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AN ASSESSMENT OF THE LATER ADJUSTMENT OF SOME EMOTIONALLY DISTURBED CHILDREN AFTER TERMINATION OF IN-PATIENT PSYCHIATRIC TREATMENT

by

Clayton Dennis Lewis

A dissertation submitted in partial fulfillment
of the requirements for the degree of
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Doctoral Committee:

Professor William C. Morse, Chairman
Professor Percy Bates
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ABSTRACT

AN ASSESSMENT OF THE LATER ADJUSTMENT OF SOME EMOTIONALLY DISTURBED CHILDREN AFTER TERMINATION OF IN-PATIENT PSYCHIATRIC TREATMENT

by

Clayton Dennis Lewis

Chairman: Dr. William C. Morse

This study had, as its focus, two major areas of concern. The first of these was to describe the school adjustment patterns of a group of emotionally disturbed children following their discharge from in-patient treatment in a children's psychiatric hospital. Secondly, the study was concerned with identifying pre-treatment and treatment variables which could be used as predictors of post-treatment adjustment.

Data were collected at three points in time: (1) at admission to treatment; (2) at discharge from treatment; and (3) at the time of follow-up. Five aspects of school adjustment were identified for investigation: (1) grade placement; (2) school attitude; (3) perceived school problem; (4) peer relations; and (5) adult relations. Data included information regarding age, sex, intelligence, socio-economic status, duration of treatment, school achievement ratings, behavior ratings, measures of self-concept, and evaluation of peer and adult interaction styles.

A sample of 75 children were included in the study, of whom 56 were male and 19 female. At admission the children ranged in age from

slightly over 5 years to slightly over 15 years with a mean I.Q. of 100. A preponderance of the children were in the elementary grades with only 23 percent being in junior high school. Data prior to and at the time of discharge from treatment were gathered from the hospital records.

Investigation of the admission data indicated that younger children, those under 9 years of age, were more often referred due to behavior problems. As age increased, a shift was also noted in the reason for referral with concerns over lack of achievement becoming more evident. Boys were more often referred than were girls, the ratio being approximately 3 to 1. Additionally, boys were more often below expected grade placement than were girls.

With respect to socio-economic status and referral, children of the lower socio-economic class, the unemployed, unskilled, and semi-skilled, were least often referred for psychiatric care.

At discharge it was noted that the more severely disturbed children, those diagnosed as either psychotic or personality disorder children, made less positive adjustment in either school adjustment or interpersonal relationships.

The duration of treatment was investigated in order to determine whether there were adjustment differences between children who were in treatment for a relatively short period of time (1-4 months) versus those in treatment for longer periods (5-12 months). The long term group was differentiated from the short term group in that the children tended to be: (1) younger at the time of admission; (2) experiencing more achievement problems; (3) more often from middle income families; (4) more often diagnosed in the more severe psychiatric categories; (5) less likely to make positive change in the quality of their

interpersonal relationships; and (6) more often considered better post-treatment risks as judged by psychiatric personnel.

When the children were studied at follow-up relative to change in the five adjustment areas, three adjustment categories were identified: (1) children who were either no problem or who made positive change during treatment; (2) children who made no positive change during treatment; and (3) children who made no positive change either during treatment or by the time of follow-up.

Children in the first of these groups, the no problem-positive change group, were typified as being generally younger, better achievers, and better adjusted with respect to peer and adult interaction. The second group, those who demonstrated no treatment change, were characterized as: more aggressive; having more learning problems; possessing more negative school attitudes; more often school drop-outs; and considered conduct disorder type personalities. The final group, those who experienced adjustment difficulties at admission, discharge, and follow-up, were most often long term achievement problems, seen as school misfits, and judged to be inadequate-immature in terms of personality.

The study suggested that there is a differential impact made by intervention which, to a greater or lesser degree, may be predicted by information available to mental health workers prior to or during treatment.

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CHAPTER I

REVIEW OF ISSUES INVOLVED IN FOLLOW-UP RESEARCH

Introduction

Any scientific study dealing with the follow-up of emotionally disturbed children brings with it a mandate to consider certain issues which confound the efforts of the researcher. Among these issues is the problem of defining the state of mental health or, conversely, criteria indicative of emotional maladjustment.

Other concerns of the researcher who focuses on follow-up are methodological difficulties, and the inability to control the conditions to the point which would allow definitive statements with regard to the efficacy of intervention techniques. When it comes to comparative issues, the paucity of school related follow-up studies of emotionally disturbed children is also at issue.

The Need for Studies

There is at the present time, an especial pressing need for well controlled follow-up research dealing with school mental health. Lewis (1965) has stated that intervention into the mental health aspects of children has been "...based implicitly on two hypotheses regarding the relationship between emotional disturbance in children and mental illness in adults." (Lewis, 1965, p. 465). The first of these hypotheses is referred to as that of continuity, i.e., that emotionally disturbed children become emotionally disturbed adults. The second, the intervention

hypothesis, refers to the efficacy of therapeutic intervention in reducing the likelihood of the occurrence of later serious mental disorders. In his review of the literature, Lewis was unable to find support for either of these two hypotheses.

Lewis identified four different formats under which studies of mental health are conducted. The continuity hypothesis has most often been tested either through retrospective studies of adult mental patients, or by follow-up of adults who were identified as being emotionally disturbed as children. Intervention has traditionally been tested by either looking at general criteria following treatment, e.g., "improved-unimproved," or through a more intensive look at particular or specific changes which may accompany treatment, e.g., improved reading scores, school attitudes, etc.

With specific reference to public school mental health programs, Morse, Cutler and Fink (1964), in their extensive review of the behaviorally handicapped child in the public schools, state:

> Established policies for disposition or follow-up of children once they left the program were rare. Many programs literally did not know what happened to children who left. Most often, the classroom teacher tried to keep track of his former children in an informal way, but transciency, lack of time, and fallibility of memory all served to cloud the data. Virtually no data on disposition or follow-up was available. This was understandable in terms of time pressures and the attitudes of special services persons who felt that getting the children screened and admitted was more important. Nevertheless, it served as a severe impediment to a rigorous evaluation of program success.
>
> One further aspect of the follow-up and disposition problem was reflected in the degree to which contact was maintained with the situation from which the child came. To some extent, 'out of sight, out of mind' applied to the pupil once he left his regular school and entered the special class. Classroom teachers indicated the degree of contact which was maintained with the former teacher and administrators...More than three-fourths of the children were 'out of sight, out of mind' as far as their former teachers were concerned. (Morse, Cutler and Fink, 1964, pp. 100-101).

There is vital need for long, hard investigation into the kinds of children served in the schools, and ultimately, into the kinds of programs which will meet their needs.

The utility and advisability of special classes for exceptional children, and particularly for disturbed children, is now being questioned, as is the entire issue of categorical labeling.

Trippe (1966) questioned the continued use of categorization for educational purposes and stated, "...even if it could be done reliably and validly...in most of our undertakings, we have been unable to demonstrate empirically that the children were in anyway benefited over and above what might have been achieved in regular classes."

Rubin, Simson and Betwee (1966) concluded, as a result of their follow-up study of children placed in special programs due to emotional disturbance, that although some improvement was noted in the special class group, the results were not significant and did not lend support to the hypothesis that placement in special class would be beneficial to disturbed children. A similar conclusion was reached by Kotting and Brozovich (1969) who state, "The assumption that a period of time...in a special classroom can adequately prepare an emotionally disturbed child for a typical subsequent school environment is not warranted."

Morse (1966), while not suggesting an end to all special classes for disturbed children, does suggest that other models should be considered as resources available to these children. Specifically mentioned was the Crisis Teacher concept which does not require that the child be labeled or displaced from his regular class placement for extended periods of time.

Trippe (1955) discusses the stigmatizing effect of labeling children for educational purposes. It is pointed out that in many instances the special class is an attempt by the school to get rid of its most extreme problems. Trippe suggests that the proper role of the teacher is one of determining the child's unique educational needs and the methods for providing for his needs, rather than determining what categorical label best describes the child.

Rhodes (1967) developed an ecological approach to the disturbed child which suggests that the "illness" does not reside within the child, but rather that emotional disturbance may be viewed as a reciprocal interaction between the culture violator (the disturbed child) and the culture bearer (society). The question is raised as to whether a human behavior can be defined as defective before society's response gives it a name. Rhodes indicates that society fails, generally, to recognize the reciprocal nature of disturbance and instead concentrates on the child. This approach acts as a reliever of the tension felt by the society but fails to come to grips with all aspects of the problem.

The issue is not whether there is need for special classes or categorical labels, but rather how education can be made more relevant and meaningful for the individual child.

Review of the Literature

Review of previous research attempts at follow-up of emotionally disturbed adults and children indicates that a myriad of problems have confronted the researchers. It is likely that recognition of these issues has been, in large measure, responsible for the scarcity of follow-up research.

Among the more difficult problems with which the researcher must deal are: 1) the difficulty of defining the state of emotional disturbances; 2) methodological issues, which include problems of data collection and interpretation as well as the issue of control groups; 3) the measurement problem, particularly the issue of criterion of adjustment or change; and 4) the problem of assessing the impact of such variables as age, sex, intelligence, maturation, and treatment duration on the efficacy of intervention. Added to this latter issue is the impact of unknown variables and the unplanned and/or unrecognized input in any intervention technique.

Assessing the State of Emotional Disturbance

Because of the elusive nature of mental health, it is understandable that professionals have often turned attention toward defining mental illness or emotional maladjustment. Long, Morse and Newman (1965) cite Bower, who refers to mental health as proportionate to the degree of freedom available to the individual in his choice of behavior alternatives. Perhaps because of the difficulty in making such a definition operational, Bower put forth an operational definition of the state of being emotionally handicapped. According to Bower:

> ...emotional disturbance can be inferred from individual behavior which is limited, inflexible, and restricted. Such limitations or restrictions serve to reduce the individual's relative freedom of choice in social and educational endeavors. ...As a result, the emotionally handicapped person shows increasing susceptibility to behavioral difficulties and interpersonal friction....
>
> Specifically, the emotionally handicapped child is defined as having moderate to marked reduction in behavioral freedom, which in turn reduces his ability to function effectively in learning or working with others. In the classroom this loss of freedom affects the child's educative and social experiences and results in a noticeable susceptibility to one or more of these five patterns of behavior:

1. An inability to learn that cannot be adequately explained by intellectual, sensory, neurophysiological, or general health factors.

2. An inability to build or maintain satisfactory interpersonal relations with peers and teachers.

3. Inappropriate or immature types of behavior or feelings under normal conditions.

4. A general pervasive mood of unhappiness or depression.

5. A tendency to develop physical symptoms, such as speech problems, pains, or fears, associated with personal or school problems.

(Bower in Long, et. al., 1965, pp. 128-129.)

To operationalize this descriptive definition of emotionally handicapped children Bower has utilized ratings made by the child himself, his peers, and the teacher. The obvious advantage of this system of identification is that, rather than relying on any single evaluation, a composite profile is developed through a weighted use of evaluations from self, peer, and teacher perceptions.

While Bower's definition appears to adequately describe the emotionally handicapped child, it has not met with anything akin to universal acceptance among mental health experts, including those involved in the education of the disturbed child. Haring and Phillips (1962) refer to the emotionally disturbed child as, "...one who has a sizeable 'failure pattern' in living instead of a 'success pattern'," (Haring and Phillips, 1962, p. 1) Kirk (1962) sees disturbed behavior as behavior that interferes with the "...development and adjustment of the child and/or interferes with the lives of other people." Kirk goes on to say that, "the term 'emotionally disturbed children' refers to those who have inner tensions and show anxiety, neuroticism, or psychotic behavior," (Kirk, 1962, p. 330)

It is recognized that no definition of emotional disturbance will be totally acceptable to the variety of mental health workers involved with disturbed children. However, Bower's definition does provide a ready frame of reference which typifies the children included in this study.

The present study includes evaluations which are made by the child concerning his or her school attitudes and self-esteem, and teacher perceptions of the child's behavioral patterns and academic ability. A detailed description of the research sample, data collection and instrumentation appears in subsequent chapters.

Methodological Problems in Follow-Up Research

It is not unlikely that methodological problems constitute one of, if not the, greatest hinderances to follow-up research. Methodological problems have concerned many researchers, for instance, Meehl (1955), in an attempt to establish minimum standards for follow-up research, concluded that there are three basic requirements: 1) a control group; 2) scientifically sound pre- and post-test evaluation procedures; and 3) follow-up of both experimental and control groups.

Sargent (1960), in a discussion of methodological problems noted that difficulties in obtaining subject cooperation and, assuming sufficient cooperation could be obtained, the difficulties in interpretation of the data are often factors which inhibit the conduction of follow-up research.

Weinstein (1968), in discussing the follow-up research of the Project Re-ED program, emphasizes the issue of the need for a control group. While the study indicated that of 223 children studied, 194,

or 87 percent, were in their own or a substitute home attending regular public school classes, the problem remained that it was not known how many of these children would be in the same situation had they not spent time at Re-ED. A second, and related question considers what percentage of children would be in their own homes and public schools had they been involved in a different intervention approach.

The Measurement Problem - Criterion of Change

Beyond the problem of what might be considered "standards for follow-up research" lies the difficulty in establishing criteria by which to judge the success of intervention processes with emotionally disturbed individuals. McNeil (1963) in discussing the utilization of the perceptions of change as judged by the patient, family, psychiatrist, and teacher warns that:

> This method requires more than a superficial approach since therapeutic relationship are, by their very nature, complex. When this is coupled with the fallibility of human observers of change, the result is such uncertainty about the efficacy of therapeutic methods that continued clinical work must proceed, supported either by faith or by biased score keeping that records success in more detail than failures. (McNeil, 1963, p. 17)

The Cambridge-Somerville Youth Study served to emphasize McNeil's point regarding the perception of change as seen by therapists and others. Eysenck (1961) cites the findings of Teuber and Powers who reviewed the study and found that in spite of the results which indicated that treatment was in no way more successful than non-treatment in preventing delinquency among a group of pre-delinquent children, the counselors maintained their subjective belief that they had been effective in the treatment of these children.

Eissler (1947) contends that social adjustment is in no way a measure of success of therapy. He states that those who consider behavior which conforms to that of a majority the yardstick by which success of therapy should be measured, are responding to a fetish and should be dismissed by those who have had extensive experience with psychiatric patients. Eissler's point of view is interesting in that he seems to suggest that one set of criteria be used as an indication of the need for therapeutic intervention, but a different and possibly unrelated one be used to assess how well the intervention technique works.

Agreement on the establishment of adequate criteria by which the effect of therapy can be measured does not solve the dilemma of follow-up research. Howe (1955) suggests that the establishment of criteria brings with it new questions to which the researcher must address himself. These include questions concerning how the criteria should be applied, when the criteria should be applied, and by whom it should be applied.

Barron and Leary (1955) give some attention to factors which may be used to measure change among a group of psychoneurotic subjects, some of whom were treated, and some of whom were not. Compared on Minnesota Multiphasic Personality Inventory (MMPI) profiles at the time of follow-up, both groups showed improvement on the symptom scales, and the untreated subjects appeared improved in terms of prognosis. There was no significantly greater improvement shown in those subjects who had received therapy over those who had not. Also recognized were the methodological aspects of this type of research. In terms of random selection of subjects, for example, the researchers thought it

likely that those chosen for treatment or those who remained on the waiting list were not truly randomly selected and thus comparable. The authors suggested that future research might add a "non-waiting-list" control group.

An earlier work by Albright and Gambrell (1938) studied a group of 80 children in an attempt to assess the prognostic value of the study of personality traits in determining the success or failure of psychiatric treatment of adolescents. They concluded that it is possible to make accurate estimates of the results of treatment from the study of personality traits.

Eysenck (1961), on the other hand, reports that: " 'projective techniques' have failed to establish their value in any of the fields in which they have been used. Thus projective techniques should not be used as evidence to establish the outcome of psychotherapy..." (Eysenck, 1961, p. 699-700).

The Intervention Issues

Follow-up studies dealing with mental health and/or emotional disturbance fall, generally, into two classes: 1) those dealing with the treatment, generally psychotherapeutic in nature; and 2) those primarily concerned with the school associated aspects of emotionally disturbed children. While in some instances, the above discrimination of the studies is somewhat arbitrary, it does, perhaps, lend itself well to an orderly review of the literature.

Assessing the Outcome of Psychotherapeutic Intervention

Effects of Maturation, Length of Treatment, Age, Sex and Intelligence.

Shirley, Baum, and Polsky (1941) followed up 85 former patients,

ranging in age from two or three years to 18 years of age. At discharge from psychiatric treatment, 35 children were considered successfully treated, while 50 were considered unimproved. Their findings indicated that with each year following treatment there was noticeable improvement in the "unsuccessful group" and a tendency toward regression in the successfully treated group. Their conclusions were that: 1) maturation both helps and hinders continued post-treatment adjustment; 2) that there was an inverse relationship between intelligence and continued improvement with the less intelligent patients making better adjustments while the brighter patients showed regression, and 3) that even the best of treatment intervention cannot withstand the overwhelming number of unfavorable factors which impinge on the individual and interfere with the acquisition of a more integrated personality and/or life style.

The effect of treatment duration on the success of therapy has been considered by several researchers. Dudley's (1935) unpublished doctoral dissertation was reviewed in the Smith College Studies in Social Work. He compared the adjustment of a group of 60 patients, randomly selected, at the time of case-closing and again at the time of follow-up. At closing, 15 percent of the subjects were considered successfully treated and 45 percent unsuccessful. At follow-up, 40 percent were considered successful and 27 percent not successful. The researchers were unable to establish any relationship between length of treatment and success or lack of success either at closing or at time of follow-up.

Ellis (1935-36) investigated 100 children under the age of 16 who were judged by criteria "generally used" as being emotionally maladjusted. He was unable to establish any relationship between successful adjustment and any one of several variables including: sex, age, measured intelligence, or length of treatment.

It is a belief among mental health workers that the outcome of treatment is very often dependent upon the age at which intervention takes place. Eisenberg (1961) contends that early institution of therapy for school phobic children leads to a greater number of returns to school and, on later follow-up, to a significantly greater percentage of cases lacking any symptom at all. Havlkova (1968) is in agreement with this opinion. She studies 71 children diagnosed as psychotic during the pre-school years, 42 of whom were treated and 29 who were untreated. The impression was that psychoses in children was serious, often leading to intellectual deficiency which could be partially prevented by treatment. However, it was also noted that some children improved as a result of maturation and irrespective of treatment. The conclusion made by Havelkova was that there is a critical age period during which intervention was more likely to be successful and that the earlier treatment was undertaken, the better the prognosis.

Treatment Versus Non-Treatment. With regard to the question of the efficacy of treatment versus non-treatment, there seems to be little agreement among researchers. As has been previously noted, the difficulty in establishing criteria by which to evaluate therapeutic intervention presents a very real problem to the researcher.

Eysenck (1952), who reviewed the work of both Landis and Denker, states that, "...certain conclusions are possible from these data. They fail to prove that psychotherapy, Freudian or otherwise, facilitates the recovery of neurotic patients." (Eysenck, 1952, p. 322). This point was supported in a later review of literature made by Levitt (1957). In summarizing the available reports of the results by psychotherapy with children, Levitt concluded that:

> ...the available evidence does not support the belief that therapy is more beneficial than are the effects of spontaneous remission without professional intervention. Two-thirds of the patients examined at close, and three-fourths seen in follow-up have improved, approximately the same percentage of improvement is found for comparable groups of untreated children. (Levitt, 1957, p. 194)

The position taken by Eysenck and Levitt has met with challenge from some others involved in the mental health field. Bergin (1963) deplores Eysenck's pessimism and suggests that Eysenck's view is perhaps premature since the requirements for an adequate test have rarely been fully met so far, particularly with respect to pre-, post- and follow-up measures as well as non-treatment control groups.

Shoben (1956) summarizes well the needs which must be met before the efficacy dilemma is to be solved. He states that: "...the conclusive evidence of therapeutic effectiveness must come not from argument but from relevant and rigorous research." (Shoben, 1956, p. 163). According to Thorne (1952), attempts to operationalize the suggested research must include some basic principles. Among those areas of high priority are: that there be evidence to show that the maladjustment is not self-limiting or self-curative; the burden of proof must rest upon those who make the therapeutic claims; there must be adequate follow-up conducted by independent observers; that the value of the intervention be based on the collection of large scale statistical data; and that nothing be accepted on the basis of weight of authority or dogma.

Other Factors Affecting Outcome of Intervention. Certain other variables may have an effect on the post-treatment adjustment of emotionally handicapped children. Socio-economic status, school achievement and placement, primary behavioral difficulties, and school- and self-attitudes may, in particular combinations, affect the outcome of intervention processes.

Educationally Oriented Studies

Effects of Special Class Placement. With regard to the efficacy of special class, Haring and Phillips (1962) compared two types of special class placement: the structured vs. the permissive. Criteria for improvement according to the researchers, included: 1) that the child be more manageable; 2) that the child be eager to learn; 3) that the child show general school progress; and 4) that the child be able to complete chores at home. At the end of one year these researchers indicated the structured group displayed greater increase in academic achievement and behavior adjustment. At the end of the second year, of a total of 15 subjects in the structured group, three were returned to regular classes where, on follow-up, they continued to adjust and achieve normally. Unfortunately the "permissive" group was not followed up in the second year after all subjects in the group had been returned to regular classes.

In a study by Rubin, Simson and Betwee (1966) effectiveness of special class placement was studied. A total of 56 subjects were selected, after intensive screening, as being acceptable for special class placement. This total was then divided into matched pairs by random selection with 28 subjects being assigned to special class and 28 subjects remaining in regular class placements. Study of the experimental group from entry to exit in the special class as compared to the control group suggested that special placement did not contribute significantly to better school adjustment. Study at follow-up indicated that the experimental group was able to maintain improvement or continue improvement in classroom behavior based on teacher ratings and display of symptoms. In academic performance, the experimental group showed some achievement

gains at follow-up over gains demonstrated at the end of special class placement. The control group showed less improvement in classroom behavior at follow-up, and continued academic decline.

Kotting and Brozovich (1969) followed up 183 of 195 children who had been enrolled in an adjusted study program for emotionally disturbed children. The mean age of the sample at admission and follow-up was 10 years 10 months and 16 years 7 months respectively. The mean I.Q. was 96.9. Their findings indicated that as a group the children were not successful in post-special class placement. Teachers rated them poorly in both academic and social behavior at follow-up. In addition, among subjects over 16 years of age at the time of follow-up, 43 percent were school drop-outs.

Variables Influencing Post-Intervention School Adjustment. Johnson and Rubin (1964) attempted to determine the child's overall adjustment based upon his school performance. Teachers' perceptions were utilized, in part, to arrive at some conclusion regarding the child's school adjustment since, according to Berkowitz and Rothman (1960), and Redl and Wattenberg (1951), it is often the teacher who referred the child for evaluation. Not surprisingly, the findings indicated that the children discharged from a psychiatric institution had poorer school adjustment than did normal children. Johnson and Rubin (1964) also found that children diagnosed in the more serious diagnostic categories (organic or psychotic) were more apt to display difficulty in school adjustment.

Huber (1964), who studied the academic achievement and non-achievement of a group of severly emotionally disturbed children, concurs with this latter finding. He found that there was a difference in school achievement with regard to the diagnostic label assigned to the child.

Academic achievement was highest among children diagnosed as psychophysiological followed by psychoneurotic, psychotic and personality disorder.

In the study of Kotting, et. al. it was thought that certain variables, measured prior to entrance to special class, were perhaps related to successful post-special class placement. Among the variables considered were: age at entrance; I.Q.; less academic retardation; and those children categorized as withdrawn. It was found that younger children and children who were considered withdrawn tended to make significantly better adjustment following special class placement.

Similar results were obtained by McKinnon (1969) who studied 88 children who had been in special classes for the emotionally disturbed. Children who were younger, had higher I.Q. levels, and who demonstrated the least amount of learning difficulties at the time of entrance to special class tended to make better adjustment following placement. In addition, McKinnon noted better post-special class adjustment was made by children from higher socio-economic situations.

Morse, Cutler and Fink (1964), in an extensive study of emotionally disturbed children in public schools, found that these children are commonly retarded in academic achievement and that the negative overt behavior of these children often stemmed from a poor self-image.

Before attempts are made to test the applicability of differential intervention designs or techniques, it will be necessary to attempt to determine whether or not there are identifiable sub-groups among children determined to be emotionally handicapped. Research must attempt to identify variables or clusters of variables which will assist in placing the child in a given sub-group. For example, Quay, Morse and Cutler

(1966) were able to identify three factors or types of behavior problems often displayed by emotionally disturbed children: conduct problems, inadequacy--immaturity, and personality problems. As a result of this differentiation between "kinds of emotionally handicapped children" differential educational approaches have been suggested. (Quay, et. al., 1966) Glovin and Witt (1969) have also suggested a program of recreational activities for conduct disordered children.

Morse, Finger and Gilmore (1968) indicate a need for the undertaking of predictive follow-up research. They suggest that one means of approaching the problem of prediction is through giving "careful attention to the relationship between codified indices of personal and social press and follow-up adjustments." (Morse, et. al., 1968, p. 467)

Lambert and Hartsough (1968) have summarized the attitudes of many researchers when they state:

> ...mental health assessment of school children will continue to reflect measures of the child's adjustment to the demands of the classroom and that the teachers and other observers (including the child himself) need to be involved in a multi-dimension assessment of the child's adaptational process in the school setting.... (Lambert and Hartsough, 1968, p. 496)

Statement of the Problem

From the foregoing it may be concluded that: one, follow-up research is fraught with "mechanical" problems; and two, that generally the kinds of studies which have thus far been conducted leave much to be desired for educators and others who are concerned with the problems of providing disturbed children with an optimal educational experience.

The findings of previous researchers, as well as the opinion of many school mental health professionals, suggests that labeling, and

consequent special class placement, may not provide the most appropriate kinds of educational experiences for these children.

Chief among the problems of follow-up research is the question of measurement of change as the result of intervention. In general, the criteria used to assess post-intervention adjustment takes one of two forms. The first of these involves the utilization of a general criterion such as "improved" or "unimproved." The second involves a more intensive assessment of specific change such as improved reading scores, improved attitude, etc. However, studies of both psychotherapeutic and educational intervention have generally been concerned with the effectiveness of treatment models on a supposedly homogeneous sample of children.

Some researchers have identified specific variables which may serve as predictors of post-intervention adjustment. Among these are age at the time of intervention, intelligence level, socio-economic status of the family, type of behavior displayed by the child, and the degree of academic retardation.

While it is recognized that there is a need for continued study of the effects of both psychotherapeutic and educational intervention, it is equally recognizable that another kind of research is necessary.

The scope of this kind of research is away from efficacy and toward prediction; away from the study of the mechanism and toward the study of the child. To be sure, study of the child cannot be accomplished without also studying what has been done with him, but the focus perhaps needs to be shifted away from method. An important issue to which workers in the mental health field must ultimately address themselves is the question of who does, or does not, improve as a result of

a particular treatment intervention. To deny, explicitly or implicitly, the possibility of differential responses to differential intervention is to deny the very individuality of the child that educators and others involved in mental health programs have long espoused.

An Overview of the Current Study

The purpose of this study is two-fold. The first purpose is to determine the status of the child after he is returned to the community following diagnosis of, and in-patient treatment for, serious emotional disturbance. Of specific interest is the child's school adjustment, as measured by his academic and socio-emotional behavior. The child's reaction to school is of primary importance in determining his adjustment after treatment.

The second, and perhaps more important, purpose is to determine what predictions can be made with regard to the disturbed child's later school adjustment on the basis of data available prior to, and at discharge from, in-patient treatment. In subsequent chapters, frequent reference will be made to the work of Heuchert (1969) who also studied the post-treatment adjustment of a group of emotionally disturbed children discharged from a residential treatment facility. In both the Heuchert study and the present research, the focus is upon determining those factors which might have predictive value with regard to the child's post-treatment adjustment.

The foregoing review of the literature lends support to the notion that there is limited fruitfulness in continuing to study emotionally disturbed children without directing attention to the variability among disturbed children. While the emphasis of the review is not on the post-treatment adjustment of institutionalized children, it does

make clear the need to consider the child from a frame of reference which is more definitive than the label "emotionally disturbed."

The focus of this study will be on client differences or variations which may serve as potential predictor variables of post-intervention adjustment. The study is not intended as an evaluation of the differential efficacy of either psychotherapeutic or educational interventions.

Five adjustment areas are of particular concern to the researcher. These are: 1) grade placement; 2) school attitude; 3) perceived school problems; 4) peer relations; and 5) adult relations. The study undertakes to determine the differential effects of certain demographic, socio-emotional, and achievement variables on the child's adjustment in these areas. Included among these variables are: age; sex; socio-economic status; duration of treatment; academic achievement; and the ratings made by the teachers, other school personnel, family and the child himself.

Summary

The difficulties in undertaking follow-up research are many and varied. No single such research effort will be able to either adequately meet all of the pre-conditions which previous researchers have indicated should be met or control all of the variables that should be controlled. Recognition of these problems should not prevent follow-up research, but rather, should serve as cautionary guidelines.

It is suggested that there is limited fruitfulness in continuing to study intervention processes based upon such ill-defined and global parameters as "emotionally disturbed" or "emotionally handicapped."

Telford and Sawrey (1967) have identified two conceptual frameworks through which exceptional children are viewed. The qualitative view holds that exceptional children are categorically different from all other children and that these differences also exist between categories of exceptionality. Thus, one may be justified in assuming that there exists a psychology, and/or a uniqueness of the emotionally handicapped child which is applicable to all children so classified. Undoubtedly, it is this point of view which has led to the study of efficacy of intervention without particular regard to the possible difference between individuals or groups of individuals within the larger category of "emotionally disturbed."

The second, or the quantitative point of view, suggests that children do not differ in kind but only in degree, and that the uniqueness belongs to the individual rather than to any hypothetical category. A compromise between these two polemic points of view leads to a modified qualitative position which recognizes the existence of similarities between members of any given category, but that with respect to any single attribute, the difference between the exceptional and the normal child is a difference in degree.

While there may be categorical similarities among children classified as emotionally disturbed or handicapped, there also exists significant differences between individual children, or sub-groups of children, which may have direct relevance as to how the child might be expected to respond to the educational setting, and ultimately how he may respond to a particular intervention technique.

Limitations of the Study

While many of the problems of follow-up research may be dealt with through careful planning, others, over which the researcher has no control, must be recognized as inhibitors to any follow-up research endeavor. The following comprises some of the recognized limitations of the present research undertaking.

Problems in Data Collection

Securing permission to include children in the study constituted the first, and perhaps most significant, difficulty in conducting the research. It is entirely possible that there may be significant differences in the adjustment profiles of those children on whom complete permission was secured versus those children on whom no permission was granted for inclusion in the study.

Secondly, as a result of the reluctance on the part of many parents or guardians, schools, and other societal institutions to allow for complete involvement of the child in the research, data were collected from various sources. Recognizing the questionable reliability of assessments made by members of any single professional discipline, one is forced to be even more tentative in drawing conclusions when the assessments are made by a variety of professional and lay individuals. There can be little question that perceptual bias plays a significant role in determining how individuals will respond to certain questions. Thus, one must question the validity of assuming "comparability of responses" when, for example, in one instance the teacher was the respondant to questions concerning the child's school adjustment, and, in another, the child's parent or social case worker was the respondant.

A third area of concern with reference to the present study involves the problem of missing or incomplete data. This is particularly significant with respect to the lack of achievement information at all three points in time; admission, discharge, and follow-up. Very often, test results were either not available due to a lack of testing programs, or, as a result of the age and/or grade placement of the child, achievement testing was no longer appropriate. The latter situation occurred frequently among junior and senior high students.

Another source responsible for significant amounts of incomplete data were those instances in which something less than total involvement of the child was granted to the researcher. For example, many parents rejected the request to interview their child but were willing to allow the school to be contacted. In these cases no data on the Coopersmith Self-Esteem Inventory or School Attitudes Study were available.

Problems of Interpreting Data

Coupled with, but in addition to, the difficulties with incomparability of data and incomplete data, is the problem of interpreting the data in order to provide for scientifically sound investigation.

Since much of the information regarding the behavioral and academic adjustment of the child was to be found in narrative form, it was necessary to transpose the data into a form which allowed for computerized statistical analysis. Thus, it became necessary to attempt to objectify the oft-times subjective assessments of parents, treatment center personnel, and schools. While attempts were made to standardize the procedure, it must be recognized that the subjective often does not correspond perfectly to pre-determined objective categories.

The Loss Factor

A final major limitation of the study involved that portion of the research sample which is included in the study but for which there is no follow-up data. It was felt that certain sub-categories of children, specifically those children who became school drop-outs and/or those who became involved with law enforcement agencies, should be included in the study based upon the fact that something was known about their ultimate disposition subsequent to discharge.

CHAPTER II

THE TREATMENT FACILITY AND THE CHILD AT ADMISSION

Introduction

The concern of this study is primarily one of investigating the post-treatment adjustment of a group of children who had been discharged from a residential treatment center for emotionally disturbed children. Reference to previous research has indicated that there is variable response to psychotherapy, and variable response to special class placement made by children who have been diagnosed as emotionally disturbed.

The focus of this study will be on factors which differentiate one child or group of children from other children, all of whom were diagnosed as emotionally disturbed, and on an assessment of how these differences might influence post-treatment adjustment.

Included within this chapter will be a brief discussion of the treatment facility from which the sample was drawn, and a description of the research sample in terms of demographic, socio-emotional, and achievement variables. Finally, an evaluation of the inter-relationship of the admission data will be presented.

The Virginia Treatment Center for Children

The Virginia Treatment Center for Children (VTCC) was established under the auspicies of the Virginia General Assembly as a segment of the Virginia Department of Mental Hygiene and Hospitals. "As specified by the Virginia Legislature, the Virginia Treatment Center for Children

provides for the study, evaluation, diagnosis, intensive care and highly specified treatment, as well as investigation into methods of treatment, of emotionally disturbed or mentally ill children under 16 years of age who are citizens of Virginia." (Mental Health in Virginia, Winter, 1968, p. 32.)

Since its opening in March, 1962, the VTCC has seen nearly 900 children diagnostically, approximately 400 of whom have been admitted to in-patient care. This service was established as a short term facility, with no child remaining in residence for a period of over one year. As a result, the VTCC does not generally admit into residence any child who, in the judgement of the screening committee, is not likely to profit from one year or less of intensive treatment to a degree which would suggest a positive prognosis upon the child's return to home and community.

Clientele of VTCC

As stated in an article published in Mental Health in Virginia:

> It is believed that the Virginia Treatment Center for Children can be of assistance in the diagnosis and treatment of selected children with problems such as: (1) the child who needs a period of intensive study which for some reason or combination of reasons, cannot be accomplished on an out-patient basis; (2) the emotionally disturbed child who has been dismissed from school, or is about to be dismissed, and who needs a controlled environment while the matter is being studied; (3) the child who becomes disturbed in the face of a family crisis; (4) the child who becomes acutely psychotic; (5) certain psychosomatic reactions; (6) the child who has an illness, such as diabetes, and is having severe adjustment problems related to the handicap itself. (Mental Health in Virginia, Winter, 1968, p. 32)

Referral to the Treatment Center came from several sources. As might be expected, schools were responsible for a significant number of direct referrals. In addition, while other personnel or agencies may have made the direct referral, it was often the school which brought

the child's problem to the attention of these personnel. Schools, social service agencies, child guidance clinics and family physicians, in that order, were responsible for 69 referrals totaling 92 percent of the sample.

Of the total sample of children, only 19 had been exposed to psychiatric or psychological intervention prior to their admission to the Treatment Center. The duration of the previous therapy ranged from one month to an excess of one year.

The single criteria utilized to determine eligibility for inclusion in the sample was that of geographic residence at the time of admission into in-patient treatment. As has been noted, the VTCC services any child in need of psychiatric care, providing they meet admission requirements, who are citizens of the State of Virginia. However, due to the vast portions of the State which are sparcely populated, a random sample was beyond the resources of this study. Included were those children whose residence at the time of admission was within the Greater Richmond Metropolitan Area, which includes the City of Richmond and the two surrounding counties of Chesterfield and Henrico. The Greater Richmond Area is taken to be fairly representative of the State in terms of socio-economic and rural-urban variables.

The City of Richmond, with a population of approximately 450,000 people, is characteristic of most urban centers. Socio-economic status ranges from upper to lower class, with the latter containing a significantly larger proportion of Negroes over whites. The two counties, with a combined population of approximately 300,000, also contain a representative cross section of the State population with respect to socio-economic variables. Both counties contain: (1) an affluent group

of professional and executive upper class; (2) several sub-urban areas; and (3) a significant agricultural-rural population.

Thus, while on the surface the sample may appear to be what Guilford (1956) refers to as an "Incidental Sample," i.e., a sample of availability, there is every reason to believe that, in fact, the sample is purposive in nature, i.e., that it is representative of the total population of children who have been treated on an in-patient basis at the VTCC.

The Research Sample

A total of 111 children who were residents of the Greater Richmond Metropolitan Area at the time of admission to in-patient treatment had been discharged prior to the beginning of data collection in February, 1968. The most current addresses of these 111 children were taken from the hospital files, and a letter of introduction was sent to parents and guardians by the director of VTCC indicating that they would be contacted concerning the availability of their child to be used in the study. Letters were then sent by the researcher to the total sample indicating the nature of the study and asking permission to contact the school and to interview their child (see Appendix A). Thirty-six of these letters were returned address unknown with no forwarding address. Inasmuch as it was impossible to make any assessment of these children regarding their post-treatment adjustment, they were dropped from the sample.

Of the remaining 75 children, a variety of responses were received indicating what the parent or guardian wished to do about having their child included in the study. Table 1 summarizes these directions and circumstances.

TABLE 1

Responses to Requests to Include
Child in the Study (N=75)

Inclusion Status	N	%
Interview		
School and Child	40	53
School only	9	12
Questionnaire	11	15
Failure of school to return data sheets	1	1
Military - No response	1	1
School drop-outs - No contact	4	5
Prison - No contact	1	1
Parental refusal to any involvement	8	11
Total	75	99

Pre- and Process Data

The data, both at the time of admission to treatment and at discharge from treatment, were secured by the researcher from each child's hospital record. These data were collected prior to analysis of the follow-up data. Thus, pre- and process-data were collected without knowledge of the status of the child following treatment. The nature of pre- and process-data included: (1) demographic variables; (2) socio-emotional adjustment variables; and (3) academic adjustment variables.

At admission, the variables included in each category were:

Demographic Variables--age, sex, intelligence, parental constellation, nature of sibships, referral source, and socio-economic status.

Socio-Emotional Variables--peer and adult relations, primary presenting problem, and psychiatric diagnosis.

School Adjustment Variables--actual grade placement, actual versus expected grade placement discrepancy, reading level, school attitude, and perceived school problem.

The remainder of the present chapter will investigate the admission data. The following chapter will analyze the inter-relationships between the admission and discharge changes as well as giving some attention to factors which might influence change.

Description of the Research Sample Prior to Hospital Admission

Demographic Variables

Age and Sex The chronological age of the research sample of fifty-six males and nineteen females is shown in Table 2.

TABLE 2

Chronological Age at Hospital Admission

	MEAN		S.D.		RANGE	
	Years	Months	Years	Months	Years	Months
Males N=56	10.84	130.04	2.58	30.96	5.50-15.17	66-182
Females N=19	10.51	126.10	1.75	33.0	5.16-15.16	62-181
Total Sample N=75	10.75	129.04	2.67	32.08	5.16-15.17	62-182

The age range of the research sample is analogous to the age range of the Virginia Treatment Center's total population. Although there is no absolute lower age limit of children admitted, seldom is a child admitted prior to age five. No child is allowed to remain in residence after his sixteenth birthday.

Sixty-two percent of the total research sample were in the middle elementary to junior high school age level. The male-female ratio of approximately 3:1 was maintained through the distribution.

Among children who were chronologically eight through tenth graders, a slight increase in the male to female ratio of 4:1 was noted.

Intelligence Quotients. Intelligence tests scores were most often available from the child's cumulative school records. In most instances the scores were obtained from the Lorge-Thornkike test. In some cases more recent scores than those noted in the school records were available from the Virginia Treatment Center records. Only test scores obtained within two years prior to the child's admission to in-patient treatment were included in the study. Very close similarities in intelligence are noted between the present research sample and the results of other studies (Heuchert, 1969; Morse, et. al., 1964). As is indicated in Tables 3 and 4, the distribution of intelligence scores was essentially normal.

TABLE 3

Intelligence Quotients (N=65)

Mean	S.D.	Range
100.0	14.0	60-139

TABLE 4

Distribution of Intelligence Quotients (N=75)

Scores	N	%
130-139	2	3
120-129	1	1
110-119	11	15
100-109	21	28
90-99	18	24
80-89	7	9
70-79	3	4
60-69	2	3
No scores available	10	13
Total	75	100

Parental Constellation. At the time of admission, forty percent of the children in the sample were from families in which one or both parents were absent due to separation, divorce, desertion, or death. Table 5 indicates the status of the family at the time of the child's admission to in-patient treatment.

TABLE 5

Status of Parental Constellation at Admission to In-Patient Treatment (N=75)

Parental Constellation	N	%
Both natural parents	45	60
Step father and natural mother	8	11
Step mother and natural father	7	9
Natural mother only	7	9
Natural father only	1	1
Neither natural parent involved with child	7	9
Total	75	99

This finding is in general agreement with Heuchert's (1969) findings although the present research found a slightly higher percentage of children coming from homes where a step-parent was involved.

Nature of Sibships. Eighty-one percent of the sample was included in sibships of two, three and four children, while five children, representing 7 percent of the sample, were only children.

First, second, and third-born children comprised 89 percent of the research sample. This finding is somewhat different from the findings of Heuchert who found only, youngest, and second youngest children made up 55 percent of his population, while only 8 percent were oldest children. Table 6 indicates the ordinal position of the child.

TABLE 6

Ordinal Position of Child in the Sibship (N=75)

Position of Child in Sibship	N	%
Oldest	29	39
2nd child	25	33
3rd child	13	17
4th child	8	11
5th child or later child	0	0
Total	75	100

Socio-Economic Status. The socio-economic status of the family was assessed utilizing Reiss' (1961) criteria. The middle and upper classes contribute a disproportionately large number of children to the treatment facility. This finding is similar to those of Roach, et. al., (1958). Table 7 summarizes the socio-economic status of the families.

TABLE 7

Socio-Economic Status of the Families (N=75)

Socio-Economic Status	N	%
Professional-Executive	12	17
Upper white collar	9	12
Lower white collar	24	32
Skilled	17	23
Unemployed, Unskilled, Semi-skilled	13	16
Total	75	100

Socio-emotional Adjustment

Peer and Adult Relations. Based upon statements contained in the diagnostic work-up and/or casework summary, the researcher evaluated the child's relationships with peers and adults at the time of

admission. With regard to peer relations, the child was rated as: 1) Aggressive-hostile; 2) Withdrawn; and 3) No problem. The child's response to adults, which is interpreted to represent his acceptance or rejection of authority figures, was evaluated on a four dimensional scale of: 1) Hostile; 2) Accepting; 3) Withdrawn; and 4) Dependent. Tables 8 and 9, respectively, indicate the status of the child's peer and adult relationships prior to treatment.

TABLE 8

Status of Child's Peer Relations at Time of Admission (N=75)

Relationship Style	N	%
Aggressive-Hostile	30	40
Withdrawn	35	47
No problem	10	13

TABLE 9

Status of Child's Adult Relations at Time of Admission (N=75)

Relationship Style	N	%
Hostile	34	45
Accepting	9	12
Withdrawn	20	27
Dependent	12	16

Primary Presenting Problem. In most instances the primary cause for referral was indicated on the child's admission summary, however, in some cases multiple problems were noted. When this occurred, the

social casework summary was referred to, and a conclusion drawn as to what constituted the primary problem. This conclusion was based upon parent interviews, and medical, psychological, and psychiatric findings. The problem behavior categories adapted from Morse, et. al., (1964), are presented in Table 10. Comparison of these findings with those of Morse, et. al., (1964) is difficult due to the fact that in the previous study the teachers often listed more than one problem; while the present study attempted to determine the single most significant problem. However, in both studies, control-management was the most prevalent problem. Comparison with the work of Heuchert indicates close similarity in terms of the percentages of acting out and withdrawn children.

TABLE 10

Primary Presenting Problem (N=75)

Presenting Problem	N	%
Control-Management	19	25
Hostile aggressive behavior	12	16
Academic-Motivation	16	21
Underachievement	10	13
Hyperactivity	5	7
Severe mood swings	0	0
Withdrawn	13	17
Perceptual problems	0	0
Total	75	99

Diagnoses. The traditional psychiatric categorization was available directly from the child's intake summary sheet, these include the following four categories: 1) psychophysiological; 2) psychoneurotic; 3) psychotic; and 4) personality disorder. Table 11

indicates the psychiatric diagnostic category to which the child was assigned at the time of admission. These findings are in close agreement with those of Heuchert with the exception of the number of children diagnosed as psychotic. Heuchert's sample included 7 psychotic children while the present study included only 3, This difference may be explained in terms of the different intake policies of the two institutions.

TABLE 11

Psychiatric Diagnoses (N=75)

Diagnostic Category	N	%
Psychophysiological disorders	2	3
Psychoneurotic disorders	58	77
Psychotic disorders	3	4
Personality disorders	12	16
Total	75	100

School Adjustment Variables

Actual Grade Placement. At the time of admission to in-patient treatment, the overall grade level of each child was determined in order to assist in planning an academic program.

The early elementary grades (1-3) account for 34 percent of the research sample. Forty-three percent of the sample were in the later elementary grades at admission with the remaining 23 percent being junior high students. Table 12 indicates the sample mean, standard deviation, and range in terms of actual and expected grade placement.

TABLE 12

Summary of Actual and Expected Grade Placement of Research Sample (N=68)

	Mean Grade	S.D.	Range
Actual	4.8	2.3	1-9
Expected	5.6	2.4	1-9

Discrepancy Between Actual and Expected Grade Placement. Table 13 summarizes the distribution and degree of deviancy between the child's actual grade placement and his expected grade placement based upon his chronological age.

TABLE 13

Distribution of Deviation between Actual versus Expected Grade Placement (N=75)

Degree of Deviation	N	%
2 or more years below expected grade placement	9	12
1 up to 2 years below expected grade placement	21	28
At expected grade level	38	51
Above expected grade level	0	0
No data	7	9
Total	75	100

Forty percent of the sample was functioning at least one year below expected grade placement while 51 percent were functioning at grade level. The similarity between these findings and those of Heuchert is very close. Heuchert also found 40 percent of his sample to be below grade level with 49 percent at grade level. Reference to Table 10 indicates that only 13 percent of the sample were referred

out of concern for the child's failure to achieve, however, an additional 21 percent of the children were referred as a result of academic-motivational problems. It is entirely likely that a number of children in this latter group, as well as some of those within the hostile-aggressive, control-management categories, were experiencing failure in school. Undoubtedly a priority was established by some parents and/or the school which placed greater concern and emphasis on the child's behavioral problems than on his achievement difficulties.

Reading Level. Serious difficulties arose in attempting to characterize,meaningfully,levels of functioning in specific academic areas. Reading achievement test data were available on only 40 subjects representing 53 percent of the sample. Achievement test data in other academic areas were so meager as to render them completely useless in attempting any sort of meaningful evaluation. The mean reading grade of these 40 children at admission was 5.0 with a standard deviation of 2.7. The range was from 1.3 to 12.9. Comparison of the mean reading grade with the actual grade placement of the sample (Table 12) indicates that there are not significant differences between the two.

Assessment of Overall School Adjustment. In order to draw a generalized picture of the research sample with regard to school adjustment, two criteria were established: 1) General School Attitude; and 2) Is child seen as having a school problem either behaviorally or academically. "School problem" was defined as any perceived problem which, in the teacher's estimation, was serious enough to require

intervention of some sort other than regular educational management. Table 14 summarizes this information.

TABLE 14

Evaluation of Overall School Adjustment at Admission (N=75)

	N	%
School Attitude:		
Excellent	4	6
Average	16	22
Poor	51	72
No Data	4	6
School Problem:		
Yes	63	88
No	9	12
No Data	3	4

Hypotheses Concerning Admission Data

The factors of age, sex, I.Q., and socio-economic status were investigated in order to determine their relationship to other aspects of the child at the time of admission to treatment. The following hypotheses, stated in the null form were tested:

Hypothesis I-A

No significant relationships exist between the child's chronological age at admission and: (A) the primary presenting problem; and (B) the child's school attitude or existence of a school problem as noted in the child's admission summary.

Chronological Age

Referral Source. Table 15 represents the frequency of referral by source as a function of C.A. Chronological age was arbitrarily categorized into early school age, grades kindergarten through third grade, middle school years, grades four through eight, and later school years, grades nine through eleven.

TABLE 15

Referral Source Distribution
by Chronological Age in Months (N=75)

Referral Source	C.A. Distribution in Months					
	61-108		109-156		157-192	
	N	%	N	%	N	%
School	4	5	13	17	3	4
Guidance Clinic	2	3	5	7	5	7
Social Service Agency	6	8	6	8	2	3
Legal Agency	0	0	3	4	1	1
Family Physician	6	8	3	4	1	1
Private Psychiatrist	2	3	4	5	1	1
Family	2	3	4	5	2	3
Total	22	30	38	50	15	20

There exists a general trend toward an increase in the number of referrals with an increase in C.A. This trend continues throughout the middle school years and then sharply declines. The trend is most pronounced among school, guidance clinics, and legal agency referrals, with schools increasing the number of referrals by 12 percent during the middle school years.

Primary Presenting Problem. Interestingly, but perhaps not unexpectedly, 57 children, 76 percent of the sample, were referred for

psychiatric treatment due to problems in one of four basic areas: 1) control-management; 2) hostile-aggressive behavior; 3) academic-motivational problems; and 4) underachievement (see Table 10). These four primary presenting problem categories may be considered as representative of one of two types of difficulty. The control-management and hostile-aggressive categories may be combined into the single category of "other-oriented" problems, or, more commonly, the behavior problem. In like manner, the categories, academic-motivational and underachievement may be viewed as "self-oriented" problems, or children who are experiencing difficulties in the learning area.

When viewed in this way, 31 children, or 41 percent of the sample, fall into the "other-oriented" behavior problem category, while 26 children, 35 percent of the sample, may be considered to be experiencing "self-oriented" or learning difficulties.

Table 16 presents the distribution of primary presenting problems by chronological age.

TABLE 16

Distribution of Primary Presenting Problems
by Chronological Age (N=75)

Presenting Problems	C.A. Distribution in Months					
	61-108		109-156		157-192	
	N	%	N	%	N	%
Control-Management	8	11	7	9	4	5
Hostile-Aggressive	5	7	7	9	0	0
Academic-Motivational	0	0	12	16	4	5
Underachievement	1	1	7	9	2	3
Hyperactivity	3	4	1	1	1	1
Severe mood swings	0	0	0	0	0	0
Withdrawn	5	7	4	5	4	5
Perceptual problems	0	0	0	0	0	0
Total	22	30	38	49	15	19

As might be expected, learning difficulties are not identified until the child has reached fourth grade level chronologically, while behavior problems are identified considerably earlier in the child's school career. Chi-square analysis of the data indicates that there exists a very significant difference in type of presenting problem as a function of C.A., as indicated in Table 17.

TABLE 17

Relationship Between C.A. and Primary Presenting Problem (N=51)

Problem Type	C.A. (In Months)			
	61-108	109-156	157-192	
Behavior problem	13	14	4	Chi-Square 11.05*
Achievement problem	1	19	6	

*Chi-Square significant at .01 level

The rather significant increase in the number of children identified as achievement problems which occurs between fourth and eighth grade suggests that screening and identification of academic problems needs to be conducted during the child's early years.

Grade Placement. In order to characterize the children with regard to their school achievement at the time of admission to inpatient treatment, grade placement discrepancy was investigated.

While the chi-square analysis of C.A. and grade placement did not demonstrate that significant differences existed, there was a tendency in the direction of differences between increased C.A. and consequent grade discrepancy.

When viewed in terms of C.A. distribution relative to grade placement discrepancy, as is indicated in Table 18, the percentage of children who were below grade level at the time of admission increases between the ages of 7 and 13 years, with the greatest increase occurring between 11 and 13 years.

TABLE 18

Distribution of Expected versus Actual Grade Placement Discrepancy by Chronological Age (N=68)

Grade Placement Discrepancy	C.A. (In Months)											
	61-84		85-108		109-132		133-156		157-180		181-192	
	N	%	N	%	N	%	N	%	N	%	N	%
At expected grade level	5	7	8	12	9	13	10	15	5	7	1	1
6 mos. to 2 yrs. below expected grade level	0	0	5	7	4	6	7	10	5	7	0	0
2.0 and more years below expected grade level	0	0	0	0	1	1	7	10	1	1	0	0

Twenty percent of the 24 children who fall into the 11 to 13 year age group are at least 1 year behind expected grade placement.

School Attitude-Perceived School Problem. Each child was rated in terms of school attitude and whether or not he was regarded as a school problem at the time of admission to in-patient treatment. In terms of school attitude the child was rated as excellent, average, or poor. However, in order to establish cell frequencies which would enable the researcher to compute chi-square, the categories, excellent

and average, were combined into a single category of acceptable school attitude. Tables 19 and 20 present the chi-square analysis of school attitude and perceived school problems as a function of C.A.

TABLE 19

Relationship of C.A. to School Attitude (N=71)

C.A. (In Months)	School Attitude		
	Acceptable	Poor	Chi-Square
61-108	9	9	9.46*
109-156	5	33	
157-192	6	9	

*Chi-Square significant at .01 level.

TABLE 20

Relationship of C.A. to Perceived School Problem (N=72)

C.A. (In Months)	School Problem		
	Yes	No	Chi-Square
61-108	14	5	5.10
109-156	36	2	
157-192	13	2	

Chi-square significant above the .01 level is obtained when school attitude is compared to chronological age. Similarly, the trend exists also, although significance was found to be slightly below the .05 level, with regard to the child being seen as a school problem. In both instances, a greater number of children, between the ages of 9 and 13 years at the time of admission, were judged to be problems

with respect to school and/or maintain a poor attitude toward school. The variance between the number of children judged to have a poor school attitude and the slightly greater number, in all C.A. categories, judged as school problems is accounted for by the fact that "school problem" included both behavioral and learning problems. Thus, some children, while possessing an acceptable school attitude, were viewed as having a school problem based upon academic failure.

Evaluation of Hypothesis I-A

No significant relationships exist between the child's chronological age at admission and: (A) the primary presenting problem; and (B) the child's school attitude or existence of a school problem as noted in the child's admission summary.

Analysis of the relationship between C.A. and primary presenting problem indicated that achievement problems were more frequently noted as primary sources of concern for children between 9 and 12 years of age than they were for younger children. In addition, between 5 and 9 years, a significantly greater number of children were referred out of concern over behavior problems rather than out of concern over achievement difficulties.

With respect to the existence of poor school attitude, it was found that children between 9 and 12 years were more often seen as possessing negative school attitudes than were younger or older children.

The hypothesis is therefore rejected.

Hypothesis I-B

No significant relationships exist between sex and (A) actual versus expected grade placement; and (B) school attitude or perceived school problem.

Sex

Referral Source. The by-sex referral ratio for the total sample favors boys over girls 3 to 1. When considered by referral source, most referring agencies maintained some approximation to this ratio, within the range of 2 to 1 to 4 to 1. The one significant departure from this ratio is in the case of social service agencies with a ratio of 13 to 1.

Proportionately, girls who become behavioral or achievement problems are more likely to be referred by what might be considered a more benign agent, such as family, family physician, or child guidance clinic, while boys, who may constitute a more anxiety provoking threat, tend to come in contact with legal and social welfare agencies.

Primary Presenting Problem. The primary presenting problem did not seem to be influenced by the sex of the child. As can be noted in Table 21, both sexes had essentially equal percentages with regard to identification of behavioral and learning difficulties.

Chi-square analysis of sex differences in type of presenting problem yielded no significant differences.

Grade Placement. As was expected, boys tended to be significantly different from girls with regard to school achievement. A by-sex distribution of grade placement at the time of admission

TABLE 21

Distribution of Primary Presenting Problem
by Sex (N=75)

Presenting Problem	Sex			
	Male		Female	
	N	% of males	N	% of females
Control-Management	14	25	5	26
Hostile-Aggressive	10	18	2	11
Academic-Motivational	12	21	4	21
Underachievement	7	13	3	16
Hyperactivity	5	9	0	0
Severe mood swings	0	0	0	0
Withdrawn	8	14	5	26
Perceptual problem	0	0	0	0

indicates that while only 18 percent of the girls were 1 or more years behind their expected grade level, 37 percent of the boys were up to 1 year behind, and an additional 16 percent were 2 or more years behind expected grade level.

Chi-square analysis is presented in Table 22. A significant difference, above the .05 level, was obtained between boys and girls with respect to their expected versus their actual grade placement.

TABLE 22

Relationship of Sex to Grade Placement Discrepancy (N=68)

Sex	Grade Placement Discrepancy			
	At Expected Grade Level	6 Months to 2 Years Below Expected Grade Level	2 Years and More Below Expected Grade Level	Chi-Square
Male	24	19	8	6.32*
Female	14	2	1	

*Chi-Square significant at .05 level.

School Attitude-Perceived School Problem. No differences were noted between males and females in terms of school attitude, chi-square being only slightly above pure chance. However, girls were more often judged to have excellent school attitudes than boys. When percentages, by sex, are combined 36 percent of the girls as compared to 26 percent of the boys were judged to have acceptable school attitudes.

In the area of perceived school problem chi-square just below the .01 level was obtained, indicating a very significant difference exists between the sexes with regard to the existence of school problems. See Table 23.

TABLE 23

Relationship of Sex to Perceived School Problem (N=72)

Sex	School Problem		
	Yes	No	Chi-Square
Male	51	4	5.05*
Female	12	5	

*Chi-Square significant below .01 level.

Evaluation of Hypothesis I-B

No significant relationships exist between sex and: (A) actual versus expected grade placement; and (B) school attitude or perceived school problem.

The hypothesis is rejected. Analysis indicated that males were significantly more often below expected grade level. It was also found that while no differences were present with respect to

school attitude, boys were significantly more often perceived to be experiencing school problems than were girls.

Hypothesis I-C

Intelligence will not be significantly related to: (A) actual versus expected grade placement; and (B) school attitude or perceived school problem.

Intelligence

Primary Presenting Problem. No significant difference was noted with regard to intelligence level and type of presenting problem. A chi-square of 1.48, well below the .05 level of significance, was obtained when I.Q. was compared to problem type.

Of the 65 children for whom intelligence test scores were available at the time of admission, 50, totaling 77 percent, fell within the range of 90 to 119.

Grade Placement. Chi-square analysis, see Table 24, indicates that a significant difference exists between the trichotomized variable of intelligence level, and grade placement discrepancy at admission.

School Attitude-Perceived School Problem. No significant differences are noted between intelligence and the existence of either negative school attitudes or school problems, although there was some indication of a relationship.

Evaluation of Hypothesis I-C

Intelligence will not be significantly related to: (A) actual versus expected grade placement; and (B) school attitude or perceived school problem.

TABLE 24

Relationship of I.Q. to Expected Versus Actual Grade Placement Discrepancy (N=61)

I.Q.	Grade Placement Discrepancy			
	At Expected Grade Level	6 Mos. to 2 Years Below Expected Grade Level	2 Years and More Below Expected Grade Level	Chi-Square
High (139-110)	12	2	0	10.89*
Medium (109-90)	19	14	5	
Low (89-60)	2	4	3	

*Chi-Square significant at .05 level

The hypothesis is rejected. Significant difference was noted between intelligence and grade placement discrepancy. Children in the middle I.Q. range (90-109) were more often below grade level than were children in the higher (110-139) or lower (60-89) ranges.

Hypothesis I-D

Socio-economic status at admission will not be significantly related to: (A) primary presenting problem; or (B) actual versus expected grade placement.

Socio-Economic Status

Referral Source. When socio-economic status is viewed in terms of low, middle, and high categories, the lower status group, made up of the unemployed, unskilled and semi-skilled, contributes only 16 percent of the total sample while the middle and upper groups comprise 83 percent. These data are presented in Table 25.

TABLE 25

Distribution of Referral Sources
by Socio-Economic Class (N=75)

Referral Source	Lower		Middle		Upper	
	N	%	N	%	N	%
School	4	5	12	16	5	7
Guidance Clinic	1	1	10	13	1	1
Social Service Agency	4	5	6	8	4	5
Legal Agency	0	0	2	3	2	3
Family Physician	1	1	2	3	6	8
Private Psychiat/Psychol.	0	0	5	7	2	3
Family	3	4	4	5	1	1
Total	13	16	41	55	21	28

In addition, those children of lower socio-economic status are not usually referred by the referral sources which might be considered more mental health oriented. Guidance clinics, family physicians, and private psychiatrists and psychologists more often tend to refer the middle and upper class children. When the percentage of referrals are combined by socio-economic level, only 2 percent are of the lower class as opposed to 23 percent from the middle class, and 12 percent from the upper class were referred by these agencies. When schools are included the referral percentages per class, low to high, are 7, 39 and 19 percent respectively.

Primary Presenting Problem. It was expected that a greater number of children in the lower socio-economic group would be viewed as behavior problems, with learning problems becoming more frequent as socio-economic status increased. Percentages, per class, of both behavior and learning problems were relatively stable across all classes, with some tendency toward a decrease in behavior problems among the upper and professional socio-economic groups.

Chi square analysis indicated no significant differences between socio-economic status and type of initial problem.

Grade Placement. No statistically significant difference between grade placement and socio-economic status was noted. However, when the distribution of grade placement discrepancy is analyzed according to socio-economic status, an unexpected trend is noted. When per-class percentages are computed, approximately 60 percent of the children in each of the lower three classes are at grade level at the time of admission, as opposed to between 35 and 45 percent of the children in each of the upper two classes. The by-category percentages of children at and below grade level are included in Table 26.

TABLE 26

Distribution of Expected Versus Actual Grade Placement Discrepancy by Socio-Economic Status (N=68)

Grade Placement Discrepancy	Socio-Economic Status									
	Unemployed-Unskilled		Skilled		Lower White Collar		Upper White Collar		Professional Executive	
	N	% by class	N	% by class	N	% by class	N	% by class	N	% by class
At expected grade level	5	55	11	61	14	64	3	37	5	45
6 mos. to 2 yrs. below expected grade level	3	33	4	22	7	32	3	37	4	36
2 yrs. and more below expected grade level	1	11	3	17	1	4	2	25	2	18

School Attitude-Perceived School Problem. As was true with regard to intelligence, socio-economic status did not appear as a significant variable with respect to the existence of either a negative school attitude or school problem.

Children from upper middle class families were more often judged to have excellent school attitudes than were children from the two socio-economic extremes. However, these middle income children were also frequently rated as having poor school attitudes. As is indicated in Table 27, only children in the lowest socio-economic category had a higher percentage of children judged to have poor school attitudes.

TABLE 27

Distribution of School Attitude by Socio-Economic Status (N=71)

School Attitude	Socio-Economic Status									
	Unemployed-Unskilled		Skilled		Lower White Collar		Upper White Collar		Professional Executive	
	N	% by class	N	% by class	N	% by class	N	% by class	N	% by class
Excellent	0	0	1	6	1	4	1	11	1	9
Average	1	10	4	22	7	30	1	11	3	27
Poor	9	90	13	72	15	65	7	78	7	64

Evaluation of Hypothesis I-D

Socio-economic status at admission will not be significantly related to: (A) primary presenting problem; or (B) actual versus expected grade placement.

The hypothesis is accepted. No significant differences were noted with respect to socio-economic status and either primary presenting problem or grade placement discrepancy.

Summary

In an attempt to determine whether significant relationships existed with respect to data available at admission, particular demographic and adjustment variables were investigated.

By and large, chronological age appears as one of the more significantly related variables in terms of the child's admission status. Prior to approximately age nine, children identified as having adjustment difficulties are seen primarily as having behavioral problems. As age increases there is a commensurate increase in referrals made by schools, guidance clinics, and legal agencies.

From the school related point of view, there is a noticable increase in the number of children referred as being academic problems beginning at about age nine, or the fourth grade level. In addition, between the ages of 9 and 13 years there is an increase in the percentage of children functioning below grade level, and, in terms of the teacher's perception, a like increase in negative school attitudes and the existence of school problems.

Boys are referred more often than girls with the ratio being roughly three to one. While no significant differences were noted between boys and girls regarding behavioral versus achievement as the primary presenting problem, there was some tendency for girls to be more often viewed as withdrawn and boys as hyperactive. This latter fact may explain, in part, why girls were more often referred through

the family, guidance clinics, and family physicians, and boys more often by legal and social welfare agencies.

In school, 18 percent of the girls as opposed to 53 percent of the boys were at least one grade retarded academically. As expected, boys were significantly more often viewed as having school problems.

With regard to socio-economic status, there appears to be a disproportionately low representation of the lower socio-economic group. In addition, those agencies which are more traditionally associated with mental health, i.e., guidance clinics, private psychiatric and psychological services, and family physicians tend to more often refer the higher socio-economic classes. A trend exists suggesting that as socio-economic class increases, the number of children referred as a result of behavioral difficulties decreases. However, this inverse relationship was not significant.

CHAPTER III

THE RESEARCH SAMPLE AT DISCHARGE

Introduction

The major focus of this chapter will be on the change that occurred during treatment. Three factors related to change will be investigated: (1) change as it relates to psychiatric diagnostic category; (2) change as it relates to interpersonal relationship style; and (3) change as a function of duration of in-patient psychiatric treatment.

A description of the sample at discharge and comparison with admission status is also included. The descriptive data gathered on the child at discharge provides a more comprehensive picture of the child than the admission data and, consequently, allows for more follow-up relationship analysis.

Descriptive Data at Discharge

Chronological Age

Table 28 compares the chronological age of the research sample at admission and discharge. The mean C.A. increase was slightly greater than 5 months.

TABLE 28

Chronological Age at Admission and Discharge (N=75)

Time	Mean		S.D.		Range	
	Years	Months	Years	Months	Years	Months
Admission	10.75	129.04	2.67	32.08	5.16-15.17	62-182
Discharge	11.21	134.55	2.62	31.43	5.75-15.75	69-189

At discharge, the sample distribution of C.A. remained concentrated in the later elementary and junior high school level.

Duration of In-Patient Treatment

As has been mentioned previously, by law no child could remain in in-patient care for a period in excess of one year; thus, the length of treatment varied from one month to one full year. In determining the length of treatment zero to 15 days was considered a month, 15 to 30 days, after the first month, as an additional month. Table 29 summarizes the length of treatment of the research sample.

TABLE 29

Duration of Inpatient Treatment

Number of Months	N	%
1-2	9	12
3-4	25	33
5-6	16	21
7-8	11	15
9-10	8	11
11-12	6	8
Total	75	100

M=5.5 months
S.D.=2.9 months
Range=1-12 months

Over 50 percent of the sample was involved in in-patient treatment for periods of between three and six months.

Socio-emotional Variables at Discharge

The evaluation of change in this area of adjustment is based upon the perception of change as viewed by the treatment staff. In most instances, the discharge summary contained statements regarding

the quality of the child's relationships with his peers and adults. The evaluations made by the child's therapist, occupational and recreational therapists, the teacher, living unit staff, and the social caseworker were summarized and coded. As was true of the admission data, data at discharge were collected prior to the analysis of follow-up data.

Peer and Adult Relations. Table 30 illustrates the child's interaction style with peers at the time of discharge.

TABLE 30

Comparison of Status of Peer Relations at Admission and Discharge

Relationship Style	Admission		Discharged	
	N	%	N	%
Aggressive-Hostile	30	40	26	35
Withdrawn	35	47	13	17
No problem	10	13	36	48
Total	75	100	75	100

Twenty-six children, representing 35 percent of the sample, were judged to have made a positive change with respect to peer relationships. Twenty-two of these children had, at the time of admission, been characterized as withdrawn from peer interaction.

Similarly, the most significant change with regard to quality of adult-child relationships occurred among those children who, at the time of admission, were seen as withdrawn or dependent children. Table 31 summarizes the child's adult relationship style.

TABLE 31

Comparison of Status of Adult Relations
at Admission and Discharge

Relationship Style	Admission		Discharge	
	N	%	N	%
Hostile	34	45	27	36
Accepting	9	12	42	56
Withdrawn	20	27	3	4
Dependent	12	16	3	4
Total	75	100	75	100

Prognosis and Out-Patient Therapy Recommendations. Prognosis and therapy recommendations were made for each child by the therapist at the time of discharge. Table 32 summarizes the prognosis evaluations at the time of discharge. Sixty-four children were recommended for continued out-patient therapy.

TABLE 32

Clinical Prognosis (N=75)

Prognosis	N	%
Good	23	31
Guarded	34	45
Poor	18	24
Total	75	100

It may be noted that 52 children, comprising 69 percent of the research sample, were considered risk or high risk cases in terms of the likelihood of their making a satisfactory adjustment following cessation of in-patient treatment. In addition, among the 23 children

for whom a prognosis of "good" was made, 12 were considered to be in need of continued out-patient treatment in order to assist them in making an adequate post-treatment adjustment.

School Adjustment at Discharge

Comparison of the actual versus expected grade placement indicates that, in terms of relative discrepancy, no significant change occurred between admission and discharge. Table 33 illustrates the admission and discharge comparisons of actual and expected grade placement.

TABLE 33

Comparison of Actual and Expected
Grade Placement at Admission and Discharge

Grade Placement	Admission		Discharge	
	N	%	N	%
2 or more years below expected grade level	9	12	7	9
1 up to 2 years below expected grade level	21	28	23	31
At expected grade level	38	51	36	48
Above expected grade level	0	0	0	0
No data	7	9	9	12
Total	75	100	75	100
Mean actual grade level	= 4.8		5.3	
S.D. " " "	= 2.3		2.3	
Range " " "	= 1-9		1-10	
Mean expected grade level	= 5.6		6.2	
S.D. " " "	= 2.4		2.4	
Range " " "	= 1-9		1-10	

Evaluation of Overall School Adjustment at Discharge. Table 34 summarizes the perceptions of the teaching staff with regard to the child's general school attitude at discharge. In addition, an

evaluation based upon the teacher's judgment of the child's ability to maintain himself in public school is provided.

TABLE 34

Evaluation of Overall School Adjustment at Discharge

Variable	N	%
School Attitude		
Excellent	10	13
Average	44	59
Poor	18	24
No data	3	4
Total	75	100
School Problem		
Yes	37	49
No	35	47
No data	3	4
Total	75	100

While the teachers indicated that only 24 percent of the sample had a poor school attitude, 49 percent were seen as likely to experience some kind of school problem.

Hypotheses Concerning Change During Treatment

In order to better understand the significance of the status of the child at discharge, certain sub-groups of the sample were compared. Of particular interest was the question of whether or not differential change occurred between children in the various psychiatric categories. A further area of concern centered around the differential effects of treatment duration.

The following hypotheses, stated in the null form, were investigated in terms of admission to discharge change.

Factors Influencing Change During Treatment

Hypothesis II-A

No significant differences will be found between the psychiatric diagnostic label given the child and admission to discharge change in the child's: (A) relationship with adults; (B) relationship with peers; and (C) perceived school problem.

Psychiatric Diagnosis

Previous studies (Johnson and Rubin, 1964; and Huber, 1964) have indicated that positive behavioral and/or achievement adjustment tends to be correlated with the degree of emotional maladjustment, with the more severely disturbed making the least favorable adjustment.

Utilizing the psychiatric diagnostic label attached to the child upon admission to treatment, comparisons were made between the diagnostic categories and the admission to discharge change in quality of adult and peer relations and the existence of a school problem. Three diagnostic categories were created out of the four clinic labels. From most to least severe, these were: 1) Psychotic - Personality Disorders; 2) Psychoneurotic; and 3) Psychophysiological Disorders, with the number of children per category being 15, 58, and 2 respectively.

The following three tables, Tables 35, 36, and 37, provide the frequencies and percentages of children in each diagnostic category in terms of admission-to-discharge status with respect to: (1) adult relations; (2) peer relations; and (3) existence of a school problem as judged by teachers.

TABLE 35

Psychiatric Diagnosis and Admission-to-Discharge Status of Adult Relations (N=75)

Admission to Discharge Status of Adult Relationship Style	Psychotic-Personality Disorder		Neurotic Disorder		Psycho-Physiological Disorder	
Admission - Discharge	N	% per category	N	% per category	N	% per category
Hostile - Hostile	6	40	14	24	0	0
Hostile - Accepting	3	20	11	19	0	0
Withdrawn - Withdrawn	2	13	6	10	0	0
Withdrawn - Hostile	1	7	3	5	1	50
Withdrawn - Accepting	2	13	19	33	0	0
Accepting - Accepting	1	7	5	8	1	50
Total per diagnostic category	15	100	58	99	2	100

TABLE 36

Psychiatric Diagnosis and Admission-to-Discharge Status of Peer Relations (N=75)

Admission to Discharge Status of Adult Relationship Style	Psychotic-Personality Disorder		Neurotic Disorder		Psycho-Physiological Disorder	
Admission - Discharge	N	% per category	N	% per category	N	% per category
Hostile - Hostile	8	53	12	20	0	0
Hostile - Withdrawn	0	0	1	2	0	0
Hostile - Accepting	2	13	7	12	0	0
Withdrawn - Withdrawn	3	20	7	12	0	0
Withdrawn - Hostile	0	0	4	7	0	0
Withdrawn - Accepting	1	7	18	31	1	50
Accepting - Accepting	0	0	6	10	1	50
No data	1	7	3	5	0	0
Total per diagnostic category	15	100	58	99	2	100

TABLE 37

Psychiatric Diagnosis and Admission-to-Discharge Status of Perceived School Problems (N=75)

Admission to Discharge Status of Perceived School Problem		Psychotic-Personality Disorder		Neurotic Disorder		Psycho-Physiological Disorder	
Admission	Discharge	N	% per category	N	% per category	N	% per category
Yes	Yes	12	80	24	41	0	0
Yes	No	3	20	23	40	0	0
No	No	0	0	6	10	2	100
No	Yes	0	0	1	2	0	0
No data		0	0	4	7	0	0
Total per diagnostic category		15	100	58	100	2	100

A smaller percentage of the more severely disturbed children were seen as improved in either adult or peer relations, or as being improved considering school problems. As might be expected, children in the psychophysiological category, while too few to allow definitive statements to be made, tend not to experience significant problems in any of the three areas.

In order to determine whether statistically significant differences existed between the diagnostic categories, the change status was dichotomized into those children who exhibited no positive change from admission to discharge, and those who were either positive at admission and discharge or who demonstrated positive change during treatment. The following three tables present the chi-square analysis of difference between the psychotic-personality disorder group and the neurotic group. Because only two children were diagnosed as psychophysiological problems, this group was not included in the analysis.

Tables 38, 39, and 40 present the between group change in adult relations, peer relations, and perceived school problems.

TABLE 38

Psychiatric Diagnosis and Change in Adult Relations (N=73)

	Psychotic-Personality Disorder	Neurotic Disorder	Chi Square
No positive change	9	23	1.96
Positive and positive change	6	35	

TABLE 39

Psychiatric Diagnosis and Change in Peer Relations (N=73)

	Psychotic-Personality Disorder	Neurotic Disorder	Chi Square
No positive change	12	27	5.39*
Positive and positive change	3	31	

*Significant at .05 level

TABLE 40

Psychiatric Diagnosis and Change in Perceived School Problem (N=69)

	Psychotic-Personality Disorder	Neurotic Disorder	Chi Square
No positive change	12	25	5.47*
Positive and positive change	3	29	

*Significant at .05 level

No difference was noted between the groups in terms of change in adult relationship quality. However, with reference to peer relationships and perceived school problems, the neurotic group demonstrated significantly more positive change than did the more severely disturbed group. Differences between the two groups are found in: 1) the relatively greater number of neurotic children who were seen as withdrawn from peer interaction but who became more accepting of peers; 2) the higher percentage of severely disturbed children who were unable to overcome their hostile attitude towards peers; and 3) the much larger percentage of severely disturbed who were viewed as school problems both at admission and discharge.

Evaluation of Hypothesis II-A

No significant differences will be found between the psychiatric diagnostic label given the child and admission to discharge change in the child's: (A) relationship with adults; (B) relationship with peers; and (C) perceived school problem.

While no difference was found between the psychiatric categories and admission-to-discharge change in adult relations, significant differences were obtained in terms of both peer relationship change and change in perceived school problems. Chi-square analysis indicated that a greater number of the less severely disturbed children were able to make positive change in each of these areas of adjustment. In light of these findings, the hypothesis is rejected.

Interpersonal Relationship Style

Tables 41 and 42, respectively, illustrate: (A) the adult and peer relationship changes between children seen as school problems at

admission but not at discharge; and (B) change in relationship style among those who did not make favorable adjustment with regard to school problems.

TABLE 41

Change in Peer and Adult Relations Among Children Improved in School Problems (N=26)

Status of Relationships		Peer Relations		Adult Relations	
Admission	Discharge	N	%	N	%
Hostile	Hostile	1	4	1	4
Hostile	Accepting	4	15	8	31
Withdrawn	Withdrawn	6	23	1	4
Withdrawn	Accepting	12	46	13	50
Accepting	Accepting	2	8	2	8
Withdrawn	Hostile	1	4	0	0
Accepting	Hostile	0	0	1	4
Total		26	100	26	100

TABLE 42

Change in Peer and Adult Relations Among Children Unimproved in School Problems (N=36)

Status of Relationships		Peer Relations		Adult Relations	
Admission	Discharge	N	%	N	%
Hostile	Hostile	17	47	17	47
Hostile	Withdrawn	1	3	0	0
Hostile	Accepting	44	11	4	11
Withdrawn	Withdrawn	4	11	5	14
Withdrawn	Hostile	2	6	3	8
Withdrawn	Accepting	3	8	2	6
Accepting	Accepting	2	6	4	11
Accepting	Hostile	1	3	1	3
Accepting	Withdrawn	2	6	0	0
Total		36	100	36	100

As a group, the children seen as improved in the area of school problems were more often children initially viewed as withdrawn from both peer and adult interaction at admission.

Roughly 70 percent of the children in the improved group were seen as accepting of peers, and over 80 percent as accepting of adults at the time of discharge, while only 25 percent of the unimproved group were accepting of peers, and 28 percent accepting of adults at discharge.

While the improved group were seen as withdrawn from interaction at admission, the unimproved group more often appeared hostile and aggressive in both peer and adult relations. It is also interesting to note that within the improved group, of those children seen as initially withdrawn, 46 percent were accepting of peers and 50 percent accepting of adults at discharge. This is again in contrast to the unimproved group where, of the children seen as initially hostile and aggressive towards peers and adults, 47 percent demonstrated no change from admission to discharge.

Assessment of Change in Short and Long Term Treatment Groups

The issue of duration of treatment and post-treatment adjustment raises some interesting questions. Are children who are hospitalized for longer periods of time more severely disturbed? Do factors such as age, I.Q. level, socio-economic status, or sex represent significant factors with respect to treatment duration? Are there differences between short and long term treatment groups in terms of achievement or affective adjustment?

Heuchert (1969) found that children hospitalized for shorter periods of time tended to be older, female, achieving higher

academically, and possessing fewer school-oriented problems than children who remained in treatment for longer periods. However, it was also found that the longer-term patients, while more severely disturbed than the short term group, made greater academic gain than did the short term group.

In the present study 34 children were hospitalized for a period of from 1 to 4 months and constituted the short term treatment group. The remaining 41 children, hospitalized from 5 to 12 months, made up the long term treatment group.

Hypothesis II-B

There will be no significant difference between the long and short term treatment groups with respect to: (A) chronological age; (B) sex; or (C) intelligence level.

Demographic Variables

Treatment Duration and C.A. Table 43 presents the means, standard deviations and range of the chronological ages of the short and long term treatment groups.

TABLE 43

Chronological Age of Short and Long Term Treatment Groups at Admission (N=75)

	Mean		S.D.		Range		
	Mos.	Years	Mos.	Years	Mos.	Years	t-test
Short term	135	11.25	34	2.83	66-182	5.5-15.2	t-test
Long term	124	10.33	29	2.42	62-180	5.2-15.0	1.47

A t-test of the difference between the two means indicated that no significant difference existed between the group. However, the mean age of the short term group was 11 months higher than that of the long term group.

Treatment Duration and Sex. The percentage of male and female children in each group indicated that girls accounted for 32 percent of the short term group and 20 percent of the long term group. However, as shown in Table 44, there was no significant difference between the two groups with regard to sex.

TABLE 44

Sex Differences in Short and Long Term Treatment Groups (N=75)

	Short Term	Long Term	Chi-Square
Male	23	33	1.64
Female	11	8	

Treatment Duration and Intelligence. The mean intelligence levels of both groups were compared both at admission and again at discharge. As is indicated in Table 45, no significant difference was found at either point in time.

TABLE 46

Intelligence Levels of Short and Long Term Treatment Groups at Admission and Discharge

Treatment Duration		Mean	S.D.	Range	t-test
Adm. (N=65)	Short term	100.1	16.5	60-139	.06
	Long term	99.9	11.5	65-125	
Dis. (N=53)	Short term	101.7	16.4	60-140	.64
	Long term	99.2	11.6	65-117	

Evaluation of Hypothesis II-b

There will be no significant difference between the long and short term treatment groups with respect to: (A) chronological age; (B) sex; or (C) intelligence level.

The hypothesis is accepted since no significant differences were found between the two groups on any of the three variables. However, the findings are in agreement with Heuchert's findings in terms of age and sex. The short term group was older and contained a relatively higher proportion of females than did the long term group.

Treatment Duration and Family and Psychiatric Variables

Some interesting trends are noted in the demographic data relating to the family and to the psychiatric findings. As is shown in Table 46, 52 percent of the long term treatment group are products of broken homes where one or both natural parents are missing. This is in sharp contrast to the short term treatment group where 73 percent of the children came from intact families made up of both natural parents.

TABLE 46

Parental Constellation of Short and Long Term Treatment Groups (N=75)

Parental Constellation	Short Term		Long Term	
	N	%	N	%
Natural parents	25	73	20	48
Step mother and natural father	1	3	6	15
Step father and natural mother	2	6	6	15
Father only	0	0	1	2
Mother only	5	15	2	5
Foster parents	1	3	6	15
Total	34	100	40	100

The socio-economic status of the two groups is displayed in Table 47. The lowest socio-economic category accounts for 26 percent of the short term group and only 12 percent of the long term group. The middle income categories of skilled and lower white collar workers represent 40 percent of the short term group and 65 percent of the long term group, while the upper two socio-economic groups contribute 35 percent of the short term and 24 percent of the long term groups.

TABLE 47

Socio-Economic Status of Short and Long Term Treatment Groups (N=75)

Socio-Economic Status	Short Term		Long Term	
	N	%	N	%
Semi-skilled, Unskilled and Unemployed	9	26	4	12
Skilled	7	20	10	24
Lower White Collar	7	20	17	41
Upper White Collar	6	18	3	7
Professional and Executive	5	15	7	17
Total	34	99	41	101

In terms of numbers of children per socio-economic category, the short term group demonstrates a relatively flat frequency curve while the long term group is leptokurtic. This again supports the notion that a disproportionately large number of the middle and upper-middle classes are utilizing psychiatric facilities, and utilizing them for longer periods of time.

Within the long-term treatment group ten children, 24 percent of the group, were diagnosed as either psychotic or personality disorder children. The short term group contained no children diagnosed

as psychotic and only five were diagnosed as personality disorders. The frequencies and percentages of children within the two groups falling into the four psychiatric classifications are presented in Table 48.

TABLE 48

Psychiatric Diagnosis of Short and Long Term Treatment Groups (N=75)

Psychiatric Diagnosis Category	Short Term		Long Term	
	N	%	N	%
Psychophysiological	1	3	1	2
Psychoneurotic	28	82	30	73
Psychotic	0	0	3	7
Personality Disorder	5	15	7	17
Total	34	100	41	99

While a greater percentage of the short term group were diagnosed as psychoneurotic, the likelihood of post-treatment failure, as indicated by the prognosis at discharge, greatly favors the long term group. As Table 49 indicates, almost double the percentage of children in the short term group, as opposed to the long term group, were thought to have a poor prognosis.

TABLE 49

Discharge Prognoses of Short and Long Term Treatment Groups (N=75)

Prognosis	Short Term		Long Term	
	N	%	N	%
Good	10	29	13	32
Guarded	13	38	21	51
Poor	11	32	7	17
Total	34	99	41	100

Treatment Duration and Achievement Change

Grade Achievement. Comparisons of short versus long term treatment groups with reference to their actual grade placement were made at both admission and discharge. At admission, the short term group was seen as functioning significantly above the long term treatment group. As is indicated in Table 50, however, the difference was no longer significant at the time of discharge.

TABLE 50

Grade Achievement Level of Short and Long Term Treatment Groups at Admission and Discharge

Duration		Mean	S.D.	Range	t-test
Adm. (N=67)	Short Term	5.6	2.4	2.0-9.6	2.14*
	Long Term	4.4	2.1	.1-7.7	
Dis. (N=66)	Short Term	5.9	2.3	2.0-10.0	1.74
	Long Term	4.9	2.3	.9-9.1	

*Significant at .05 level

Reading Achievement. Reading achievement scores at the time of admission were available on only 49 of the 75 children. While short term subjects had a mean reading grade level of 6.0, as opposed to 4.6 for the long term subjects, this difference was not significant. Table 51 summarizes the reading achievement levels of the two groups at admission. Unfortunately, no reading achievement tests were administered at the time of discharge.

Grade Placement Discrepancy. When the admission-to-discharge change in grade placement discrepancy among the short and long term treatment groups was investigated, a larger percentage of the long term group was six months to two years behind in terms of achievement

TABLE 51

Reading Achievement Level of Short and Long Term Treatment Groups at Admission (N=40)

Treatment Duration	Mean	S.D.	Range	t-test
Short Term	6.0	3.5	1.6-12.9	1.57
Long Term	4.6	1.8	1.1-8.5	

level at both admission and discharge. Sixty-nine percent of the short term group were at grade level at both admission and discharge, as opposed to only 47 percent of the long term group. In general, and as has been noted earlier, children who were below grade level, while not usually falling further behind during treatment, were seldom able to recoup the loss in order to achieve at expected grade level. This finding is consistent with the findings of both McKinnon (1969) and Heuchert (1969) in their studies of the adjustment of children following either special class or in-patient psychiatric treatment.

Hypothesis II-C

Between the long and short term treatment groups, no significant differences will exist with regard to change in their relationship styles toward adults or peers from admission to discharge.

Treatment Duration and Behavioral Change

Adult Relations. When the total sample was investigated relative to change in quality of adult-child interactions, chi-square significant above the .01 level was obtained. Most obvious change took place among those children who were seen as being withdrawn-dependent at admission but accepting of others at discharge. These results are presented in Table 52.

TABLE 52

Admission-to-Discharge Change in
Adult Relations - Total Sample (N=75)

		Discharge			
		Hostile	Accepting	Withdrawn Dependent	Chi-Square
Admission	Hostile	20	14	0	19.53*
	Accepting	2	7	0	
	Withdrawn-Dependent	5	21	6	

*Significant at .01 level

Two interesting trends are noted when change in quality of adult relations is viewed in terms of the short versus long term treatment groups.

Greatest change in the short term group occurs among those children who were initially seen as withdrawn-dependent. Of 12 children so diagnosed, 10 were seen as accepting of adult relations at discharge while 2 remained withdrawn-dependent. Of 17 children in this group who were initially seen as hostile in their interactions with adtuls, only four were seen as accepting of adults at discharge.

Twenty of the long term treatment group were considered withdrawn-dependent at admission. Of these, 5 were considered hostile at discharge, 11 as accepting of adults, and four remained as they were at admission. Seventeen long term children were considered hostile toward adults at admission. At discharge, 7 remained hostile, with the other 10 children appearing accepting of adults.

It would appear that while children considered to be withdrawn-dependent toward adults tend to improve within a relatively short

period of time, children viewed as hostile-aggressive hold more tenaciously to their behavior. In addition, greater positive change is noted among children who are withdrawn-dependent than among those considered hostile-aggressive.

Peer Relations. Much the same trend as was noted with respect to adult relations was also noted with respect to change in peer relations, both in the total sample and in the short and long term treatment groups. In the total sample the most frequent change occurred among those children who were withdrawn from peer interaction at admission in that they were more often seen as having made positive adjustment at the time of discharge. Among the 30 children seen as aggressive-hostile in their peer interactions prior to treatment, only 9 were viewed as having no problem with peer interaction at discharge.

Investigation of differences between the two treatment groups again demonstrated that greater change, although below significance, occurred in the short term group, particularly among the withdrawn children, and that generally fewer of the hostile-aggressive children in either group made positive adjustment in their peer relations by the time of discharge.

Evaluation of Hypothesis II-C

Between the long and short term treatment groups, no significant differences will exist with regard to change in their relationship styles toward adults or peers from admission to discharge.

Although greater change did occur among the short term group, the level of confidence did not reach statistical significance and the hypothesis is therefore accepted.

Hypothesis II-D

No significant differences will be found between the long and short term treatment groups with regard to admission-to-discharge change in their school attitudes.

School Attitude. A significant change in school attitude was noted for the entire sample with an obtained chi-square well above the .01 level of confidence, as is shown in Table 53.

TABLE 53

Admission-to-Discharge Change
In School Attitude-Total Sample (N=70)

		Discharge			
		Excellent	Average	Poor	Chi-Square
Admission	Excellent	4	0	0	34.80*
	Average	2	13	1	
	Poor	2	31	17	

*Significant at .01 level

Because of the problem of extremely low obtained cell frequencies in both the long and short term groups, chi-square analysis was not attempted. In both treatment groups children judged to have a poor school attitude at the time of admission were considered to have generally improved school attitudes at the time of discharge.

Evaluation of Hypothesis II-D

No significant differences will be found between the long and short term treatment groups with regard to admission-to-discharge change in their school attitudes.

Due to low cell frequencies, the hypothesis could not be subjected to statistical analysis. In general, children in both groups who were judged to have poor school attitudes at admission tended to improve.

Perceived School Problem. Of 62 children who, at admission, were viewed as having a school problem, 42 percent were judged to have made sufficient gain in either their behavioral or achievement maladjustment so as to be considered unlikely to have a school problem at the time of discharge.

In terms of change within the two groups, 27 children in the short term group were seen as school problem children at admission. Of these, 10 representing 37 percent of the group were thought to have made adequate adjustment by the time of discharge. Interestingly, the long term group demonstrated a greater percentage of children improved who had initially been seen as school problem children. Sixteen of the 35 long term children, 46 percent, were thought unlikely to be school problems at discharge.

Summary

The evaluation of change during treatment is a difficult task which must be viewed with the understanding that the assessment of change is often a subjective one, and thus susceptible to the errors noted by McNeil.

Generally, the more severely disturbed children made less adequate adjustment in terms of quality of interpersonal relationships or overall school adjustment.

Psychotic and personality disorder children are typically more hostile and aggressive in their interactions with others, while the neurotic child is more apt to be withdrawn. While no significant difference was obtained between the two groups with reference to adult relationship change, the less severely disturbed children did make significantly more positive change in both peer interactions and school problems.

In relationship to improvement, the withdrawn children made greater positive change in their interactions with others, and hostile-aggressive behavior more often characterizes that group of children seen as having serious school problems. That there is differential change between the two groups depending upon the kind of interpersonal relationship problem may be explained on the basis of degree of problem difficulty. It is possible that the withdrawn-dependent children in the short term group were less withdrawn or dependent than were those children in the long term group. Conversely, the degree of severity of hostile aggressive behavior among the short term group may have been greater than that of the long term group and therefore considered less amenable to treatment.

Some support for the above suggestion may be inferred from discharge evaluations of perceived school attitudes and expectant school problems. While school attitudes for the entire sample were judged greatly improved at discharge, a higher percentage of the long term treatment group were considered unlikely to experience school problems after discharge.

Children who underwent longer psychiatric treatment tended to be slightly younger, were experiencing greater reading retardation,

and greater overall academic deficiency as indicated by their lower actual grade placement as compared to their expected grade level. Neither intelligence or sex proved to be of significance in differentiating between the two groups.

A greater number of the long term group were from the middle socio-economic strata and from homes where one or both of the natural parents were missing.

The long term group contained a greater number and percentage of children who fell into the more severe psychiatric diagnostic categories. However, children in the short term treatment group were more often considered a poor adjustment risk upon discharge.

The quality of interpersonal interactions of the sample was seen as generally improved between admission and discharge, with the greatest positive change seen among children initially viewed as withdrawn-dependent. Those children involved in treatment for a shorter period of time were more likely to make significant admission-to-discharge change, again, occurring most often among the withdrawn-dependent children.

Greater improvement in both adult and peer relationship was noted among those children in the short term group who were withdrawn-dependent than among similarly diagnosed children in the long term group. However, children considered hostile-aggressive seemed to make slightly greater positive adjustment if they were hospitalized for a longer period of time.

CHAPTER IV

THE CHILD AT FOLLOW-UP

Introduction

This chapter includes a discussion of the normative data at the time of follow-up, and analysis of the differences found among various sub-groups of the sample with respect to certain adjustment variables. Five specific areas of adjustment at follow-up were of concern to the researcher. These were: (1) grade placement; (2) school attitude; (3) perceived school problem; (4) peer relations; and (5) adult relations.

The descriptive and normative data include demographic information, achievement ratings, and ratings of the child's socio-emotional adjustment.

Dimensions and Sources of Follow-Up Data

Following confirmation by the family or guardian concerning the degree and kind of involvement they were willing to accept, letters were sent by the researcher to each of the three school districts involved indicating briefly the nature of the study.(see Appendix B) Appointments were made with the Superintendents or their representatives at which time the purpose of the study, the instruments to be used, and an approximation of the time involvement for the teacher and child were discussed in depth.

The purpose of the follow-up data was to allow for an assessment of the child's adjustment following treatment. The child's academic adjustment was determined on the basis of: achievement test scores, when they were available; teacher perceptions and ratings; and the degree of academic retardation or excelleration. Socio-emotional adjustment at follow-up was assessed by: the child's self ratings of esteem and school attitudes; and by teacher or parent ratings and perceptions with regard to areas of school problems and behavior manifestations. The child's cumulative school file was utilized to gather information on test scores; I.Q.; and age.

Only 53 percent of the sample was available for complete follow-up data collection. Data on an additional 27 percent of the sample were available to a limited degree. In the case of the latter, the parent or guardian often indicated they did not wish to have the child and/or the school contacted due to concern over how the child might react to a reinvolvement with VTCC. A questionnaire was developed to be completed by the parent or guardian for these children. Table 54 indicates the dimension, source of information, and, with respect to any given dimension, the number of children for whom data were available.

Child and/or School Interviews

In instances where permission had been granted to contact the child and/or the school, individual appointments were made for each child and each teacher. When possible, teachers were interviewed prior to the interviewing of the child. During the teacher interview the nature of the study was explained and each of the teacher instruments

TABLE 54

Dimension and Source of Data for Sub-Samples at Follow-Up

Dimension	Source	Size of Sub-Sample (N)
Chronological Age	School Records	75
Reading Achievement Grade	School Records	33
Achievement Level	Teacher Judgement	
Reading		44
Arithmetic		45
Spelling		43
General Academic Status	Teacher, Parent Judgement	57
School Attitude	Teacher, Parent Judgement	57
Perceived School Problem	Teacher, Parent Judgement	57
Placement	School, Hospital and Parent Reports	75
School Attitude Scale	Child Self-Report	40
Self Esteem Inventory	Child Self-Report	40
AML Behavior Rating	Teacher, Parent Judgement	59
Symptomatic Behavior Rating Scale	Teacher, Parent Judgement	59

was reviewed in order to insure that the teachers fully understood what they were to do.

Teacher Ratings: With regard to socio-emotional adjustment as rated by the teacher or other school personnel, the following dimensions were evaluated. Utilizing the top five most frequently occurring behavior problems found by Morse, et. al. (1964), teachers were asked to judge each behavior on a "yes-no" basis. Two assessments of behavior were utilized. The first, developed by the San Mateo County School System, assesses the child's behavior in terms of three factors; 1) Aggressive-Outgoing, 2) Mood Internalizing, and 3) Learning. In addition, Quay's (1964) Symptomatic Behavior Rating Sheet was completed by the teacher. This instrument yields three personality patterns: (1) Conduct Problem; (2) Personality Problem; and (3) Inadequate-Immature type children.

The teacher was asked to evaluate certain school aspects: the child's attitude toward school; whether or not the child was seen as having a school problem; the child's achievement level with respect to reading, arithmetic, spelling; and finally, a rating of the child's academic problems based upon an adaptation of the Project Re-Ed Pupil Information Form. (See Appendix C).

Self Ratings by Child: During the child interviews, two assessment instruments were used. The first, The School Attitude Scale, which was developed and used by the Midwest Center for Pupil Personnel Services, measures five dimensions: school anxiety; academic success and morale; self-perceived trouble maker; general negative interpersonal relations; and peer relations. The Coopersmith Self-Esteem

Inventory was also administered which assesses the child's perceptions of self, social, home, and school, self-esteem. In addition, a total self-esteem index is provided by combining the scores of the self, social and school factors. (See Appendix D)

Questionnaire

The questionnaire was developed in order to secure comparable data on children whose parent or guardian preferred that no contact be made with the child or the school. The information asked for was personal, academic, and behavioral. Whenever possible, the same instruments as those completed by the teacher were included in the questionnaire. (See Appendix E)

Data Analyses Procedure

The data were analyzed utilizing the University of Michigan Systems 360 Computer. Two basic computer programs were used in the data analysis. The BLITZ program mass produces bi-variate frequency tables and chi-square analysis for each variable with all other designated variables. This program was introduced in order to statistically analyze the qualitative variables. Utilizing this program, it was possible to ascertain whether significant differences existed, for example, between particular groups within an adjustment variable and a variety of other variables such as sex, referral source, ordinal position of the child in the sibship, and teacher ratings.

Analysis of the quantitative data was accomplished through use of the analysis of variance program. This program is designed to compare several independent samples with respect to mean values on a given variable.

In addition to these two computer programs, multiple correlation coefficients were also secured on a large number of variables.

Description of the Sample At Follow-Up

The Discharge to Follow-Up Interval

The mean length of time between discharge and follow-up was slightly over 23 months with a standard deviation of 16 months. The range was from 1 month to 5 years 4 months.

Educational Placement at Follow-Up

Table 55 indicates the placement status of the children at follow-up.

TABLE 55

Educational Placement of Sample at Follow-Up (N=75)

Placement Status	N	%
Regular Class	43	57
Special Class	6	8
Therapeutic Institution	3	4
Penal Institution	3	4
Special School (private, military)	1	1
Drop-out	9	12
Military Service	1	1
Unknown	9	12
Total	75	99

Grade Placement and Reading Grade Level

The mean actual grade placement, the expected grade placement (based on chronological age at the time of follow-up), and available reading achievement scores at follow-up are presented in Table 56.

TABLE 56

Actual, Expected and Reading Grade at Follow-Up

	M	S.D.	Range
Actual Grade Placement (N=52)	6.4	2.5	1.9-12.9
Expected Grade Placement (N=57)	7.4	2.7	1.9-12.9
Reading Achievement Grade (N=33)	5.3	2.6	1.5-10.0

While the mean length of time between discharge and follow-up was 23 months, the mean expected grade placement level increase between discharge and follow-up was only 12 months. The reason for this discrepancy is that many of the older children were no longer in school or their whereabouts at follow-up could not be established.

Teacher Ratings of Achievement Levels

Teachers were asked to rate the child's achievement status in reading, arithmetic, and spelling. The ratings asked that the teacher place the child in the upper one-fourth, middle one-half, or lower one-fourth of his class in each of the achievement areas. Table 57 shows these ratings.

It is interesting to note that of 44 children rated in reading, 16 were rated in the lower one-fourth and 16 in the upper one-fourth of the class. In both arithmetic and spelling almost twice as many children were rated in the lower one-fourth as in the upper fourth.

As a measure of reliability of the teacher ratings of the child's academic ability, two additional ratings were requested. The first, adapted from the Project ReEd Follow-up battery, asked that the teacher rate the child in terms of his general academic status. The second

TABLE 57

Teacher Ratings of Achievement
Levels at Follow-Up (N=75)

		N	%
Reading:	Upper 1/4	16	21
	Middle 1/2	12	16
	Lower 1/4	16	21
	No data	31	41
Arithmetic:	Upper 1/4	9	12
	Middle 1/2	16	21
	Lower 1/4	20	27
	No Data	30	40
Spelling:	Upper 1/4	12	16
	Middle 1/2	9	12
	Lower 1/4	22	29
	No Data	32	43

requested that the teacher make two assessments of the child's performance in school. First, the child's general school attitude, and second, whether or not the child was perceived as having a significant school problem. Significant school problem was defined to the teacher as being any situation, behavioral or academic, which, in the teacher's estimation, required some intervention in addition to, or instead of, the regular school program. The results of these two ratings are presented in Tables 58 and 59.

Comparison of the teacher ratings of academic status with the ratings of achievement and the ratings of perceived school problem indicate that the teachers are quite consistent in their ratings. Roughly 20 percent of the children were rated as being in the lower one-fourth of the three achievement area, while 21 percent were judged as either being complete misfits in the school environment or doing

TABLE 58

Teacher Rating of General Academic Status
At Follow-Up (N=75)

Status of Child	N	%
Complete misfit academically. Lacks skills needed to learn current material.	9	12
Doing failing work. May receive social promotion.	7	9
Doing passing work but low enough, or enough below capacity to cause concern.	10	13
Satisfactory work. In line with capacity.	24	32
Work is above average.	7	9
No data.	18	24
Total	75	99

TABLE 59

Teacher Rating of School Attitude and
Perceived School Problem (N=75)

School Attitude:	Excellent	12	16
	Average	34	45
	Poor	11	15
	No data	18	24
School Problem:	Yes	23	31
	No	34	45
	No data	18	24

failing work. When the third category of academic status is included with the first two, 34 percent of the children are rated as having poor school status. This compares favorably to the teacher ratings of perceived school problems which indicated that the teachers felt 31 percent of the children did have significant school problems.

Ratings of School Attitude and Behavior

Of the total sample of 75 children, 40 were available for direct interview at follow-up. Standardized measures of school attitude and

self-esteem were administered to these 40 children. The results of the testing are presented below.

School Attitude Scale. The School Attitude Scale attempts to measure five aspects of the child's perceptions of concern about school and/or his perceptions of how he relates to others in the school setting. The five measures are: 1) school anxiety; 2) academic success and morale; 3) self-perceived trouble maker; 4) negative interpersonal relations; and 5) negative peer relations. Table 60 displays the results of this measure and comparison with the standardized norms.

TABLE 60

Results of School Attitude Scale (N=40)

Measure	Sample Score		Norms	
	M	S.D.	M	S.D.
School Anxiety	2.4	.6	2.5	.7
Academic Success and Morale	3.1	.5	3.2	.6
Self Perceived Trouble-Maker	2.8	.6	2.8	.6
General Negative Interpersonal Relations	2.8	.7	2.8	.6
Peer Relations	2.9	.6	2.7	.4

The scores of the research sample closely approximate the norms as well as the results found by previous researchers, Heuchert (1969) and McKinnon (1969). The area in which the child expresses the greatest degree of positive attitude is in academic success and morale, while least positive attitudes are in the area of school anxiety. It seems rather paradoxical that on the one hand the child indicates that he is most comfortable in terms of his academic performance and feelings toward success in school, and on the other, expresses concern over failure in the school situation.

This indication of ambivalence over school may be accounted for in one of two ways. It is possible that the child is, in fact, succeeding in the achievement area, but that he is often concerned over ultimate failure and, thus, becomes anxious. The other possibility is that the child is anxious over school failure because he is not achieving well, but either consciously or unconsciously refuses to admit to his learning difficulties. Of the 40 children to whom the School Attitude Scale was administered, 25 were at least one grade behind expected grade level based on their chronological age. In addition, 12 of these 25 children were rated by the teacher as functioning in the lower one-fourth of the class academically. These two findings perhaps lend support to the notion that these children are anxious over school failure but will not admit to their academic failure.

Self-Esteem Inventory. The Coopersmith Self-Esteem Inventory yields measures of the child's self-,social-, and school self-esteem. The combining of these three factors provides a measure of the child's total self-esteem. The mean score of the norm population was 100 on each of the measures. Table 61 presents the results of the obtained scores of the 40 children to whom the inventory was administered.

TABLE 61

Results of the Coopersmith Self-Esteem Inventory (N=40)

	Present Study		Heuchert Study	
	Mean	S.D.	Mean	S.D.
Self	91	24	96	23
Social	97	25	92	25
School	98	17	97	22
Total Self-Esteem	93	23	93	22

These results indicate that in general the students viewed themselves fairly positively. However, the self measure was slightly lower than the results obtained by Heuchert and McKinnon. The total self-esteem scores was identical to Heuchert's results, and lower than the 96 found in McKinnon's study.

AML Behavior Rating Scale. This scale, developed for the San Mateo County Schools, (Beisser and Van Fleet, 1962), utilizes the teachers' ratings of behavior problems in attempting to identify behavior problem children. It has been suggested that the child's school behavior often reflects the existence of difficulties between the child and his family. The scale measures three factors in the child's school behavior: 1) Aggressive-Outgoing; 2) Internalizing-Moody; and 3) Learning Problem. In addition, a total score is obtained by totaling the three sub-scores. While no standardized scores are available for the instrument, the higher the factor score, the higher the total score, the less favorable the child's status in the school environment. Table 62 shows the results of the measure and the total possible range for each factor.

TABLE 62

Results of AML Behavior Rating Scale (N=59)

Factor	Mean	S.D.	Possible Range
Aggressive-Outgoing	11	5	5-25
Internalizing-Moody	11	4	5-25
Learning Problem	2	1	1-5
Total AML Score	24	8	11-55

Summary

The mean length of time between discharge and follow-up of the research sample was just under 2 years. Teacher ratings of the child's status in school indicated that about 20 percent of the sample were in the lower quartile of their class in achievement and 21 percent were failing academically. Thirty-one percent of the children were viewed as having school problems significant enought to require intervention in addition to the regular school program.

Combined categories of the teacher ratings of academic status indicated concern on the part of the teachers over the achievement of 34 percent of the sample.

On standardized measures of school related attitudes, self-esteem, and behavior problems, it was found that scores were very similar to the norms and those obtained in previous follow-up research. Anxiety over failure in school was the most pressing concern of the children. In general, the children felt they were achieving well in school, but it is suggested that this appraisal is an unrealistic assessment.

The Adjustment Variables and Identified Sub-Groups

Five adjustment variables were considered in terms of the change that occurred from admission to discharge, and the relationship of change to the measures of behavior and achievement obtained at follow-up. The five adjustment variables were: (1) the discrepancy between actual and expected grade placement; (2) change in school attitude; (3) change in the perceptions of other with respect to the existence of school problems; (4) change in peer relationship style; and (5) change in adult relationship style.

On each of these variables sub-groups of children were identified based upon the direction or kind of change that occurred. A description of the change groups in each of the five adjustment variables is provided below.

Adjustment Variable I--Grade Placement

Three groups were identified with respect to grade placement. The At Grade Level Group were those children who were at grade level at all three points in time, admission, discharge and follow-up. A second group were children who were below grade level at admission and discharge but not at follow-up. Children who were below grade level at all three points in time made up the third group.

Adjustment Variable II--School Attitude

Three groups were identified based on school attitude. The first group was made up of those children seen as positive in their school attitude at all points in time. Children who were seen as having negative school attitude at admission but positive at discharge made up the second group. Those children who maintained negative school attitudes at both admission and discharge comprised the third group.

Adjustment Variable III--Perceived School Problem

Three groups were identified. The first group were those seen as school problems at admission only. Those who were seen as school problems at both admission and discharge accounted for a second group. Children seen as school problems at admission, discharge, and follow-up made up the third group.

Adjustment Variable IV--Peer Relations

With regard to quality of peer relations, three groups were identified. A first group was children who were considered negative toward their peers at admission but who made positive change by the time of discharge. Second were children judged to be negative towards peers at admission, and considered hostile-aggressive towards peers at discharge. Children who were negative toward peers at admission and who were seen as withdrawn from peer interaction at discharge made up the third group.

Adjustment Variable V--Adult Relations

The three groups identified in terms of adult relations are the same as those of the Peer Relations variable.

Hypotheses Concerning Sub-Group Differences on Adjustment Variables

On each adjustment variable, three sub-groups of children were identified based upon the status of the child at admission, discharge, and follow-up with respect to the particular variable. In as much as the characteristics of the sub-groups were different for most variables, the sub-groups will be described in the sections dealing with each variable. Of specific concern was the question of whether or not the differences between the sub-groups were further contaminated by certain demographic, behavioral, or achievement differences.

The order of analysis of the adjustment variables will be: (1) grade placement differences; (2) school attitude differences; (3) school problem differences; and (4) analysis of adult and peer relationship differences. The adult and peer relationship variables were combined for analysis since the characteristics of the sub-groups for these two variables were identical.

Grade Placement Differences

The following designations were assigned to the three sub-groups of this adjustment variable: (1) those children who were at grade level at admission, discharge and follow-up were labeled, At Grade; (2) those below grade level at admission and discharge but not at follow-up were labeled, Below A & D; (3) children below grade level at admission, discharge, and follow-up were labeled, Below All.

Hypothesis II-A

No significant differences exist between children in the various sub-groups of the grade placement discrepancy variable and: (A) sex; or (B) intelligence level.

Demographic Data

Chi-square analysis of the sub-groups was performed in order to determine what differences existed between the groups on the basis of sex, ordinal birth position, and socio-economic status. While no differences were found between the groups in terms of ordinal position in the sibship or socio-economic status, Table 63 indicates that significant differences were obtained with references to sex.

TABLE 63

Grade Placement Differences and Sex (N=41)

Sex	At Grade	Below A & D	Below All	Chi-Square
Male	11	7	11	8.79*
Female	9	1	2	

*Significant at .05 level

Among children who were below expected grade level at admission and discharge, and at all times, males outnumber females.

A comparison of the mean intelligence level of the groups indicated that, as might be expected, a significant difference did exist. Table 64 provides a description of the mean intelligence levels of the three groups.

TABLE 64

Grade Placement Differences and Intelligence Levels (N=37)

Change Group	M	S.D.	Diff.	t-test
At G.L. Below A & D	107.06 98.13	11.40 7.16	8.93	2.03
At G.L. Below All	107.06 96.91	11.40 10.27	10.15	2.41*
Below A & D Below All	98.13 96.91	7.16 10.27	1.22	0.29

*Significant at .05 level

Evaluation of Hypothesis III-A

No significant differences exist between children in the various sub-groups of the grade placement discrepancy variable and: (A) sex; or (B) intelligence level.

A significant difference was found to exist between sub-groups of the grade placement variable and both sex and intelligence. Males were significantly more often found to be below expected grade level both at discharge and at follow-up. In addition, children who were below expected grade level at admission, discharge, and follow-up were significantly lower in intelligence than were children who were consistently at grade level. The hypothesis is therefore rejected.

Behavioral and Attitudinal Data

No differences were noted between the grade placement groups and their scores on either the School Attitude Scale or the Coopersmith Self-Esteem Inventory. The F-ratios of analysis of variance between the groups was well below significance in all cases.

Teacher ratings of the children on the AML Behavior Rating Scale produced some between group differences. As might be expected, the At Grade Level children were significantly different from those Below A & D and Below All on the learning factor. Table 65 indicates these differences.

TABLE 65

Grade Placement Differences on AML Learning Factor (N=33)

Change Group	M	S.D.	DIFF.	t-test
At G.L. Below A & D	1.65 3.75	1.75 1.50	-2.10	-4.32**
At G.L. Below All	1.65 2.69	.75 1.25	-1.04	-3.01**
Below A & D Below All	3.75 2.69	1.50 1.25	1.06	1.42

**Significant at .01 level

Children who are below grade level apparently continue to experience problems in the learning area, even though they may have been retained because of achievement difficulties earlier.

The analysis of variance between the At Grade Level and Below A & D sub-groups on the Aggressive-Outgoing factor of this scale yielded an F-ratio which approaches significance at the .05 level. Inspection of the differences between means of the At G.L. and Below

A & D groups shows a t-ratio significant at the .05 level. Recognizing that a nonsignificant F-ratio nullifies the fruitfulness of the subsequent t-test, it is none-the-less interesting that the Below A & D children are seen by the teachers as more aggressive-outgoing.

Hypothesis III-B

Between the various sub-groups identified in terms of grade placement, no significant differences exist on indices of personality pattern as measured by the Quay Symptomatic Behavior Problem Inventory.

Quay's Symptomatic Behavior Problem Inventory, which identifies three personality patterns; Conduct problems, Personality problems, and Inadequate-Immature personality, was completed by the teachers at follow-up. The Below A & D children were seen as being significantly more immature-dependent, more aggressive-acting out, and more distractable than the At G.L. children. The Below All children were seen as more distractable and more passive than the At G.L. children.

When the children are rated in terms of the three personality patterns identified by Quay, et. al., (1966), the Below A & D children were significantly more often classified as Conduct Problem children than were the At G.L. group. These differences are shown in Table 66.

TABLE 66

Grade Placement Differences on Conduct Problem Factor (N=26)

Change Group	M	S.D.	DIFF.	t-test
At G.L. Below A & D	2.17 8.33	1.82 4.04	-5.62	-3.94**
At G.L. Below All	2.17 4.00	1.82 2.83	-1.29	-1.33
Below A & D Below All	8.33 4.00	4.04 2.83	4.33	2.09

**Significant at .01 level

Conversely, as is indicated in Table 67, the Below All children are significantly more often viewed as Inadequate-Immature personalities than were the At G.L. group.

TABLE 67

Grade Placement Differences
on Inadequate-Immature Factor (N=28)

Change Group	M	S.D.	DIFF.	t-test
At G.L. Below A & D	2.82 6.75	3.26 4.86	-3.93	-1.98
At G.L. Below All	2.82 7.40	3.26 3.06	-4.58	-3.60**
Below A & D Below All	6.75 7.40	4.86 3.06	-0.65	-.031

**Significant at .01 level

The relatively small number of children in each group makes placing heavy reliance on the findings difficult. This is particularly true with reference to the Below A & D children since very few children who were below expected grade level at admission and discharge were able to achieve expected grade level at the time of follow-up. However, it does suggest that further research in this direction may be fruitful, particularly in light of the suggestion that differential educational approaches are useful with different personality patterns.

Evaluation of Hypothesis III-B

Between the various sub-groups identified in terms of grade placement, no significant differences exist on indices of personality pattern as measured by the Quay Symptomatic Behavior Problem Inventory.

Analyses of personality patterns of the sub-groups of the grade placement variable indicated that children who were below expected

grade level at admission and discharge were significantly more often identified as Conduct Problem type children than were children consistently at grade level. Additionally, children who were below grade level at admission, discharge, and follow-up were significantly more often viewed as Inadequate-Immature personality types than were children who were consistently at grade level. In light of these findings, the hypothesis is rejected.

School Adjustment Data

On measures of reading achievement, the At Grade Level children were significantly different than the Below All children. Table 68 demonstrates the mean admission reading grade level of the groups.

TABLE 68

Grade Placement Differences and
Admission Reading Grade Level (N=26)

Change Group	M	S.D.	DIFF.	t-test
At G.L. Below A & D	6.58 4.04	2.92 1.78	2.54	1.96
At G.L. Below All	6.58 3.60	2.92 1.51	2.98	2.51*
Below A & D Below All	4.04 3.60	1.78 1.51	.44	.48

*Significant at .05 level

At follow-up, no significant differences in reading achievement were noted between the groups. However, since a number of children were not available for reading achievement testing at follow-up, and in light of the number of children who were school drop-outs, it is possible that the obtained scores are not representative of the reading achievement levels of the groups.

Summary

Analysis of sex differences in the discrepancy between actual and expected grade placement indicated that boys, more often than girls, were below grade level.

Measures of group differences of intelligence revealed that children at grade level had significantly higher I.Q. scores than those children below grade level. As might be expected, the At Grade Level group was not seen as experiencing learning problems while children below grade level were significantly more often viewed as learning problems.

Children who were below grade level at admission and discharge but not at follow-up were pictured as being more aggressive, and more likely to be seen as Conduct Problem type children. Those who were consistently below grade level were more often seen as Inadequate-Immature type children.

Finally, differences were noted between the admission reading achievement grades of those children who were at grade level versus those continually below grade level.

School Attitude Differences

Three groups of children were considered with respect to change in school attitude. Children who maintained positive school attitudes at admission, discharge and follow-up are referred to as Positive All. Children who were seen as having negative school attitude only at the time of admission were considered the Positive Change group while children who possessed negative school attitudes at both admission and discharge were considered the No Change group.

Hypothesis III-C

No significant difference exists between the school attitude subgroups in terms of chronological age at either admission or follow-up.

Demographic Data

No differences were noted between the groups with regard to sex, chronological age, ordinal position in the sibship, intelligence level, or socio-economic status. The No Change children were seven months older than the Positive Change children, and 19 months older than the Positive All children at admission. The chronological ages of the three groups are compared in Table 69.

TABLE 69

School Attitude Differences and Chronological Age at Admission and Follow-Up

	Change Group	M	S.D.	DIFF.	t-test
Admission (N=72)	Positive All	121.00	37.93	-12.65	-1.48
	Positive Change	133.65	25.50		
	Positive All	121.00	37.93	-19.06	-1.75
	No Change	140.06	26.85		
	Positive Change	133.65	25.50	- 6.41	-0.83
Follow-Up (N=72)	Positive All	148.62	38.66	-14.53	-1.45
	Positive Change	163.15	34.74		
	Positive All	148.62	38.66	-22.73	-1.87
	No Change	171.35	35.52		
	Positive Change	163.15	34.47	- 8.20	-0.79
	No Change	171.35	35.52		

While these differences were not significant, it is apparent that with an increase in age there is a greater probability that the child will maintain his negative feelings about school.

In terms of length of hospitalization, children who were positive at all times were hospitalized for a mean of 5.19 months as opposed to 5.65 months and 5.88 months for the Positive Change and No Change groups.

Evaluation of Hypothesis III-C

No significant difference exists between the school attitude sub-groups in terms of chronological age at either admission or follow-up.

The hypothesis is accepted. Although the data suggested a tendency for older children to be less likely to become more positive with reference to school attitude following treatment or at follow-up, the between group differences were not statistically significant.

Hypothesis III-D

No significant differences exist between the school attitude sub-groups and ratings made by the child of his peer relations at follow-up.

Behavioral and Attitudinal Data

With one exception, no significant differences were noted on the standardized measures of behavior adjustment. The one instance in which a significant difference was obtained was in the area of peer relations at follow-up. Positive All children were generally more positive in their interactions with peers than were the No Change children, and slightly more positive than the Positive Change children. Table 70 provides the presentation of differences between groups on the peer relations factor of the School Attitude Scale.

TABLE 70

School Attitude Differences and Negative Peer Relations at Follow-Up (N=40)

Change Group	M	S.D.	DIFF.	t-test
Positive All	32.36	4.20	3.99	2.01
Positive Change	28.37	5.75		
Positive All	32.36	4.20	6.76	2.65*
No Change	25.60	7.24		
Positive Change	28.37	5.75	2.77	1.13
No Change	25.60	7.24		

*Significant at .05 level

While the t-ratio between the Positive All and Positive Change groups is only slightly below that necessary for significance at the .05 level, the close approximation would indicate that children who are seen as negative toward school are also apt to experience difficulties in interactions with peers.

An interesting, but non-significant, occurrence is seen in the scores of the three groups on measures of self-esteem. On three of the four factors, self-, social-, and total-, the Positive Change children scored lower than the Positive All and No Change children. That is, children who were negative in their attitudes toward school at admission, but who were not considered negative at discharge, tended to have lower self-esteem scores than did those children who were considered to feel negative toward school at both admission and discharge.

Evaluation of Hypothesis III-D

No significant differences exist between the school attitude sub-groups and ratings made by the child of his peer relations at follow-up.

When children who maintained positive school attitudes at all times were compared to children who were negative in their school attitudes at admission and who demonstrated no change, significant differences were noted in terms of self-reported negative peer relations. Children who were consistently negative toward school also reported more negative feelings toward their peers than did children who were consistently positive in their school attitudes. The hypothesis is therefore rejected.

School Adjustment Data

Group differences in school adjustment as determined by admission and follow-up reading achievement scores, teacher ratings of functioning level in reading, arithmetic, spelling, and overall achievement, and the teacher ratings of the child's status in school were not statistically significant. Admission reading achievement levels of the three groups are presented in Table 71. Table 72 presents the mean reading levels at follow-up.

TABLE 71

School Attitude Differences and Reading Achievement at Admission (N=40)

Change Group	M	S.D.	DIFF.	t-test
Positive All Positive Change	5.60 4.56	2.97 2.90	1.04	.89
Positive All No Change	5.60 3.67	2.97 2.55	1.93	1.57
Positive Change No Change	4.56 3.67	2.90 2.55	.89	.85

TABLE 72

School Attitude Differences and Reading Achievement at Follow-Up (N=33)

Change Group	M	S.D.	DIFF.	t-test
Positive All	5.02	2.88	.17	.16
Positive Change	4.85	2.77		
Positive All	5.02	2.88	-.18	-.12
No Change	5.20	2.90		
Positive Change	4.85	2.77	-.35	-.27
No Change	5.20	2.90		

The differences between the three groups at admission are approximately one year between the Positive All and the Positive Change groups, and a like difference between the Positive Change and No Change groups. When reading achievement is viewed in terms of chronological age the scores take on added significance. The Positive All children are reading slightly above expected grade level, and the Positive Change children slightly below grade level. However, the No Change children are reading approximately three years below grade level.

At follow-up the three groups are much more similar to each other. Two factors make these data suspect and lead to the possibility that they do not represent the true reading level of the groups. First, it is probable that many of the poorer achievers are not represented due to having dropped out of school, and secondly, with the increased age of the entire sample, reading achievement testing was no longer appropriate in many instances.

Summary

In terms of school attitude three groups of children were considered: those who were continually judged to be positive; those who

were initially negative but who improved during treatment; and those who were unimproved following treatment.

Chronological age and length of time in treatment were greater for the most negative group and least for the most positive group. Children who were most positive in school attitude tended to have significantly better peer relations than did the most negative group.

No differences between the groups were found with regard to the teacher ratings of school achievement or status. The Positive All and Positive Change groups were at appropriate grade level on admission reading test scores. Only the No Change children demonstrated appreciable reading achievement retardation.

School Problem Differences

In the area of perceived school problems, three sub-groups were identified. Children who were initially felt to have a significant school problem but who were improved at discharge are referred to as the Positive Change at Discharge group. A second group, those having significant school problems at both admission and discharge but not at follow-up, are the Positive Change Follow-up group. Those children who were consistently seen as having school problems comprise the No Change group.

Demographic Data

No significant differences were found between the groups with reference to chronological age, sex, ordinal position, intelligence, or socio-economic class. The mean age at the time of admission for the Positive Change Discharge and Positive Change F. U. groups was 132 months, and 138 months for the No Change group. Measured intellectual

level of the three groups presented in Table 73 indicates that I.Q. was not a significant variable in differentiating which children were likely to improve in terms of the existence of school problems.

TABLE 73

School Problem Differences and Intelligence (N=56)

Change Group	M	S.D.	DIFF.	t-test
Pos. Change Dis. Pos. Change F. U.	98.76 100.87	12.92 16.19	-2.11	-.54
Pos. Change Dis. No Change	98.76 94.56	12.92 16.19	4.20	.92
Pos. Change F. U. No Change	100.87 94.56	10.11 16.19	6.31	1.29

Behavioral and Attitudinal Data

When children were asked to rate themselves on the School Attitude Scale, it was found that the children who demonstrated change at follow-up and those who did not change saw themselves as having more difficulty getting along with others than did the group which improved during treatment. As is shown in Table 74, children who improved following discharge and those who showed no improvement rated themselves almost identically on measures of school attitude.

TABLE 74

School Problem Differences and Scores on Perceived Trouble-Maker Factor (N=40)

Change Group	M	S.D.	DIFF.	t-test
Pos. Change Dis. Pos. Change F. U.	31.53 26.75	5.10 2.71	4.78	2.46*
Pos. Change Dis. No Change	31.53 25.50	5.10 5.87	5.03	2.47*
Pos. Change F. U. No Change	26.75 26.50	2.71 5.87	.25	.11

*Significant at .05 level

This finding is somewhat contradicted, at least for the Positive Change Follow-up children, by the results of the Self-Esteem Inventory. Here it was found that these children obtained higher scores on all four factors; self-, social-, school-, and total self-esteem, than did either of the other two groups. Further, a significant difference occurs between the Positive Change Follow-up and the No Change groups on the social factor. Positive Change Follow-up children indicate some inability to get along with others based on scores of the School Attitude Study, yet appear to feel adequate in terms of their social skills. The data on social self-esteem is presented in Table 75.

TABLE 75

School Problem Differences on Social Self-Esteem Factor (N=40)

Change Group	M	S.D.	DIFF.	t-test
Pos. Change Dis. Pos. Change F. U.	97.23 112.95	26.59 15.69	-15.72	-1.53
Pos. Change Dis. No Change	97.23 84.79	26.59 24.12	12.44	1.32
Pos. Change F. U. No Change	112.95 84.79	15.67 24.12	28.16	2.95*

*Significant at .01 level

The No Change children are more consistent in their self perceptions with regard to social interaction. These children tend to see themselves having difficulty dealing with others, and as not well integrated socially.

When teachers rated the behavioral adjustment of these children the picture remained much the same. Teachers saw the No Change children as significantly below both the Positive Change Discharge and the

Positive Change Follow-up on measures of aggressive-outgoingness and learning. Table 76 presents the findings on these two factors of the AML Behavior Rating Scale.

TABLE 76

School Problem Differences on AML Scale

Aggressive-Outgoing Factor (N=49)				
Change Group	M	S.D.	DIFF.	t-test
Pos. Change Dis.	9.00	3.03	-1.18	-1.01
Pos. Change F. U.	10.18	3.54		
Pos. Change Dis.	9.00	3.03	-5.13	-3.77**
No Change	14.13	5.37		
Pos. Change F. U.	10.18	3.54	-3.95	-2.12*
No Change	14.13	5.37		

*Significant at .05 level
**Significant at .01 level

Learning Factor (N=49)				
Change Group	M	S.D.	DIFF.	t-test
Pos. Change Dis.	2.26	1.21	.35	.81
Pos. Change F. U.	1.01	1.14		
Pos. Change Dis.	2.26	1.21	-1.14	-2.57*
No Change	3.40	1.50		
Pos. Change F. U.	1.99	1.14	1.49	-2.76**
No Change	3.40	1.50		

*Significant at .05 level
**Significant below .01 level

The teachers also rated the children on the Quay Symptomatic Behavior Rating Sheet. Again significantly lower scores were achieved by the No Change children over the Positive Change Discharge children. Based on the results of the Quay Scale, the No Change children are more typically seen as inadequate-immature personality types than are either of the other two groups. Table 77 displays the results of the scores on this factor.

TABLE 77

School Problem Differences on
Inadequate-Immature Factor (N=42)

Change Group	M	S.D.	DIFF.	t-test
Pos. Ch. Disch. Pos. Ch. F. U.	4.00 4.33	2.81 3.32	-.33	-.27
Pos. Ch. Disch. No Change	4.00 7.60	2.81 4.32	-3.60	-2.88*
Pos. Ch. F. U. No Change	4.33 7.60	3.32 4.32	-3.27	-1.94

*Significant at .01 level

Hypothesis III-E

No significant differences exist between sub-groups of the school problem variable and teacher ratings of the child's standing in: (A) Reading; (B) Spelling; or (C) Arithmetic.

School Adjustment Data

On standardized reading achievement tests, there was no significant difference between the groups at either admission to in-patient treatment or at the time of follow-up. However, when teachers rated the children in terms of their relative standing within the class on reading, arithmetic, spelling, and overall achievement, significant differences were found in three of the four areas, the exception being arithmetic. The following three Tables; 78, 79, and 80, indicate the results of chi-square analysis. In each instance, the children seen as school problems at all points in time comprise a significantly large proportion of those children rated in the lower one fourth of their class in achievement.

TABLE 78

School Problem Differences and Ratings
of Reading Standing (N=36)

Rating	Pos. Ch. Dis.	Pos. Ch. F. U.	No Ch.	Chi-Square
Upper 1/4	34	5	0	
Middle 1/2	8	2	2	15.50*
Lower 1/4	5	1	9	

*Significant at .01 level

TABLE 79

School Problem Differences and Rating
of Spelling Standing (N=36)

Rating	Pos. Ch. Dis.	Pos. Ch. F. U.	No Ch.	Chi-Square
Upper 1/4	3	3	1	
Middle 1/2	6	3	0	10.34*
Lower 1/4	6	3	11	

*Significant at .05 level

TABLE 80

School Problem Differences and Rating
of Overall Achievement (N=36)

Rating	Pos. Ch. Dis.	Pos. Ch. F. U.	No Ch.	Chi-Square
Upper 1/4	4	4	1	
Middle 1/2	8	3	1	12.91*
Lower 1/4	4	2	10	

*Significant above .05 level

While these findings were perhaps to be expected, the fact that the No Change children were so often significantly different from the

other two groups, both behaviorally and academically, raises some important points or questions for further study.

It seems apparent that teachers are capable of identifying children with school problems severe enought to cause real concern to both the child and the school. This raises the question of how early in the child's school career teachers are able to make these identifications. Another question raised has to do with the perceptions of self maintained by children with severe school problems. Are these perceptions true statements and when are they formed? If they are, in fact, a true analysis of the child's social interaction skills, do they result prior to, or following, the child's recognition of problems in achievement areas?

In view of the similarity of chronological age at admission, it is quite possible that the self-perceptions are in large measure formed following prolonged periods of academic failure.

When rated by teachers with regard to their status in school in terms of functional ability, the No Change children more often received negative ratings. Table 81 indicates the distribution of each group within five status categories.

Severe school problem children are frequently seen as school misfits and/or functioning below the appropriate level.

Evaluation of Hypothesis III-E

No significant differences exist between sub-groups of the school problem variable and teacher ratings of the child's standing in: (A) Reading; (B) Spelling; or (C) Arithmetic.

The hypothesis is rejected. Teachers tended to rate children who were consistently seen as having school problems in the lower

fourth of their peer group in reading and spelling. Children who made positive change in terms of teacher perceived school problems were significantly more often rated in the middle half or upper fourth of their peer group in reading and spelling.

TABLE 81

School Problem Differences and Teacher Ratings of School Status (N=47)

School Status	Pos. Ch. Dis.		Pos. Ch. F. U.		No Change	
	N	%	N	%	N	%
Complete misfit--lacks skills needed to learn.	1	3	0	0	8	47
Doing failing work--may receive social promotion.	4	13	1	5	2	12
Doing passing work but low enough below capacity to cause concern.	3	10	2	10	3	17
Satisfactory and in line with ability.	9	30	8	42	2	12
Above average.	4	13	0	0	0	0
Total	21	99	11	99	15	100

Summary

It has been noted that children seen as improved in the areas of school problems from admission to follow-up tend to be better adjusted both behaviorally and academically. Greatest concern both from the teachers' and the child's point of view is among the group of children who are continually rated as school problems. These children are often seen as aggressive and immature in terms of personality. The children recognize their own inability to interact positively with others and generally maintain an unfavorable opinion of self. Teachers rate these children most often as academic failures.

Adult and Peer Relations Difference

Three groups of children were considered in both the adult and peer relations adjustment variables. The Positive Adjustment children were those who were seen as being negative in their interactions with others at the time of admission, and who made positive adjustment in their relationships with others during treatment. The Negative-Hostile Discharge children were children who were negative towards others at admission, and who were seen as being hostile toward adults or peers at the time of discharge. Similarly, Negative-Withdrawn Discharge children were negative at admission and seen as withdrawn and/or dependent in their interactions at the time of discharge.

Hypothesis III-F

No significant differences exist between sub-groups identified on the adult and peer relations variable and length of inpatient treatment.

Demographic Data

No significant differences were found between the groups on any of the demographic variables of sex, intelligence, chronological age, ordinal position in the sibship, or socio-economic status. Generally, the children who had made positive adjustment in their interpersonal relationships were slightly younger than were the children in either the Negative-Hostile or Negative-Withdrawn groups.

No differences were found between the groups on the peer relations adjustment variable and the length of time in treatment. However, with regard to quality of adult relations and length of treatment, a significant difference was noted between the Positive

Adjustment and the Negative Withdrawn groups. The latter group of children were hospitalized for a significantly shorter period of time than were the Positive Adjustment children. Table 82 presents the results of the analysis of variance between the groups.

TABLE 82

Adult Relations Difference and Length of Treatment (N=73)

Change Group	M	S.D.	DIFF.	t-test
Pos.-Adjustment	6.00	2.79	.20	.26
Neg.-Hostile	5.80	3.23		
Pos.-Adjustment	6.00	2.79	2.23	2.62*
Neg.-Withdrawn	3.77	2.09		
Neg.-Hostile	5.80	3.23	2.03	2.50
Neg.-Withdrawn	3.77	2.09		

*Significant at .05 level

Evaluation of Hypothesis III-F

No significant differences exist between sub-groups identified on the adult and peer relations variable and length of inpatient treatment.

While no differences were found with respect to the peer relations sub-groups and length of treatment, significant differences were found among the adult relations sub-groups. Children who made positive admission-to-discharge change in adult relations were involved in inpatient treatment for a significantly longer period of time than were children who were initially negative toward adults and seen as withdrawn and/or dependent at discharge. The hypothesis is rejected.

Hypothesis III-G

No significant differences exist between sub-groups of the adult and peer relations variable and personality patterns as measured by the Quay Symptomatic Behavior Problem Inventory.

Behavioral and Attitudinal Data

Children who were in the Negative-Hostile group on both the adult and peer relations adjustment variables tended to view themselves as trouble-makers at follow-up significantly more often than did the Positive Change children. Tables 83 and 84 demonstrate the between group differences of both the adult and peer relations groups on the Self-Perceived Trouble Maker factor of the School Attitude Inventory.

TABLE 83

Adult Relations Difference and Self-Perception as Trouble-Maker (N=39)

Change Group	M	S.D.	DIFF.	t-test
Pos. Change	3.14	.53	.52	2.51*
Neg.-Hostile	2.62	.62		
Pos. Change	3.24	.53	.35	1.80
Neg.-Withdrawn	2.79	.16		
Neg.-Hostile	2.62	1.62	-.17	-.75
Neg.-Withdrawn	2.79	.16		

*Significant at .05 level

TABLE 84

Peer Relations Difference and Self-Perception as Trouble-Maker (N=36)

Change Group	M	S.D.	DIFF.	t-test
Pos. Change	3.06	.44	.47	2.49*
Neg.-Hostile	2.59	.56		
Pos. Change	3.06	.44	.03	.12
Neg.-Withdrawn	3.03	.62		
Neg.-Hostile	2.59	.56	-.44	-1.55
Neg.-Withdrawn	3.03	.62		

*Significant at .05 level

The measures of self-esteem for both the adult and peer relations groups, while not significant, did present an interesting trend. On all four factors of self-esteem: self-; social-; school-; and combined self-esteem, highest scores were obtained by the Negative-Withdrawn children, while lowest scores on all four factors were achieved by the Negative-Hostile children.

When teachers rated the behavioral problems of these children, the Negative-Hostile group was consistently seen as more aggressive and more often Conduct Problem type children. Table 85 indicates the comparison of the adult relations and peer relations groups on the aggressive acting-out factor of the Symptomatic Behavior Rating Scale. Table 86 provides a similar comparison of the adult and peer relations groups on the Conduct Problem factor of the same behavior rating scale.

Evaluation of Hypothesis III-G

No significant differences exist between sub-groups of the adult and peer relations variable and personality patterns as measured by the Quay Symptomatic Behavior Problem Inventory.

The Positive Change groups in terms of both adult and peer relations were compared to those children who were initially negative toward adults and/or their peers and seen as hostile-aggressive at discharge. Children in the Negative-Hostile sub-group were significantly more often seen as a Conduct Problem type children than were children in the Positive Change sub-group. The hypothesis is therefore rejected.

School Adjustment Data

On standardized measures of reading achievement at both admission and follow-up, no differences were found between the groups of either

TABLE 85

Adult and Peer Relations Differences on Aggressive Acting-Out Factor

Change Group	Adult Relations (N=44)				Peer Relations (N=42)			
	M	S.D.	DIFF.	t-test	M	S.D.	DIFF.	t-test
Pos. Change	6.29	3.64	-5.77	-3.25**	6.58	4.06	-4.36	-2.17
Neg.-Hostile	12.06	7.14			10.94	7.58		
Pos. Change	6.29	3.64	-3.11	-1.44	6.58	4.06	-2.58	-1.42
Neg.-Withdrawn	9.40	6.88			9.43	5.77		
Neg.-Hostile	12.06	7.14	2.66	0.74	10.94	7.58	1.51	0.47
Neg.-Withdrawn	9.40	6.88			9.43	5.77		

**Significant at .01 level
*Significant at .05 level

TABLE 86

Adult and Peer Relations Difference on Conduct Problem Factor

Change Group	Adult Relations (N=41)				Peer Relations (N=42)			
	M	S.D.	DIFF.	t-test	M	S.D.	DIFF.	t-test
Pos. Change	3.05	1.84	-2.66	-2.94**	3.06	1.95	-2.07	-2.04*
Neg.-Hostile	5.71	3.42			5.13	3.64		
Pos. Change	3.05	1.84	-1.55	-1.36	3.06	1.95	-1.65	-1.65
Neg.-Withdrawn	4.60	3.58			4.71	2.87		
Neg.-Hostile	5.71	3.42	1.11	0.63	5.13	3.64	.42	0.27
Neg.-Withdrawn	4.60	3.58			4.71	2.87		

**Significant at .01 level
*Significant at .05 level

the adult or peer relations variables. When teachers rated the children with respect to their ability in reading, arithmetic, and spelling, the results, while not statistically significant, do indicate some trends. Table 87 compares the peer relations groups on each of the achievement factors and an overall achievement rating based on an average of the other three factors. It may be noted that the Positive Change children are nearly equally distributed between the upper one-fourth, middle one-half, and lower one-fourth of their peer group on each of the achievement factors. The Negative-Hostile and Negative-Withdrawn children tended, with greater frequency, to fall into the lower fourth of the class on most measures. The exception to this trend occurred among the Negative-Hostile children in the area of reading.

When the analysis was carried out with the adult relations group similar results were obtained. Table 88 provides the chi-square analyses of the adult relations groups on the four achievement factors. The Negative-Hostile and Negative-Withdrawn children were more frequently found in the lower one fourth of the class. Of interest was the close agreement between the ratings on reading and overall achievement, and the less similar agreements found between arithmetic or spelling and overall achievement.

No significant differences were found between the groups of either the adult or peer relations variables on measures of school status or educational placement at follow-up. Roughly 50 percent of each of the groups were considered above and below average on ratings of school status.

TABLE 87

Peer Relations Difference and Teacher Ratings of Achievement

Teacher Ratings	Reading Achievement (N=40)				Arithmetic Achievement (N=41)			
	Pos. Ch.	Neg.-Hos.	Neg.-Wd.	Chi-Sq.	Pos. Ch.	Neg.-Hos.	Neg.-Wd.	Chi-Sq.
Upper 1/4	6	6	2		6	2	0	
Middle 1/2	8	3	1	6.58	6	5	4	4.32
Lower 1/4	5	3	6		7	6	5	
	Spelling Achievement (N=39)				Overall Achievement (N=41)			
	Pos. Ch.	Neg.-Hos.	Neg.-Wd.	Chi-Sq.	Pos. Ch.	Neg.-Hos.	Neg.-Wd.	Chi-Sq.
Upper 1/4	6	3	1		6	4	2	
Middle 1/2	5	2	2	1.74	8	4	2	2.41
Lower 1/4	8	7	5		5	5	9	

TABLE 88

Adult Relations Difference and Teacher Ratings of Achievement

Teacher Ratings	Reading Achievement (N=44)				Arithmetic Achievement (N=44)			
	Pos. Ch.	Neg.-Hos.	Neg.-Wd.	Chi-Sq.	Pos. Ch.	Neg.-Hos.	Neg.-Wd.	Chi-Sq.
Upper 1/4	8	6	2		8	6	0	
Middle 1/2	6	7	4	2.74	10	4	2	4.54
Lower 1/4	7	6	3		6	7	6	
	Spelling Achievement (N=42)				Overall Achievement (N=44)			
	Pos. Ch.	Neg.-Hos.	Neg.-Wd.	Chi-Sq.	Pos. Ch.	Neg.-Hos.	Neg.-Wd.	Chi-Sq.
Upper 1/4	7	4	1		8	6	0	
Middle 1/2	5	2	2	4.25	6	2	6	9.37
Lower 1/4	6	9	6		6	7	3	

Summary

Those children who were viewed as continuing to experience problems in interpersonal relationships at the time of discharge from treatment were also seen at follow-up as experiencing school problems. In particular, children viewed as hostile at discharge were more often considered greater Conduct Problems by their teachers at follow-up than were children who had made a positive adjustment during treatment. Interestingly, there was a slightly greater proportion of withdrawn-dependent type children viewed as having academic problems.

Concluding Statement

The mean length of time between discharge and follow-up of the sample was just under two years. At the time of follow-up, teachers indicated that nearly 20 percent of the children rated were in the lower quartile of their peer group in achievement. In addition, 21 percent of the children rated were considered failing academically.

Among children below expected grade level at discharge and follow-up, males outnumbered females. It was also found that children who were consistently at grade level possessed higher measured intelligence, and were less aggressive or inadequate than children who had experienced school failure.

Children who did not improve in terms of negative school attitudes tended to be older and remain in treatment longer than did those children considered to maintain positive attitudes toward school. A correspondence between negative school attitude and negative peer relations was also found to exist. Children continually perceived by

teachers to have significant school problems were also perceived as being more aggressive and immature in terms of personality development.

Finally, children who were viewed as having continuing problems with respect to interpersonal relationships tended to be rated by teachers as more often having school problems than children who were better adjusted in terms of adult and peer relationships.

CHAPTER V

SUMMARY OF FINDINGS

Introduction

This chapter includes a brief description of the sample at admission, discharge, and follow-up; a composite of the change and no change groups; a discussion of the differential impact of intervention; comparison of the present study with similar follow-up research; and implications and suggestions for future follow-up research.

Summary of the Sample: Admissions; Discharge; and Follow-Up

Description of the Research Sample at Admission

A total of 75 children, 56 males and 19 females were included in the research sample. The mean chronological age was 10.75 years. The I.Q. range was from 60 to 139 with a mean of 100. A majority of the children were from middle class socio-economic background where at least one, and often both, natural parents were involved with the child.

Diagnostically, the children fell into one of four psychiatric categories while the primary referral reasons included six behavioral or academic manifestations. Generally the children were in one of two problem groups, either acting out behavior problems or school learning problems. Duration of treatment for the sample was 5.5 mean months, with a range of from 1 to 12 months. A majority of the children were seen as having difficulties in the area of interpersonal relations with

both peers and adults and, in addition, as having negative attitude toward school.

The actual mean achievement level of the sample was 4.8 which was nearly one year below the mean expected grade level. No child was functioning above grade level at admission, about half were at grade level, and the remainder at least one year below expected grade level. The mean reading grade level was 5.0 which was approximately six months below the expected grade level based upon chronological age. At admission nearly 90 percent of the sample was considered to have a school problem severe enough to warrent intervention in addition to the program typically provided in the schools.

The Sample at Discharge

At discharge the sample was still concentrated in the lower and middle elementary grades. No significant change occurred during treatment with respect to the numbers of children functioning at and below grade level.

Among the treatment staff personnel, it was felt that the most positive change in interpersonal relations took place among children who were withdrawn in interaction with others, and much less change took place among the more aggressive, acting-out children. Teachers tended to see improvement in the attitudes of the children toward school, however, it was felt that one-half of the sample would experience school problems of a magnitude which would require that some assistance beyond the normal school program be given the child.

Greater improvement in both the quality of relationships with others and general school adjustment was noted among the less severely disturbed children. In addition, children seen as withdrawn as

opposed to the more aggressive children tended to be seen as having less serious school problems.

Children who were involved in treatment for a shorter period of time were older, a year and one half higher in reading at admission, one year higher in grade achievement level, and more often functioning at expected grade level. The long term group tended to make slightly greater improvement in achievement during treatment and to more often be considered better prognostic risks.

The Sample at Follow-Up

The mean time between discharge and follow-up was just under two years with a range of from 1 month to 5.4 years. Of the children for whom information was available regarding post treatment school adjustment, the discrepancy between expected and actual grade placement remained at approximately 1 year. Teacher ratings of reading, arithmetic, and spelling indicated that an equal number of children were in the upper and lower quartiles in reading but that twice as many children were in the lower quartile in arithmetic and spelling as were in the upper quartile. On teacher ratings of the general academic status of 57 children, 31 were doing average or above average work with the remainder rated as either causing concern or complete academic misfits.

The measures of school attitude as determined by the School Attitude Scale indicated that the sample closely approximated the norms on all five factors. On the Coopersmith Self-Esteem Inventory the results were similar to those obtained by previous researchers. In general, the children rated themselves high in terms of self-esteem although the lowest scores were obtained on the self factor.

Composite of Change and No-Change Groups

Five adjustment variables were considered in an effort to predict the post-treatment school status of a group of emotionally disturbed children. These included: 1) Grade placement; 2) School attitude; 3) Perceived school problem; 4) Peer relations; and 5) Adult relations. In general, three degrees of adjustment were identified for each of the variables, these were: 1) Those children who were not experiencing difficulties at admission, or who demonstrated positive change during treatment on the adjustment variable; 2) Those children who demonstrated no positive admission to discharge change on the variable, but who had made some positive adjustment by the time of follow-up; and 3) Those children who had demonstrated no positive admission to discharge change on the adjustment variables, and who were considered to have continuing difficulties in adjustment at follow-up. This latter group was identified on only two of the five adjustment variables; Grade Placement, and Perceived School Problems.

The following represents a composite picture of the children in each of the three adjustment categories based upon group differences found when each adjustment variable was analyzed independently.

No Problem and Positive Change Group

Children who either demonstrated no problems on the adjustment variables, or who were thought to have made positive change during treatment were characterized on each of the adjustment variables as follows.

Girls tended to achieve better than boys generally and, among the No Problem-Positive Change group, were in significantly greater evidence. In general, children in this group were higher in intelligence and higher in reading at the time of admission to treatment than other children. At follow-up, these children were considered by teachers to have fewer learning problems, to be less aggressive as well as less immature than other children.

School Attitude. Generally children who had positive school attitudes at discharge tended to be younger, spend less time in treatment, and maintain more positive inter-personal relations with their peers than did children who had not improved in terms of their general school attitude by the time of discharge.

Perceived School Problems. Children who were considered adjusted with respect to this variable were children who, at follow-up, were seen as more positive in their inter-actions with others. In addition, they were more often rated by teachers as achieving well.

Adult and Peer Relations. A significant difference between the children who adjusted versus those who did not in terms of adult and peer relations was found with respect to chronological age. The better adjusted children tended to be younger than other children.

No Positive Change During Treatment

Grade Placement Discrepancy. Teachers most often rated these children as being aggressive-acting-out children who demonstrated significantly more learning problems than the better adjusted children. These children who were below expected grade level at both admission and discharge from treatment were most often characterized as conduct problem type children.

School Attitude. Children who maintained poor school attitude throughout treatment were significantly lower than all other children in reading at the time of admission and were often school drop-outs following treatment.

Perceived School Problem. Children thought of as still experiencing significant school problems at discharge tended to rate themselves significantly higher on measures of self-esteem at follow-up than did other children.

Adult and Peer Relations. Two sub-groups of children who failed to make positive change during treatment were identified: those who were hostile-aggressive at discharge and those who were withdrawn dependent at discharge.

The withdrawn-dependent children tended to have higher self-esteem scores than other children and also to be lower in achievement.

The hostile-aggressive sub-group was characterized by the teachers as being also lower in achievement at follow-up than others and to be conduct problem type children. These children typically saw themselves as troublemakers and rated themselves lower in self-esteem than others.

No Change: Admission-to-Discharge or at Follow-Up

Only two of the adjustment variables were investigated. These were: Grade Placement Discrepancy and Perceived School Problem.

Grade Placement Discrepancy. Children who were below expected grade level at all points in time were rated by teachers at follow-up as being lower in reading than other children. These children were more often passive and considered inadequate-immature type personalities.

School Problem. Again teachers rated these children as having greater learning problems, lower in achievement, and as being school misfits or complete academic failures. In terms of personality type, teachers saw them as inadequate-immature. This latter rating is consistent with the self-ratings made by the children in that they saw themselves as having difficulties in interactions with others.

Comparison of Findings to Previous Follow-Up Research

Attempts at what might be considered predictive follow-up research have most often been concerned with how well the subjects adjusted following treatment. The work of O'Neal and Robins (1958) represents one of the first studies to assess the relationship between post-treatment adjustment and differential indices of behavior prior to treatment. The findings of Johnson and Rubin (1964) and Huber (1964) which suggested that children diagnosed as more severely disturbed, i.e., organic or psychotic, and personality problems, make less adequate post-treatment school adjustment was generally borne out in this study.

Eisenberg (1961) and Havelkova (1968) have concluded that age at the time of intervention is a significant factor in predicting the effects of treatment. In the present study it was found that children who were most positive in their attitudes toward school, and who were least often considered to have school problems, were those children who possessed more positive interpersonal relationships. It was further noted that younger children tended to make more positive adjustment with respect to personal interaction with adults and peers.

A sex difference was found to exist with respect to achievement in the present study. Cunningham (1956) and Heuchert (1969) both found that females were generally better adjusted than males at follow-up. These findings are supported by this study which demonstrated significantly greater improvement in achievement among females.

McKinnon (1969) found intelligence to be a significant variable in predicting post-treatment adjustment. However, in this study intelligence was not a significant factor in predicting positive adjustment on any of the five adjustment variables. This finding is similar to those of Heuchert who found no relationship between achievement at follow-up and intelligence.

Both Dudley (1935) and Ellis (1935) concluded that length of treatment was not a significant variable in determining adjustment following treatment. It is suggested in this study that withdrawn-dependent type children generally make more positive adjustments during treatment and are hence in treatment for shorter periods of time. Greater positive post-treatment adjustment occurred among hostile-aggressive children who were hospitalized for longer periods of time. Short-term hostile-aggressive children made less favorable adjustment.

The Differential Impact of Intervention

The results of the study indicated that intervention by the psychiatric facility had differential impact on the children. Studied at follow-up, it was found that certain aspects of the child, of his background, and of his behavior tend to decrease the probability of favorable post-treatment adjustment. In addition, as the number of

these factors increases,the liklihood of positive adjustment seems to decrease.

Two aspects of the child himself which seem to decrease the probability of positive post-treatment adjustment were sex and age. Boys and older children, whether more severely disturbed or simply poorer candidates for treatment, made poorer progress following treatment. In addition to the sex and age factors, these children also tended to be less intelligent and lower achievers.

While duration of treatment itself did not always identify the child who was a poor prognostic risk, children who had the poorest attitudes toward school at follow-up more often spent longer periods of time in treatment. It was also noted that children who were in treatment longer were more often from families in which there was a separation of the natural parents.

Another circumstance which increased the probability of poor post-treatment adjustment was the child's personal interaction style. Poorest school adjustment occurred among children who had continuing difficulties interacting with others, this was particularly true of children who were aggressive, acting-out types.

Thus it appears that children with multiple odds against them are much more likely to experience post-treatment problems. Conversely, children with fewer odds against them offer a much more encouraging prognosis for achieving some measure of success following treatment.

Finally, the frequency of occurrence of post-treatment failure being coupled with difficulties in the area of interpersonal relationships may suggest that schools must become more cognizant of the

affective dimensions of the child and more proficient in managing his behavior.

Implications and Suggestions for Future Follow-Up Research

There is an increasing awareness, particularly among school mental health personnel, of the need to identify not merely the exceptional child, but additionally, the exceptional aspects of each child. Quay, et. al. (1966) and Rubin, et. al. (1966) have all given attention to the need for descriptive research, and a school relevant taxonomy for that group of children who have traditionally been categorized as "emotionally disturbed." It is evident that continued research on, and consequent school programming for, this supposedly homogeneous group of children does little toward providing optimum educational opportunities for them.

Beyond the need for description lies the equally pressing need to identify those variables or variable clusters which have predictive value in terms of the child's later adjustment. It has become increasingly important that school programs be tailored to the individual child rather than to an obviously heterogeneous category of children. Following the work of Quay, this study represents an attempt to make predictive statements of post-treatment adjustment based on codified measures of behavior and achievement prior to, and during in-patient psychiatric treatment.

The "out-of-sight, out-of-mind" phehomenom noted by Morse, et. al., (1964) becomes extremely evident when follow-up research is undertaken. This is not an indictment of either the school or the residential

treatment facility, but rather a recognition of the shortage of time, money, and personnel to adequately manage the liason and follow-up services urgently needed. It is clear that priorities must be established, however, it is unfortunate that in the establishment of the service priority over liason there is a concommitent breakdown in communication between school and treatment facility. The lack of continuing communication between sending and receiving institution serves only to perpetuate the gulf which exists between clinic and school, and ultimately to deny the child the best possible educational experience.

Partly as a result of lack of communication and partly due to the very nature of traditional follow-up studies, the researcher suggests the abandonment of future group follow-up studies. The problems of transposing subjective data such as that often found in clinic records and school reports into objective measure is difficult at best. Added to this is the problem of missing or incomplete data, as well as inappropriate data, which, rather than allowing for definitive statements, often serves to cloud or mask information.

Even in instances in which complete and objective data are available problems arise in interpretation of the findings. The reporting of mean scores or group tendencies does not provide the researcher or the consumer of the research with information which would be most useful in formulating plans for the individual child. It has been reasonably well established, in this and other similar research endeavors, that certain conditions might be expected among a group of disturbed children. For example: younger children seem

to make better adjustments during and following treatment; females also tend to adjust more favorably than do males; conduct disorder type children present certain behavioral and achievement characteristics. However, it is the uniqueness of the individual, rather than his similarity to the group, with which the school must concern itself.

The suggested focus for future research is away from the investigation of group phenomenon and parameters. Rather, it may prove fruitful to begin to study the individual child or, if not the individual, a very small group of children matched on certain pre-treatment variables. What is suggested is a return to the longitudinal study rather than the more common cross-sectional approach. The goal here would not be one of establishing norms, but rather to study and make predictions with regard to the kinds of experiences suggested for the child, and ultimately to predict strengths and weaknesses in post-treatment adjustment.

The need is clear, educators, and others concerned with the school mental health of children, must reaffirm their dedication to the child.

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APPENDIX A

LETTERS TO PARENTS

April 10, 1968

Dear Parent:

As part of its total responsibility, the Virginia Treatment Center for Children is charged with coordinating research into improved methods of treatment of children with emotional problems.

One area in which we are vitally interested is that of school progress. At this time we are working on a plan to follow-up the school progress of children who have been patients at this center.

In the near future, Mr. Clayton D. Lewis, an educator, will be in touch with you to explain what we are doing and to ask your permission to check with the school about your child's educational progress.

We shall appreciate your cooperation as the study will be of help to other children.

Sincerely,

Douglas F. Powers, M.D.
Director

DFP/let

April 15, 1968

Dear Parent:

You recently received a letter from Dr. Powers of the Virginia Treatment Center indicating that we are interested in conducting some research on the school progress of children who have been patients at the center.

Basically we are interested in two kinds of information. First we would like to know how the children are progressing, and second, how we might better plan educational programs. In order to do this it is necessary for us to be able to contact children who were former patients at the center.

Should you grant us permission to contact your child and the school, I would like to assure you that his or her privacy will be respected, as will your own.

Enclosed is a card which we would like you to check, sign and return to us at your earliest convenience. If you have any further questions, or would like to discuss our project personally, please feel free to contact me.

Thank you for your cooperation in this matter. This will be of valuable assistance to us and to many children who may need the services of the Virginia Treatment Center.

Sincerely,

Clayton D. Lewis
Research Project Coordinator

CDL/let

Enclosure

APPENDIX B

LETTER TO SCHOOL SUPERINTENDENTS

March 29, 1968

Mr._____, Superintendent
_____ Schools
_____, Virginia

Dear Mr. _____:

I am interested in conducting some follow-up research in conjunction with the Virginia Treatment Center on children who have been in-patients at the center and who have been discharged and returned to either public schools or some other placement.

While the major purpose for this research is to fulfill the doctoral requirements at the University of Michigan, I am intensely interested in attempting to discern what has happened to children who have been in in-patient treatment, and in attempting to reach some conclusion as to how we might better program for these children once they are discharged from in-patient treatment.

I have been in touch with Dr. Powers at the Virginia Treatment Center and have secured his permission to utilize the records of the Treatment Center in an attempt to gather information on these children prior to their admission to the center and also, while they were in psychiatric treatment. The most crucial aspect of the proposed research, however, is the follow-up aspect. To this end it is, of course, imperative that the schools be willing to allow me to interview the teachers and children.

I would be most happy to discuss in detail my research with you and other interested school personnel at your convenience.

A response at your earliest convenience would be very much appreciated since it is necessary for me to contact these children prior to the end of the present school session.

Sincerely,

Clayton D. Lewis
Assistant Professor
Special Education

APPENDIX C

TEACHER RATINGS

TEACHER RATING OF BEHAVIOR PROBLEM

Directions: Following each of the six statements below, circle either "Yes" or "No" as it applies to the student being rated.

1. Lacks self confidence: Yes No
2. Unable to concentrate: Yes No
3. Needs prodding: Yes No
4. Feels inferior: Yes No
5. Poor self-control: Yes No

A>M<L BEHAVIOR RATING SCALE*

Pupil_____ District_____

Birth Date_____Sex_____ School_____

Date of Rating_____ Grade_____

Teacher_____

PLEASE RATE THIS PUPIL'S BEHAVIOR AS YOU HAVE OBSERVED AND EXPERIENCED IT

This Pupil--	Seldom of Never (1)	Not very Often (2)	Often (3)	Most of the time (4)	All of the time (5)
(A) 1. Gets into fights or quarrels with other pupils	___	___	___	___	___
(M) 2. Has to be coaxed or forced to work or play with other pupils	___	___	___	___	___
(A) 3. Is very restless	___	___	___	___	___
(M) 4. Is unhappy or depressed	___	___	___	___	___
(A) 5. Enjoys disrupting class discipline	___	___	___	___	___
(M) 6. Becomes sick when faced with a difficult school problem or situation	___	___	___	___	___
(A) 7. Is very obstinate	___	___	___	___	___
(M) 8. Is overly sensitive to criticism	___	___	___	___	___
(A) 9. Is very impulsive	___	___	___	___	___
(M) 10. Can be very moody	___	___	___	___	___
(A) 11. Has difficulty learning	___	___	___	___	___

A > Score_____

M < Score_____

L Score_____

Total_____

*Developed by San Mateo County School System, Redwood City, California

SYMPTOMATIC BEHAVIOR RATING SHEET

TEACHER_____ PUPIL_____

SCHOOL OR BUILDING_____ SYSTEM_____

GRADE_____ DATE_____

Instructions: Below you will find a list of words and phrases which describe various kinds of behavior sometimes seen among emotionally disturbed children. Go through this list and, in the space provided, place an "0" beside each item which is not a problem for the particular child you are rating, an "X" next to each one which is a mild problem and a "Y" next to each one which is a severe problem.

Behavior Descriptions

1. ____ Cheats
2. ____ Clumsy
3. ____ Self-deprecating
4. ____ Is a scapegoat
5. ____ Unable to concentrate; short attention span
6. ____ Threatens others physically
7. ____ Won't compete
8. ____ Unconscientious
9. ____ Lies
10. ____ Poorly coordinated
11. ____ Afraid to try
12. ____ Seeks help actively
13. ____ Disorganized in work
14. ____ Bullies others by hitting, pushing, etc.
15. ____ Passive
16. ____ Deceitful
17. ____ Steals
18. ____ Speech problem
19. ____ Easily upset
20. ____ Overly affectionate
21. ____ Lazy
22. ____ Argues
23. ____ Submissive, timid
24. ____ Dishonest
25. ____ Peculiar ideas
26. ____ Feelings of inferiority
27. ____ Overly generous, makes point of sharing
28. ____ Needs prodding
29. ____ Picks on others
30. ____ Shy
31. ____ Unfair
32. ____ Bizarre manner
33. ____ Lack of self confidence
34. ____ Blames others
35. ____ Annoys others
36. ____ Uncooperative
37. ____ Prefers to play with younger children
38. ____ Irresponsible,undependable
39. ____ Defiant of authority; disobedient
40. ____ Reticent, secretive
41. ____ corruptible
42. ____ destructive
43. ____ Easily flustered and confused
44. ____ Inattentive to what others say
45. ____ Impertinent, saucy
46. ____ Preoccupied; "in a world of his own"
47. ____ Insincere
48. ____ Self conscious, easily embarassed
49. ____ Laziness in school
50. ____ Loud
51. ____ Lack of interest in environment; "bored"
52. ____ Unjust
53. ____ Hypersensitive; feelings easily hurt
54. ____ Short attention span
55. ____ Assaultive
56. ____ Daydreams excessively
57. ____ Immoral
58. ____ Dislike for school
59. ____ Irritable
60. ____ Untruthful
61. ____ Sluggishness, lethargy
62. ____ Angers easily
63. ____ Concealing
64. ____ Drowsy
65. ____ Tries to hurt others
66. ____ Invites trouble

TEACHER RATING OF SCHOOL ATTITUDES AND PROBLEMS

Directions: Circle the appropriate response to each of the following two statements as they apply to the student being rated.

1. The child's general attitude toward school is:

excellent

average

poor

2. I see the child as having a school problem which is serious enough to require some intervention:

Yes

No

I. D. NO.:_____

Name of Child_____

A.

_____ 1. Child is a complete misfit in his class academically; he lacks the basic skills needed to learn current material.

_____ 2. Child is doing failing work (although he may receive social promotion.)

_____ 3. Child is doing passing work, but his grades are low enough, or he is working enough below his own capacity, to cause concern.

_____ 4. Child's work is generally satisfactory and in line with his ability.

_____ 5. Child's work is above average.

B. How does he compare with other children in his class in each of the following areas:

Upper 1/4	Middle 1/2	Lower 1/4	
( )	( )	( )	Reading
( )	( )	( )	Arithmetic
( )	( )	( )	Spelling

APPENDIX D

SELF RATING BY CHILD

TO BE COMPLETED BY STUDENT

The following questions are concerned about how you feel about school and yourself. Fill in the blank next to the number of the question in the following manner:

M	if you feel this way most of the time.
S	if you feel this way sometimes.
H	if you feel this way hardly ever.
N	if you never feel this way.

_____ 1. I worry about school.

_____ 2. My school studies are easy for me.

_____ 3. My parents don't like the way I get along in school.

_____ 4. The kids in the class try to boss me around too much.

_____ 5. The kids in school are my very good friends.

_____ 6. I like the things you do in school.

_____ 7. I feel upset in school.

_____ 8. I like to be called on in class.

_____ 9. I behave as I should in school.

_____ 10. Kids in my class are friendly.

_____ 11. The kids in class include everybody in what they do.

_____ 12. I have trouble getting all my school work finished.

_____ 13. School tests make me worry.

_____ 14. School is fun.

_____ 15. I have trouble keeping the rules in class.

_____ 16. Teachers don't understand kids very well.

_____ 17. The kids in my class are hard to get along with.

_____ 18. If I have a bad day in school, the teacher will understand.

_____ 19. I am afraid I will fail in school.

_____ 20. I'm proud of my school work.

_____ 21. I have trouble with my temper.

_____ 22. The teachers expect more of me than I can do.

_____ 23. You can't trust the kids in school very far.

_____ 24. Teacher is fair to all the kids.

_____ 25. I worry about my grades in school.

_____ 26. I do as well in school as most of the kids in my class.

_____ 27. I get in fights.

_____ 28. The kids in class pick on me.

_____ 29. When about to have trouble, the teacher helps me to behave.

_____ 30. I feel like giving up school.

_____ 31. What we learn in school is important to know.

_____ 32. I get blamed for things other kids do.

_____ 33. The teachers have favorites.

_____ 34. I wish I didn't have to go to school.

_____ 35. I get nervous sitting in class.

_____ 36. I do well in my school studies.

_____ 37. The rules for the class are too strict.

_____ 38. What we study in school is pretty hard.

_____ 39. I get bored in school.

_____ 40. The teacher helps me whn I need it.

_____ 41. I get blamed when it isn't my fault.

SELF-ESTEEM INVENTORY

(Coopersmith)

NAME_____ DATE_____

CLASS_____ TEACHER_____

Please mark each statement in the following way:

If the statement describes how you usually feel, put a check in the column "LIKE ME". If the statement does not describe how you usually feel, put a check in the column "UNLIKE ME".

There are no right or wrong answers.

	LIKE ME	UNLIKE ME
Example: I'm a hard worker.		
1. I spend a lot of time day-dreaming.		
2. I'm pretty sure of myself.		
3. I often wish I were someone else.		
4. I'm easy to like.		
5. My parents and I have a lot of fun together.		
6. I never worry about anything.		
7. I find it very hard to talk in front of the class.		
8. I wish I were younger.		
9. There are lots of things about myself I'd change if I could.		
10. I can make up my mind without too much trouble.		
11. I'm a lot of fun to be with.		

	LIKE ME	UNLIKE ME
12. I get upset easily at home.		
13. I always do the right thing.		
14. I'm proud of my school work.		
15. Someone always has to tell me what to do.		
16. It takes me a long time to get used to anything new.		
17. I'm often sorry for things I do.		
18. I'm popular with kids my own age.		
19. My parents usually consider my feelings		
20. I'm never unhappy.		
21. I'm doing the best work I can.		
22. I give in very easily.		
23. I can usually take care of myself.		
24. I'm pretty happy.		
25. I would rather play with children younger than I am.		
26. My parents expect too much of me.		
27. I like everyone I know.		
28. I like to be called on in class.		
29. I understand myself.		
30. It's pretty tough to be me.		
31. Things are all mixed up in my life.		
32. Kids usually follow my ideas.		
33. No one pays much attention to me at home.		

	LIKE ME	UNLIKE ME
34. I never get scolded.		
35. I'm not doing as well in school as I'd like to.		
36. I can make up my mind and stick to it.		
37. I don't really like being a boy (girl).		
38. I have a low opinion of myself.		
39. I don't like to be with other people		
40. There are many times when I'd like to leave home.		
41. I'm never shy.		
42. I often feel upset in school.		
43. I often feel ashamed of myself.		
44. I'm not as nice looking as most people.		
45. If I have something to say, I usually say it.		
46. Kids pick on me very often.		
47. My parents understand me.		
48. I always tell the truth.		
49. My teacher makes me feel I'm not good enough.		
50. I don't care what happens to me.		
51. I'm a failure.		
52. I get upset easily when I'm scolded		
53. Most people are better liked than me.		

	LIKE ME	UNLIKE ME
54. I usually feel as though my parents are pushing me.		
55. I always know what to say to people.		
56. I often get discouraged in school.		
57. Things usually don't bother me.		
58. I can't be depended on.		

APPENDIX E

QUESTIONNAIRE

I.D. No.:_____

Section I. Personal Information

1. Child's age at present_____years_____months.

2. Child is living in (check one): _____natural home

_____foster home

_____institution

_____with relatives

3. Time since child's discharge from the Virginia Treatment Center

_____years_____months.

4. Number of brothers and/or sisters child has_____.

5. Breadwinner's occupation (specific)_____.

6. With whom does the child live (check one): _____both natural parents

_____step mother and natural father

_____step father and natural mother

_____mother only

_____father only

_____foster parents

7. Following discharge from the Treatment Center did your child continue in out-patient therapy? _____Yes _____No

8. If #7 is "yes," for how long: _____years _____months

9. Is your child presently in school? _____Yes _____No

IF you have answered item #9 "yes" please answer items #10-#12.

10. What grade is your child in now?_____.

11. What grade should your child be in?_____

12. Is your child in a special education class? _____Yes _____No

IF you answered item #9 "no" please answer items #13-#15.

13. How long has your child been out of school? _____years_____months

14. What was the highest grade your child completed in school?_____.

15. Is your child presently employed? _____yes _____No (If in the armed forces please indicate)

Section II. School Information

If your child is no longer attending school, please answer the following questions as you best remember the situation when he was in school.

1. Check the one description which you feel best describes your child's school achievement.

   _____ a. Child is a complete misfit in his class academically; he lacks the basic skills needed to learn current material.

   _____ b. Child is doing failing work (although he may receive social promotion.)

   _____ c. Child is doing passing work, but his grades are low enough, or he is working enough below hiw own capacity, to cause concern.

   _____ d. Child's work is generally satisfactory and in line with his ability.

   _____ e. Child's work is above average.

2. Directions: Following each of the six statements below, circle either "YES" or "NO" as it applies to your child in school to the best of your knowledge.

1.	Lacks self confidence:	Yes	No
2.	Unable to concentrate:	Yes	No
3.	Needs prodding:	Yes	No

4. Feels inferior: Yes No

5. Poor self-control: Yes No

3. Directions: Circle the appropriate response to each of the following two statements as they apply to your child.

1. The child's general attitude toward school is: excellent
average
poor

2. I see the child as having a school problem which is serious enough to require some help other than that which the school is (or was) providing. Yes No

Section III. Behavioral Information

1. Check the <u>one</u> that best describes your child.

_____ a. Doesn't seem to like others very much, and has little if any regard for their feelings. Does things which he or she knows are wrong or will hurt others, but doesn't display any signs of feeling ashamed or sorry about it, and shows no concern about "getting caught."

_____ b. Wants what he wants when he wants it. Pretends to feel sorry for his behavior but doesn't really. Major concern is with getting caught--which seems to bother him.

_____ c. Child doesn't have a true set of personal values or standards of behavior, but has learned the "don'ts" of society and feels badly when he breaks the rules.

_____ d. Child has a fairly good set of values and is genuinely concerned over the feelings of others most of the time.

_____ e. Child has a very high set of moral principles or values. Very concerned and sensitive to the feelings of others.

2. Please rate your child's behavior as your have observed and experienced it, or been told of it by others such as the school.

	Seldom or Never (1)	Not Very Often (2)	Often (3)	Most of the time (4)	All of the time (5)
1. Gets into fights or quarrels with other children	___	___	___	___	___
2. Has to be coaxes or forced to work or play with other children	___	___	___	___	___
3. Is very restless	___	___	___	___	___
4. Is unhappy or depressed	___	___	___	___	___
5. Enjoys disrupting discipline	___	___	___	___	___
6. Becomes sick when faced with a difficult problem or situation	___	___	___	___	___
7. Is very obstinate	___	___	___	___	___
8. Is overly sensitive to criticism	___	___	___	___	___
9. Is very impulsive	___	___	___	___	___
10. Can be very moody	___	___	___	___	___
11. Has difficulty learning	___	___	___	___	___

3. Instructions: Below you will find a list of words and phrases which describe various kinds of behavior sometimes seen among children. Go through this list and, in the space provided, place an "0" beside each item which is not a problem for your child, and "1" next to each one which is a mild problem and a "2" next to each which is a severe problem.

BEHAVIOR DESCRIPTIONS

1._____Cheats
2._____Clumsy
3._____Self-depreciating
4._____Is a scapegoat
5._____Unable to concentrate; short attention span
6._____Threatens others physically
7._____Won't compete
8._____Unconscientious
9._____Lies
10._____Poorly coordinated
11._____Afraid to try
12._____Seeks help actively
13._____Disorganized in work
14._____Bullies others by hitting, pushing, etc.
15._____Passive
16._____Deceitful
17._____Steals
18._____Speech problem
19._____Easily upset
20._____Overly affectionate
21._____Lazy
22._____Argues
23._____Submissive, timid
24._____Dishonest
25._____Peculier ideas
26._____Feelings of inferiority
27._____Overly generous, makes point of sharing
28._____Needs prodding
29._____Picks on others
30._____Shy
31._____Unfair
32._____Bizarre manner
33._____Lack of self confidence
34._____Blames others
35._____Prefers to play with younger children
36._____Irresponsible, undependable
37._____Defiant of authority; disobedient
38._____Reticent, secretive
39._____Corruptible
40._____Destructive
41._____Easily flustered and confused
42._____Inattentive to what others say
43._____Impertinent, saucy
44._____Preoccupied; "in a world of his own"
45._____insincere
46._____Self consciousness, easily embarrassed
47._____Laziness in school
48._____Loud
49._____Lack of interest in environment; "bored"
50._____Unjust
51._____Hypersensitive; feelings easily hurt
52._____Short attention span
53._____Assaultive
54._____Daydreams excessively
55._____Immoral
56._____Dsilike for school
57._____Irritable
58._____Untruthful
59._____Sluggishness, lethargy
60._____Angers easily
61._____Concealing
62._____Drowsy
63._____Tries to hurt others
64._____Invites trouble
65._____Annoys others
66._____Uncooperative