) is left for the ten second "off" period there will be little danger of getting cells muddled.

<u>Symbol</u>	<u>Description</u>
X	Out of seat

This is defined as any situation in which the normal seating surface of either buttock is applied to the child's seat or in which there is movement of his desk or chair so that its ultimate stationary position is altered (thus swinging a seat on its axis or tilting a chair on its legs is excluded). Where the child is performing a permitted out-of-seat activity such as sharpening his pencil (after having gotten permission from the teacher) this would not be marked as out-of-seat behavior except 1) when deviant behavior occurs during the permitted act such as "side trips," looking at things on the teacher's desk, stopping to talk, etc. or 2) when the permitted activity is prolonged beyond a reasonable period of time or altered in some significant way.

→ Physical Contact or  
Disturbing Others Directly

Any physical contact initiated or reciprocated between the child under observation and another person independent of the intent of the child (aggression or affection). Include here physical contact made with another person by means of an object such as a book held in a hand or an object thrown, or some disturbance of another person or child by the subject in which there is contact not with the other's body but rather with objects about him such as his work, his desk, etc. Examples: grabbing objects or work, knocking objects off the other's desk, destroying his property or pushing his desk.

N Audible Noise

Any non-vocal, non-respiratory noise which is clearly audible, and which is not an integral part of a non-deviant activity. Examples: tapping a pencil, clapping, tapping feet, rattling or tearing papers, throwing papers, throwing a book on a desk, slamming a desk closed, etc.

 90° Turn, Seated

A child must be seated and the turn of the head and/or body must be more than 89°. The desk is used as a

reference point. Exception is where the child wishes to attract the teacher's attention and turns, raising his hand to attract attention. A helpful guide here is if the head is parallel to the shoulders, or if the child or the other person looked at is beyond the  $90^\circ$  arc, the turn must be in excess of  $89^\circ$ .

#### V                    Vocalization

A vocalization or other respiratory noise such as a whistle which is not task-related and which is not physiological (this includes normal cough or sneeze). Examples: answering teacher without first raising hand, talking to others without permission, muttering which is obviously intended for an audience, swearing, etc. Do not rate as V behavior that which is a direct response to a teacher's question or, in general, when a teacher is with the child except where the content of what is said is clearly deviant, such as stating refusal to do work, putting off obeying instructions, swearing, etc. Do not include working out loud.

#### I                    Isolation (i.e., for deviant behavior)

The child has been sent out of the room as a punish-

ment or has been placed in the time-out toom. The appropriate below the dotted line (i.e., on-task--off-task symbol in such cases is //; other deviant behaviors which can be noted such as vocalizations, noises, should be recorded along with the I.

Ø Other Deviant Behavior

Include here behaviors which do not fit easily into a category above and also behaviors which are situational rather than absolutely deviant. For example, engaging in a task other than that which is assigned (reading, instead of doing arithmetic, drawing instead of reading, etc.). Include here also daydreaming. Exceptions: the following are not deviant behaviors: playing with clothes, playing with self, chewing gum, playing with pencil in hand (all other pencil activities such as propping desk up with a pencil or taking a ball point pencil to pieces, stubbing the point heavily on wood, etc. are deviant).

2. On task--off-task activity (scored below the dotted line).

Definition--This is an attempt to assess the child's attention to the designated task material. Attending is defined as the eyes being applied to the task material or to the teacher

for a period of not less than 15 out of the 20 seconds or observation (use your stopwatch!). Exceptions to this are where the child can be clearly seen to be on task even though his eyes are off his work, for example by counting on his fingers, working out loud, etc. It should be noted that while it is possible for deviant behavior--particularly disruptive noises such as tapping the foot or deviant behaviors of short duration (less than five seconds)--to be recorded and yet the child may still get an "on task" check, the converse, namely being off task without some deviant behavior being noted above the line cannot occur. In general when in doubt put a  $\emptyset$  above the line.

// Activity engaged in some other activity which is either clearly deviant or not the assigned for greater than five seconds.

Sometimes this will become apparent only after some time has elapsed as for example when the teacher comes up and admonishes the child for doing other than that which is assigned. In such circumstances the incorrect cell should then be corrected.

- D Daydreaming--here the child is off task for more than five seconds but does so by daydreaming, staring into space rather than some active endeavor.

This type of behavior is very uncommon problem children.

3. Teacher contact (scored below the line). Teacher is defined as any adult person who is interacting with the children rather than just observing them. Any contact between teacher and child whether initiated by child or by teacher is scored here. This would include such obvious contacts as talking to the child but also less obvious ones such as gesturing or turning the child's clock on or off. It is permissible to have only one teacher contact noted in a cell.

T Teacher initiated contact (no instigation on part of child)

t Child initiated (include both questions, etc. Add teacher responding to deviant behavior)

T & t Positive contact (judged by what teacher does)

~~T~~ & ~~t~~ Negative contact (Note: ~~T~~ ought not to occur!)

Note: Recording something above the dotted line for Deviant Behavior, and something below it for on-task behavior are obligatory for every cell. Teacher contact is of course added only when it occurs.