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THE UNIVERSITY OF ALBERTA

ACADEMIC SELF-ESTEEM AND ACHIEVEMENT IN BEHAVIOR DISORDERED CHILDREN

by

WILMA BAYKO

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF EDUCATION

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled ACADEMIC SELF-ESTEEM AND ACHIEVEMENT IN BEHAVIOR DISORDERED CHILDREN
submitted by WILMA BAYKO
in partial fulfilment of the requirements for the degree of MASTER OF EDUCATION
in COUNSELLING PSYCHOLOGY

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Abstract

This investigation examined the treatment effects of special classes for behaviorally disordered students and the relationship between academic self-esteem, student achievement and teacher ratings of student behavior disorders.

The subjects were 11 students previously diagnosed as behaviorally disordered and placed in a two-year special class in designated schools. The instruments used were: The Culture-Free Self-Esteem Inventory for Children, The Behavior Problem Checklist, the Burns/Roe Reading Inventory, The Schonell Graded Word Spelling Test, the Diagnostic Math Test-Level C, The Neale Analysis of Reading Ability, and the Stanford Diagnostic Math Test.

Treatment effect would be demonstrated if student achievement improved, if incidents of behavior disorders decreased and if self-esteem increased.

Results showed there was a treatment effect as indicated by an overall improvement in self-esteem and academic achievement and a reduction in behavior disorders as reported by teacher ratings and observations. Results also showed there was a low correlation between self-esteem and academic achievement and between academic self-esteem and teacher rating of student behavior disorders. These correlations were not, however, statistically significant.

Implications and suggestions for research were discussed.

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CHAPTER I

OVERVIEW

Even though there have always been individuals whose behavior is considered different from the norm, emphasis in the field of education is now being placed on how to identify, educate and treat youngsters whose behavior is aberrant. Historically, the treatment of children with behavior disorders was based on a punishment rather than on a rehabilitative model. Children whose behavior was aberrant were excluded from schools. Only recently have schools allowed these children to remain. Today these children may attend school in regular classes, special classes or special schools or may reside and receive their education in an institution.

Because our society values education and believes that the quality of that education strongly influences the future of the child, it is even more important for teachers to provide a quality education for children with behavior disorders (Cullinan, 1983). It is known that behavior can be caused, increased or continued, by what a teacher does, or fails to do. Teachers can play a major role in the reduction or elimination of behavior disorders, and must therefore be knowledgeable in this area (Schmid, et al, 1984).

Two issues that receive considerable attention in the

literature concern the assessment and identification of students with behavior disorders and the definition of the term "behavior disordered".

> Various professionals employed by educational agencies are currently faced with the appropriate means of identifying students who are handicapped...Although seriously emotionally disturbed is defined (in the U.S.)in Public Law 94-142, it appears that a variety of terms and definitions are currently being used at the state level. (Smith, Frank, & Snider, 1984)

After studying 207 students designated emotionally disturbed, Bower (1982) observed that these students were poor learners (despite being able to learn); they had few satisfactory interpersonal relationships; they behaved oddly or inappropriately; they developed illnesses or phobias; and they were unhappy or depressed.

More generally, McDowell (1982) suggests that behavior can be identified as disordered when it does not match the situation and Cullinan (1983) states that "when youngsters behave in ways that create discomfort or hindrances for themselves or others, they are said to show behavior disorders" (p. 1). Given this broad spectrum of definitions, it would seem that most people's behavior would be considered disordered at one time or another throughout their childhood. Clearly a rate, frequency and severity classification must be included in the definition (Bower, 1982).

Another notion that is supported in the literature is that children with behavior disorders often exhibit academic difficulties (Oliver, 1974; Roberts & Baird, 1972;

Swift & Spivak, 1968, 1969, 1973, 1975). Some of these studies report that up to 80 percent of behavior disordered children experience academic difficulties (Stone & Rowley, 1964; Tamkin, 1960; Wright, 1974; & Brown, 1981). In studying elementary aged boys Glavin and Annesley (1972) found that 81 percent showed problems with arithmetic. In a study of "emotionally disturbed" and "socially maladjusted" eleventh graders, Cawley and Webster (1981) found that 50 percent showed functional literacy insufficient to receive a high school diploma.

As early as 1943 Fernold, (later supported by Glick, 1972), indicated that emotional problems arose after students experienced continued failure in reading. However, a causal relationship between behavior disorders and failure to read has not been substantiated.

Along with academic difficulties, it is also logical to assume that a low self-concept would be associated with behavior disorders. Most educators would agree that students who have a good attitude about themselves tend to do well in school and that those who view themselves negatively do not do well academically. Kauffman (1981), suggests, however, that intelligent, healthy, socially capable, self-assured children evoke positive reactions from teachers and that children with behavior difficulties evoke unfavorable reactions resulting in an unproductive cycle with ever-increasing school problems.

One hypothesis is that rejection from important people

will cause the child to reject himself and will become incorporated into a negative self-concept and may result in more negative behavior. There is, however, not enough research to support whether poor self-concept results in behavior disorders or vice-versa; or whether other factors are responsible for both a low self-concept and behavior disorder (James, Osborn & Oetting, 1967).

Despite this, improvement of self-concept is often presented as a primary goal of special education for the behaviorally disordered (Forness, 1983).

In order to continue to examine these issues, the purpose of this study was to investigate the :

a) relationship between academic self-esteem and academic achievement in language arts and mathematics of elementary and secondary behavior disordered students.

b) relationship between teacher ratings of student behavior disorders and student reported level of academic self-esteem.

c) treatment effect in two pilot behavior disordered elementary and secondary classes as measured by change in student reported level of academic self-esteem.

ANTECEDENTS OF THE PROBLEM

Only within the last thirty years has special education for children with behavior disorders fully emerged. Despite the amount of research, however, problems still ex-

ist with regard to concensus on etiology, definition, prevalence, and treatment of behavior disorders.

Research techniques for studying the etiology of behavior disorders are varied and have much to do with the confusion regarding antecedents of behavior disorders (Brown, 1981). Ideally, research should be conducted in a laboratory where dependent variables (behavior) can be validly measured while controlling for confounding variables. Independent variables can then be systematically manipulated in order to study their effects. However, these conditions are impossible to attain in the natural environment. As suggested by Brown (1981) "the best alternative to laboratory research for etiological investigations is the longitudinal study" (p. 34). This type of study, however, presents numerous difficulties. Because of the expense, very few longitudinal studies have been done in the area of behavior disorders. In order for this type of research to be meaningful, large numbers of subjects must be followed for many years.

An alternate research strategy to study the etiology of behavior disorders is the field study. This requires researchers to collect large quantities of data in the natural environment using various techniques such as interviews, questionnaires and direct observations. Problems arising with this type of research involve the questionable reliability of the data as well as the fact that the researchers themselves are limited by the necessity of decid-

ing which variables are important. Despite this, most of the information regarding the continuity of child and adult behavior disorders has been derived from retrospective studies (Brown, 1981).

One of the most popular methods used in etiological research involves assessing a sample of individuals who may or may not represent a specific population (Campbell & Stanley, 1963). Large amounts of data are collected with interpretation of the results being based on the intercorrelation between the variables selected for the study. The problem with these type of studies, however, is that they do not demonstrate etiology or that one thing causes another. "Correlation is (instead) an expression of the way in which two things vary together: it (only) demonstrates the extent to which they are related..." (Brown, 1981, p. 35). Several research studies have shown that behavior disorders are correlated with home environments, inappropriate parental disciplinary techniques, low intelligence, poor school performance, etc. (Balswick & Macrides, 1975; Jensen, 1972; Jones & Swain, 1977).

Since anything short of laboratory research cannot reliably identify events or agents that cause behavior disorders, this study examined correlates as opposed to causes. The correlates selected in this study pertain specifically to school; i.e. academic achievement, teacher rating of student behavior disorders, and student reported academic self esteem.

DEFINITIONS

Behavior Disorders

Children with behavior disorders are those who chronically and markedly respond to their environment in ways that deviate significantly from age-appropriate expectations and significantly interfere with their own learning and/or that of others. Such children demonstrate more than one of the following characteristics:

a) inability to establish or maintain satisfactory relationships with peers or adults;
b) frequent demonstrations of inappropriate behavior or feelings under ordinary conditions;
c) a generally pervasive mood of unhappiness or depression;
d) severe difficulty in coping with the learning situation despite remedial measures;
e) development of physical symptoms or fears associated with personal or school problems;
f) severe difficulty in facing reality. (Blowers,et al, 1983)

Along with this definition is a caution that behavior disorders be seen as on a continuum---with one end including students who exhibit the above behaviors infrequently for short periods of time to the other end where a smaller number of children exhibit behavior disorders for extended periods of time, in all settings, and to an extreme degree.

Self-Concept

Self-concept is the sum total of a person's attitudes and feelings about him or herself. As Hamachek (1973) defines it, "The self is the sum total of all that a person can call his...it is a person's awareness of all the beliefs, attitudes and opinions which he holds about

himself" (p. 262). It includes "the person's ideas of the kind of person he is, the characteristics he possesses, and his most important and striking traits" (Coopersmith & Feldman, 1974, p. 198).

Research (Piers & Harris, 1964; Muller & Leonetti, 1974; & Shavelson, Bolus & Keesling, 1980) reported that self-concept can be subdivided into a complex of relatively independent and discreet areas that can be studied separately. This is supported by the research of Muller, Chambliss & Wood, (1978); and Gose, Wooden & Muller, (1980); who report that direct measures of behavioral characteristics of an individual are reliably related only to those measures of self-concept which directly reflect those qualities. For the purpose of this study, academic self-esteem was the component of self-concept which was examined.

Academic Self Esteem

Academic self-esteem is the subset of school-related self-evaluation statements held by a student.

SPECIFIC PROBLEMS AS SEEN IN THE LITERATURE

As was stated earlier, the type of research one is able to do is dependent on several factors such as time, money, and accessibility. To date, the considerable research done in the area of behavior disorders has not identified specific causes either in groups or individuals. At best, the research indicates that behavior is influenced by many factors: biophysical, cultural and/or psychological.

It would seem more realistic and productive to consider factors that may predispose or predict the probability that a behavior disorder might occur and establish a treatment model that will reduce or eliminate these factors.

One factor that this study examined was the self-reported esteem levels of students described as behavior disordered. It has been proposed that a person's self-concept varies according to the attitudes and feelings he or she has with respect to different situations (Pervin, 1980); and, that, self-esteem can be an important determinant of behavior. As Aronson & Mette (1968) indicated, people tend to behave in ways that are harmonious with their self-concepts. As Cullinan (1983) states; "It is logical to assume that many behaviorally disordered youngsters possess poor self-concepts" (p. 58). However, there is not enough scientific evidence to determine whether low self-esteem is a causative factor or if behavior disorders cause low self-esteem. Poor self-concept is suggested by some as a cause of behavior disorders (James, Osborn & Oetting, 1967) and improvement of such is often a primary goal in educating the behavior disordered. It has also been found that in order for children to feel good about themselves, they must experience success. Therefore, it seems logical that programs designed to treat behavior disorders must provide for some of these success experiences.

The question of causality with regard to reading dif-

ficulties and behavior disorders is not clearly established either. The problem of establishing a causal relationship between reading disability and behavior disorders is also complicated by the difficulty in conducting sound research in this area. Research has demonstrated that reading-disabled students do demonstrate higher incidence of adjustment problems (Hake, 1969), and that, the negative effects on personal adjustment of early reading disabilities appears to continue into adulthood (Woolf, 1965). It also seems that experience of failure may precipitate behavior disorders as a means of compensating for the negative feelings associated with failure. (Cawley, Goodstein & Burrow, 1972). As Brown (1981) states "failure is the daily lack of success and the production of unacceptable but tolerable rates of incorrect responses" (p. 302). This combination is paradoxical. If the teacher tells the student that his/her behavior is unacceptable, and continues to confront the child with failure experiences, the teacher is, then, demonstrating tolerance for the unacceptable behavior. Children must be allowed to succeed. As a result of being confronted with success experiences their academic achievement should improve along with improvement in self-concept. At the same time, their compensatory behavior problems should decrease.

RESEARCH QUESTIONS

This study examined the following questions?

Question 1

Would student reported self-esteem and teacher rating of student behavior disorders change in a positive direction as a result of treatment?

Question 2

What is the relationship between student reported level of academic self-esteem and teacher rating of behavior disorders?

Question 3

What is the relationship between student self-ratings of academic self-esteem and achievement in language arts and mathematics?

OVERVIEW OF THE THESIS

Chapter II of this thesis is a review of the literature with regard to the historical development of behavior disorders. Also, the development of various theoretical perspectives and a review of the literature with regard to prevalence, characteristics, assessment, etiology and treatment of behavior disorders is included. As well, the relationship between academic achievement and behavior disorders and self-esteem and behavior disorders as seen in the literature is reviewed.

In Chapter III the methodology and design of the study is described with results being reported in Chapter IV. Chapter V contains the summary and discussion of the study.

CHAPTER II

REVIEW OF RELATED LITERATURE

HISTORICAL PERSPECTIVE

There is growing concern in "educational" and "parenting" circles today regarding the seemingly increasing numbers of children with behavior disorders. The topic has become a "public issue" with a widespread belief that "schools today are places in which chaos and aggression are increasingly encountered" (Frude, Gault, 1984, p. 7). This belief has been fueled by the media's reporting of outstanding incidents. For example, in reporting an incident from St. Savior's Church of England School in 1982, banner headlines proclaimed "Terror of Mini Mafia". "Riot class of '82'", and "Children's Reign of Terror" (Frude, Gault, 1984). Even though the incident had more to do with the socioeconomic issues of unemployment and living conditions, some of the presentations implied that schools were in a state of crisis and that the dominant theme (as seen by the media) is that contemporary school life is one of violence and disruption.

In actuality the situation is not as severe as presented in those headlines, but school violence and disruption is not a myth. Our schools are not in chaos and crisis, however, more and more attention is being paid to

the study of disordered and disruptive behaviors of pupils. Due to the difficulties in measuring the degree of indiscipline, none of the studies on their own, however, are totally convincing with regard to the issue of whether disruptive behavior is on the rise in our schools. Due to the attention that this issue has received, what has happened is that "behavior disorders" are being studied with a view to prevention. Hopefully from this, children who are genuinely "disordered" will be able to receive the help they need.

Historically, treatment of both disordered adults and children has varied considerably from harsh, almost fatal methods of treatment (exorcism or torture) to the more permissive psychodynamic perspective in the 1920's and '30's (Cullinan, 1983). During the Greek and Roman era, the roots of abnormal behavior were seen as either organic or psychological. "Hippocrates, "the father of medicine",...was scornful of supernatural interpretations of physical and behavioral disorders" (Cullinan, 1983, p. 13), and treatment for such disorders was, as a result, relatively humane, based on a medical rather than a religious philosophy.

As the Christian Church grew in influence, civilization entered the Dark Ages. During this era, the Church centered on powers of good and evil. It was believed that the "Devil and his servants" were responsible for deviant behavior and treatment involved exorcism to

drive out the evil powers, or torture and death to kill the carrier of the evil (Cullinan, 1983).

The power of the Church faded and the Dark Ages slowly ended. Beliefs during this period of Renaissance placed more value on the "person's rights, achievements and potentials" (Cullinan, 1983, p. 14). During the early 16th century, Juan Luis Vives, a social philosopher, was interested in helping the behaviorally disordered in a more humane way. He insisted on value being placed on self-understanding, reasoning and careful observation of nature and rejected the supernatural explanations of human behavior. Vives was one of the first men to advocate for hospitals for "mentally ill" people insisting that:

> It should be considered a highest service if we either restore the minds of others to sanity or keep them sane and rational. Hence, when a man of unsettled mind is brought to a hospital it must be determined...whether his illness is congenital ... whether there is hope for recovery...It is of utmost importance that the treatment be such that the insanity be not nourished and increased... (quoted in Zilboorg & Henry, 1941, p. 187)

Continuing along this line, John Locke, another philosopher, saw the human mind as a blank slate (tabula rasa) to be filled with associations and experiences from the moment of birth---a position seen as the forerunner of the behavioral school of psychology.

Although these Renaissance philosophers would eventually change ideas, treatment of the mentally ill and behaviorally disordered during this time, still involved witchcraft, torture and imprisonment. The few asylums and

monasteries were renowned for their deplorable conditions; the Monastery of Saint Mary of Bethlehem (Bedlam) in London being just one example. "Treatment was cruel: Inmates, with heads shaven were put in straight jackets and chains, isolated in dark cells, and forgotten except for occasions on which citizens could pay a small fee to the keepers for the privilege of observing these unfortunate children and adults displaying their deviant behavior" (Cullinan, 1983, p. 16).

Humanistic treatment of the behaviorally disordered emerged with the appointment of Philippe Pinel as head of Bicetre Hospital (1792). He received permission to unchain his patients maintaining that "these mentally ill are intractable only because they are deprived of fresh air and their liberty" (Zilboorg & Henry, 1941, p. 322). Independent of Pinel, efforts by William Tuke in England and Benjamin Rush in the United States resulted in hospitals striving to provide for more humane treatments for the behaviorally disordered (Cullinan, 1983).

The work of Pinel, Tuke, Rush and others in this area was called "moral treatment" because its "orientation promoted the development of a definite therapeutic system" (Cullinan, 1983, p. 16). As Bockoven (1963) stated the moral therapist "acts towards his patients as though they were mentally well...(and impresses) on patients that idea that a change to more acceptable behavior was expected" (p. 76).

In the late eighteenth and nineteenth centuries, the enactment of child labor laws and compulsory school attendance laws supported the growth of the public school system. Prior to this, a school education was considered a privilege for only the wealthy upper class. As Cremin (1961) stated:

> Compulsory school attendance marked a new era in the history of American education. The crippled, the blind, the deaf, the sick, the slow-witted, and the needy arrived in growing numbers. Thousands of recalcitrants and incorrigibles who in former times might have dropped out of school now became public charges. (p. 127)

Alternatives needed to be established for these students with special educational problems. Thus, special classes, tutorial sessions, nongraded programs and disciplinary classes began to appear in nearly 200 cities during the early 1900's (Sarason & Doris, 1979).

However, one problem still existed. Until the late 19th century, very little systematic study had been done on children's behavior---normal or abnormal. Thus, children were perceived as miniature adults with their behavior disorders being seen as downward extensions of adult disorders (Achenbach, 1974).

One of the first studies done on the thought processes of children and adolescents was in 1904 by G. Stanley Hall---the first man in America to receive a Ph.D. and the founder of the American Psychological Association. His two-volume book Adolescence (1904) described the development of the adolescent. At about the same time, in France,

Alfred Binet developed his intelligence test, "thus facilitating objective judgements about the degree of deviance from normal (average) intellectual ability" (Cullinan, 1983, p. 19). Terman (1916) adapted Binet's work for American children and published the Stanford-Binet scale. With these developments came the advent of several longitudinal studies of large numbers of children to establish some objective norms on physical, social, emotional behavioral and intellectual characteristics.

The three best known studies were the Berkeley Growth Study (MacFarlane, Allan & Honzik, 1954); the Fels Research Institute Study (Kagan & Moss, 1962); and Terman's study of intellectually gifted children (Terman & Oden, 1959).

Along with this growing interest in the psychological development of children was a growing concern for the physical and psychological well-being of children. The first psychological clinic for children was established in 1896 in the United States by Lightner Witmer at the University of Pennsylvania. Its major purpose was to apply the principles of psychology to assist children with behavior and learning difficulties. Upon the establishment of the National Committee for Mental Hygiene in 1909, prevention and early identification of mental illness, became the focus of attention. This Committee also conducted surveys and found that behavioral and emotional problems in children were higher than expected, that existing services to treat behaviorally disordered children were inadequate

and that most behavior disorders of children were not hopeless. (Rie, 1971). The development of a team approach to treating these children as well as the establishment of child guidance clinics is directly attributed to the work of this Committee.

By the late 1920's, various states established special education departments at universities along with requiring basic certification for teachers in special education. Thus began the growth of special education.

At the end of World War II the public was forced to change its attitudes about handicapped people. Parents and parent organizations began to demand special education services to the extent that by 1950 federal legislation was put into effect to finance colleges and state agencies to better prepare teachers of the mentally retarded (Burke, 1976). In 1964, the Council for Children with Behavioral Disorders was established as part of the International Council for Exceptional Children. By 1966, the federal Bureau of Education for the Handicapped was formed to encourage further research and training for teachers for mentally handicapped and behaviorally disordered students. As more people became aware of issues with handicapped children, the "litigation-legislation-litigation cycle" became the process to bring about change in educating handicapped children (Bateman & Herr, 1981). This eventually led to the famous "Public-Law 94-142---the Education for All Handicapped Children Act of 1975". This law has been

heralded by some as the "Bill of Rights" for handicapped children (Goodman, 1976). "PL 94-142 guarantees and defines the concepts of the right to a free education, the development of an individualized education program, education in the least restrictive environment, and due process safeguards" (Cullinan, 1983, p. 24).

Since the establishment of PL 94-142, various forms of legislation have evolved in Canada. Each province has developed legislation in regard to its handicapped children. In Alberta the School Act (1988) provides for education of handicapped children under Section 29:

> 1) A board may determine that a student is, by virtue of the student's behavioral, communicational, intellectual learning or physical characteristics, or a combination of those, a student in need of a special education program.
> 2) A student who is determined by a board to be in need of a special education program is entitled to have access to a special education program provided in accordance with section 28.
> 3)Before a board places a student in a special education program it shall
> a) consult with the parent of that student, and
> b) where appropriate, consult with the student. (p. 23)

With increased public pressure for excellence and with the advances in educational technology it is becoming easier to recognize students with handicaps, whether they be in the area of academic learning or social-behavioral learning. To date, however, efforts to meet the educational needs of students with behavior or learning problems has not been totally successful despite the changes in legislation and teacher qualifications. This is, in part,

due to the complexity of these problems. The more these areas are researched, it seems, the less defined they become because of differences in determining definition, etiology, treatment and prevention. It is important, therefore, to continue to do research in these areas in order that the special needs of these students be addressed.

THEORETICAL PERSPECTIVE

Prevalence

One of the results of the classic longitudinal Berkeley Child Guidance (MacFarlane et al., 1954) and surveys administered by the U.S. Department of Health, Education and Welfare in the 1960's (Oliver, 1974; Roberts & Baird, 1972) was that researchers were able to establish some normative data on developmental stages and sex differences in school-age children. It was also established that up to one-third of the children experienced problems in attentiveness, adjustment, discipline and relationships with their peers. In these surveys, teachers reported that "14 percent of the pupils were somewhat maladjusted, and an additional 1.5 percent were considered seriously maladjusted...emotional and behavior problems were associated with below-average ability and achievement (and that) children with one kind of behavior problem tended to have some other kind of problem" (Cullinan, 1983, p. 95).

These epidemiology studies along with many others (as reviewed by Glidewell and Swallow, 1968; Graham, 1979) indicate that, generally behavior problems of children and

adolescents are common, the extent of behavior problems varies by age and behavior problems appear to vary by sex.

Due to the lack of consensus on a definition of behavior disorders and the variablity of reported prevalence estimates, it is difficult to summarize the literature on prevalence. Cullinan (1983) suggests the following "rule-of-thumb" with regard to prevalence of behavior disorders:

> 1) In any school year, approximately one-third of all pupils exhibit behavior problems that concern their teachers.
> 2) About one-third of this group (roughly 10 percent of pupils) show a greater degree of problems, to the extent that changes from the usual educational procedures are required.
> 3) In around one-third of this group (roughly 4 percent of pupils), behavior disorders are serious enough to justify referral to special education and/or other intervention services. Within this 4 percent figure is included the tiny proportion (less than 1 in 1000; Werry, 1979a) of severely to profoundly behaviorially disordered youngsters. (p. 107)

Given that behavior disorders do exist in children, is it fair to say that severity is the factor that determines when a "problem" becomes a "disorder"?

Part of the difficulty in answering this question has to do with definition. As was already stated, no definition of behavior disorders is universally accepted by special educators and/or other professionals; however, there seem to be two areas of agreement: "Children with behavior disorders 1) deviate from standards or expectations for behavior and 2) impair the functioning of others or themselves" (Cullinan, 1983, p. 103). Therefore, frequency, intensity and persistence do become mitigating

factors in judging behavior disorders. The terms mild, moderate and severe have been used to report on prevalence of behavior disorders.

> ...incidences figures for the mild group have been reported from 10 percent (Kauffman, 1977) to 36.3 per cent
> (Bahn & Norman, 1959); 2 percent (Grauvard, 1973) to 12.6 percent (Bahn & Norman, 1959) for the moderate group ; .1 percent (Kauffman, 1974) to 4 percent (Glidewell & Swallow, 1968) for the severe. Delivery systems differentiate the mild group as children who can manage in school while the moderate require more extensive help in resource room and the severe require assignment to special classes or schools. (Olson, et al., 1980, p. 96)

Other research has found that only two major categories of behavior disorders are represented; that of mild/moderate and that of severe/profound. Olson, et al. (1980) found that when teachers categorized behavior disordered students no characteristics were linked with the moderate category. The moderate category was, instead, linked with the mild category.

Typically, for educational purposes, definitions of behavior disorders are developed according to legislation and the local conditions of funding and facilities. Definitions, however, used by educational authorities tend to conclude that behavior disorders exist when:

> -the behavior deviates from expected norms;
> -the behavior is chronic and excessive;
> -the behavior is exhibited over several settings;
> -the individual has difficulty in interpersonal relationships;
> -there are frequent concommitant learning and achievement problems. (Blowers, et al., 1983)

In defining behavior problems, Kauffman (1977) states

> Children with behavior problems are those who chronically and markedly respond to their environment in socially unacceptable and/or personally unsatisfying ways but who can be taught more socially acceptable and personally gratifying behavior. Children with mild and moderate behavior can be taught effectively with their normal peers (if their teachers receive appropriate consultative help) or in special resource or self-contained classes with reasonable hope of quick reintegration with their normal peers. Children with severe and profound behavior disorders require intensive and prolonged intervention and must be taught at home or in special classes, special schools, or residential institutions. (p. 23)

Characteristics

There is a growing body of literature to support the argument that behaviorally disorder students differ from learning disabled or educable mentally retarded on the basis of social adjustment (Hallahan & Kauffman, 1977). In a study done by McCarthy & Pareskevopoulos (1969), teachers rated learning disabled, behaviorally disordered and average children on the Behavior Problem Checklist (Quay & Peterson, 1975) and reported that behaviorally disordered students had higher scores on three factors: conduct disorder, personality problems and inadequacy/immaturity than either learning disabled or average children. In other studies, Gjar (1979) also found that behaviorally disordered children had higher scores on conduct disorders and personality problem factor and both behaviorally disordered children and learning disabled children had higher scores on personality factor. The differences between the behaviorally disordered and learning disabled groups approached significance. It seems that the conduct disorder

factor differentiates between a behaviorally disordered student and a learning disabled student. Barr and McDowell (1972) observed classroom behaviors of learning disabled and behaviorally disordered students and found that behaviorally disordered children presented more negative physical contact, vocalizations, and out-of-seat behavior than the learning disabled students. These factors match with those associated with the conduct disorder dimension on the Behavior Problem Checklist. In a study done in 1982, using the Classroom Behavior Inventory, McKinney and Forman found behaviorally disordered children rated less task-oriented and considerate and more distractable and hostile than learning disabled children.

In the extensive studies using the Behavior Problem Checklist (Quay, 1977, 1979; Quay & Peterson, 1975) two to four different factors of behavior disorders are found depending on age and sex. These were conduct disorder, personality problems, inadequacy/immaturity and socialized delinquency. Conduct disorder and personality problems are seen by Quay (1979) as fundamental problems of behavior disorders because these factors are identified when both normal and behavior disorder children and adolescents are studied. This is also compatible with the notion that the difference between behavior disordered children and normal children has to do with degree or severity of the problem.

McDermott (1980, 1981) analyzed data collected from teachers who observed and rated behaviors of over 2000

Canadian school children using the Bristol Social Adjustment Guides (Stott, 1979) and also found major dimensions similar to Quay and others.

More recently, a large study done by Epstein, Kauffman and Cullinan (1985) using the Behavior Problem Checklist demonstrated the "pervasiveness and consistency of the Aggression-Disruption factor across age groups and sexes" (p. 143). They reported that this factor "which has been repeatedly found in other analysis, is remarkably reliable and consistent in the specific items comprising it (Cullinan & Epstein, 1984; Quay, 1979). Edelbrock and Achenbach (1984), although using a different scale, found a similar factor (aggressiveness)" (Epstein et al., 1985, p. In comparing parallel items comprising the aggression-disruption factor and Edelbrock and Achenbach's (1984) aggressive factor, Epstein et al. (1985) found that they included the following: disobedience, negativism (argues, defiant), boisterous (loud), temper tantrums, disruptiveness (disrupts classes), fighting, profane language (swearing), jealousy, irresponsibility (acts irresponsibly), attention-seeking (demands attention), uncooperative (stubborn), irritability (moody, explosive, easily frustrated), and impertinence (talks out of turn, defiant, threatens, shows off). (Items in parentheses are those from the Edelbrock & Achenbach study that parallel those found in Epstein et al. study). Epstein, Kauffman and Cullinan (1985) then conclude that "the primary factor

in children's behavioral disorders as perceived by teachers, one consisting of aggression and classroom disruption, is clearly established for school-age children regardless of age or sex" (p.132).

These highly disruptive children form the majority of those identified in schools as behaviorally disordered. Prolonged, frequent and severe aggression is of more concern to teachers than any other type of behavior disorder (Bullock & Brown, 1972). Children with conduct disorders are disobedient, destructive, defiant, disruptive, assaultive, impertinent and jealous. Their continual refusal to comply with school rules and conventional rules of behavior as well as their refusal to have others help make them difficult to teach (Hallahan & Kauffman, 1982).

Conduct disordered children have also not developed any reliable internal controls. "Their behavior is impulsive, distractible, hyperactive and disruptive. They have short attention spans, and sometimes seem not to know right from wrong (Winzer, Rogow & David, 1987).

At the other extreme, a factor that merits consideration in examining characteristics of behaviorally disordered children is the anxiety-inferiority factor. This factor appeared in four subsamples in the Epstein, Kauffman & Cullinan (1985) study. Previously a general factor called internalizing or anxiety/withdrawal had been found consistently in samples of behaviorally disordered children (Achenbach & Edelbrock, 1978, 1981, 1983; Quay, 1977,

1979). More recent studies have found problems related to lack of social competence and feelings of inferiority (Cullinan & Epstein, 1984; Edelbrock & Achenbach, 1984). Children identified with these problems internalize their behavior (Achenbach, 1966) and exhibit behavior that is different than that of the aggressive child.

> They may suffer from nausea, pains, headaches, phobias,fears, obsessions, shyness, nightmares, crying, depression, self-consciousness and withdrawal. Withdrawn children are fearful, secretive and apathetic. They tend to spend large amounts of time fantasizing and day-dreaming instead of interacting with those around them. Younger children may show regressive behaviors such as thumb-sucking, clinging and toilet accidents. (Winzer, Rogow, & David, 1987, p. 393)

Because these children do not attract attention to themselves, they can often be overlooked. They have low self-concept and self-esteem and are self-conscious, hypersensitive and unhappy most of the time (Winzer, et al., 1987). Also these children are often a greater threat to themselves and others because they have ineffectual social relationships. As a result of their low self-image these students experience feelings of "hopelessness" and depression which in the extreme may manifest in suicide (Cohen-Sandler, Berman & King, 1982).

More interest on the part of researchers and clinicians has developed in the area of childhood depression. (Cantwell, 1982; Earls, 1984; Kaslow & Rehm, 1983; Kovacs, Feinberg, Crouse-Novak, Paulauskas & Finkelstein, 1984; Petti, 1983). This increased interest may result in

changes in behavior rating scales to include items such as "hopelessness" along with the items on aggression and disruption in order for teachers to identify these withdrawn children. It is very easy for teachers to identify aggressive and disruptive behaviors, but not depressive behaviors. It appears that the anxiety/withdrawal factor warrants attention and rating scales should be designed to identify it.

Assessment

Once again the variability in definitions of behavior disorders results in variability in assessment procedures. It is imperative that assessment procedures be as reliable and valid as possible. Because educational and treatment programming are based on assessments, methods for obtaining data should address the four components of the special education process--student selection, problem identification, program monitoring and outcome evaluation (Cullinan, 1983). The biggest problem currently facing educational agencies, however, is <u>how</u> to reliably and validly assess children for special programming or special class placements (Smith, et al., 1984).

In the U.S., PL 94-142 provides some guidelines for this identification process, in that, this law requires the use of multiple sources of data, and the input of several people in the final decision. Various investigations conducted in the U.S. indicated that despite these guidelines, problems still exist amongst professionals regarding the

specific data to be used in making placement decisions (Hollane, 1980; Morrow, Powell, Ely, 1976; Peterson & Hart, 1978).

In a study done by Smith, et al. (1984) it was found that "the identification of children as behaviorally disordered in (their) sample, to a great extent, was based on traditional measures of academic and intellectual assessment, even though different professional groups appear to believe such infomation is the least valuable for such a task" (p. 31).

The most common ways of assessing students for special placement involves collecting data in regard to the social, personal, academic, intellectual and behavioral functioning of the student. This usually involves collecting information from informants such as teachers, parents, peers, and the student himself. Such information may be gathered through the use of interviews, behavior-rating scales, sociometrics and personality and intelligence tests. It remains important, however, to consider as wide a range of information as possible. Several studies (Epstein, Kauffman & Cullinan, 1985; Epstein, 1980; and Cartledge & Milburn, 1980) have found that extraneous factors such as rater subjectivity and perceptual set influence the information reported by teachers and parents.

Also, a study done by Slate and Saudargas (1986) found that "direct observational data appear to measure a different facet of behavior than that assessed by teachers'

ratings ...It seems that teacher ratings may not predict actual behaviors" (p. 46). These results support a study by Cosper and Erickson (1984) that compared two teacher-rating scales--School Behavior Checklist (Miller, 1977) and Behavior Problem Checklist (Quay & Peterson, 1967) with behavioral observations based on coding system developed by O'Leary, Kauffman, Kass and Drabman (1977). These authors suggest that teachers' ratings of characteristics are important but no assessment is complete without assessing events in the process of occurring (Hartup, 1979). Direct observation examines behaviors as they occur in the natural setting which, as suggested by Deno (1980), might be the most accurate source of assessment information. This means of collecting data has been largely overlooked, but seems to warrant inclusion in the assessment process along with the use of rating scales, interviews, sociometrics and personality and intellectual assessments. With the development of the video camera this means of assessment is much more accessible and much less expensive. No longer is a highly paid professional needed to collect this observational data---they need only evaluate the videotape.

Etiology and Treatment

Numerous conceptual frameworks have been devised to categorize the etiology and treatment of behavior disorders. Rhodes and Tracy (1974) proposed five theoretical models in an attempt to systematize these various approaches. These five models are: biophysical,

psychodynamic, behavioristic, sociological, and ecological.

1) Biophysical

Proponents of this model believe that behavior disorders are caused by organic dysfunctions related to genetic disorders, developmental lag, neurological or biochemical irregularities, or temperament (Coleman, 1986). research in this area has, thus far, only resulted in hypotheses and tentative conclusions. The four major interventions used in this model are: psychopharmacology, orthomolecular psychiatry (megavitamin therapy), nutrition therapy and neuro-development therapies which focus less on organic and more on cognitive/learning process (Coleman, 1986).

2) Psychodynamic or Psychoeducational

The psychodynamic model deals with normal and abnormal development of intrapsychic functioning, and the influence that it has on overt behavior. "Behavior disorders are seen as outward signs of intrapsychic disorders...Interventions are intended to assist the child in understanding and mastering conflicts, negative feelings, and other emotional disturbances that interfere with personal satisfaction, social acceptance and educational success (Cullinan, 1983, p.152).

Psychoanalysis is seldom used with behaviorally disordered children, however, various psychoeducational interventions are employed. This approach is less concerned with assessment and more concerned with having teachers es-

tablish a proper therapeutic relationship with the student. Following this basic philosophy, Fagen, Long and Stevens (1975, 1976, 1979) developed the Self-Control Curriculum (S-CC) to teach self-control and develop positive feelings toward the self and others. As teachers work through the four curriculum units: 1) identifying feelings; 2) developing positive feelings; 3) managing feelings; 4) reinterpreting feeling events in a non-threatening environment, students gain insight into the past and present events that underlie their current problems. Other programs that incorporate the principles of the psychoeducational model include Crisis/Helping Teacher (Morse, 1971, 1976), the Hillcrest School (see Long, 1974) and the Rutland Center (Wood, 1972, 1975).

3) Behavioristic

Proponents of this view believe that behavior is not primarily an expression of intrapsychic forces, but is a phenomena in and of itself. Behavior disorders are a result of environmental events. Biological and cognitve factors are recognized but emphasis is placed on environmental factors (Cullinan, 1983). Behaviorists assert that the only difference between most disturbed behaviors and normal behaviors are the frequency, magnitude and social adaptiveness of the behaviors; if certain behaviors were less frequent, less extreme and more adaptive, they would not be labelled disturbed (Coleman, 1986).

Behavior modification using techniques such as shaping

modelling, contingency contracting, extinction, time-out, punishment and reinforcement of compatible behavior is used widely in schools with behavior disordered children (Coleman, 1986).

4) Sociological

According to this model, the behavior disordered child is

> ...the child who cannot or will not adjust to the socially acceptable norms of behavior and consequently disrupts his own academic progress, the learning efforts of his classmates, and interpersonal relations. (Woody, 1969, p. 7)

Like the behaviorists, sociological theorists emphasize the role of environment, at least the societal forces that influence individuals. Basically, people who break the societal rules are seen as deviant, are labelled and must be negatively evaluated or punished.

The role of the school is important as schools are primary socialization agents. "Schools not only dispense knowledge, but also values such as punctuality, patriotism, getting along with others, and subordination of the individual for the common good" (Coleman, 1986, p. 97). Motivation to achieve and conformity to school rules are seen as necessary characteristics from a sociological perspective.

Sociometric techniques such as sociograms, behavior rating checklists and social histories are used to evaluate behavior.

Sociological interventions are extremely difficult to

implement because the community, family unit or society at large may be part of the problem. Therefore, there are few educational applications of this model because sociological interventions depend upon changing the entire social structure.

5) Ecological

Advocates of this model believe that it is impossible to define disturbed behavior separate from the environment in which the behavior occurs. Disordered behavior is viewed as an imbalance in the ecosystem of which the child is only a part. All components of the ecosystem must be analyzed as possible problems or targets for intervention (Coleman, 1986).

The most well known example of a program based on the ecological model is Project Re-Ed (Hobbs, 1961). Again emphasis is placed on understanding systems, individuals, and their interactions.

Academic Achievement and Behavior Disorders

Failure to achieve academically in school is a major characteristic of behavior disordered students (Bower, 1961; Roberts & Baird, 1972; Glavin & Annesley, 1972; Oliver, 1974; Kauffman, 1977). From their studies, Swift and Spivak, (1968, 1969, 1973, 1975) concluded that:

> The underachieving child is manisfesting underachievement in a variety of ways which suggest a general lack of adaptation to the demands of the classroom environment as presently designed. The further implication is that underachievement cannot be conceived of only in achievement terms but must be seen as an inability of the "total" child to adapt to an environment in which he spends a great deal of his waking hours.

1969, p. 104)

In reviewing the studies that compare age and academic retardation of behavior disordered students, Cullinan, Epstein and Lloyd (1983) concluded that "the academic deficit of a student with behavior disorders would be expected to grow larger over time, unless there is powerful intervention" (p. 257). Further to this, in looking at the reason for academic failure, Cullinan, et al (1983) have grouped this research into four explanatory categories: ability deficits, emotional blocks, faulty learning and miscellaneous.

As far as ability goes, scores on intelligence measures among behavior disordered students range from below average to gifted (Morse, Cutler and Fink, 1964). In a review of literature by Kauffman (1981), it is suggested that most students with behavior disorders show slightly below average IQ scores in the 90-95 range.

In looking at academic remediation it becomes important to address the needs of the student. Evaluating cognitive processes in order to assess academic strengths and weaknesses and then designing programs to address these would seem in order. It would appear important also to address the emotional blocks to learning. Teachers need to work towards improving the feelings and attitudes of students towards themselves and others (Redl & Wineman, 1952; Rogers, 1969). "Good education is not curative enough for the children who hate. Really the reverse is truer; in or-

der for a good educational diet to work, considerable repair must first be done on their basic personality weaknesses" (Redl & Wineman, 1957).

Of all the techniques used to remediate academic deficiencies, academic behavior modification, precision teaching and direct instruction are the most popular behavioral approaches that have proved successful (Cullinan, 1983).

Self Esteem and Behavior Disorders

There has been little dispute about the importance of self-esteem as a determinant of behavior. This is not surprising. Most educators would agree that students who have a "good attitude" about themselves are usually pleasant, cooperative and self-motivating. In contrast, students who view themselves negatively tend to have a short attention span, little patience and demonstrate symptoms of frustration when difficulties arise. Combs (1964) found that underachievers demonstrated less effective problem solving than high achievers and were not as free and adequate with their emotional expression. Aronson and Mette (1968) reported that individuals tend to behave in ways that are harmonious with their self-concepts. It is, therefore, reasonable to assume that students demonstrating behavior disorders also possess low levels of esteem. The more important question, however, is, does low esteem result in behavior disorders or does disordered behavior cause a low level of self-worth; or do other factors

lead to both low esteem and behavior disorders. Unfortunately, as Cullinan, Epstein and Lloyd (1983) indicate, there is little scientific research to determine or support what the relationship might be.

CHAPTER III

DESIGN AND METHODOLOGY

The Sample

The subjects for this study consisted of 11 male students (5 from Division 2; 6 from Division 3) previously diagnosed as behavior disordered according to definition and criteria established for Edmonton Public Schools (see section "Criteria for Placement" on the next page). Students ranged in age from 9 years, 3 months; to 13 years, 10 months. Intellectual ability was varied with scores ranging from low average to superior. Students also exhibited a wide range of academic abilities.

These students were originally attending schools in the area where their parents resided, but were placed in the behavior disordered pilot classrooms in designated schools. This meant they were moved from their residential school and bussed to another area of the city.

The pilot program was a two-year program with the objective being to improve the behavior of these students so that they would be able to function successfully in their home school programs.

In the pilot classes, a highly structured behavioral management program and individualized academic program was designed for each student. Because these students frequently displayed inappropriate responses to situations, one component of the behavioral management program involved

direct instruction of prosocial skills to the students. On an ongoing basis, students were taught the appropriate responses for various situations using various techniques such as modelling, role-playing, rehearsal and structured learning.

Each classroom had a special education teacher, an instructional program aide and a maximum of six students. Resource help was provided by Behavior Disorders Consultants (as needed with a minimum of one-half day per week); Student Placement and Bureau Services Consultants; and psychiatric consultation (once a month, or as needed).

To further support the program, principals, special class teachers, aides and secretaries in the designated schools were involved in a training program given by the Behavior Disorders Consultants to provide information on theories, practises and intervention strategies for the behavior disordered.

In order to assist parents in coping with these children at home and reinforce the skills being taught in the program, the consultants provided parenting courses on the prosocial skills being taught at school, and advice and assistance as needed or requested. Teachers met with parents to discuss the child's individual educational and behavioral plan, and made contacts on a daily (if needed) or weekly basis to discuss student progress.

Criteria for Placement

Students were selected by a Committee of repre-

sentatives consisting of Behavior Disorders Consultants, Student Placement Consultants and Bureau Services Consultants. Information was provided by parents, previous teachers, principals, and consultants through direct observation, interviews and videotapes. Selection was based on the following criteria:

-the student was referred by home school principal;
-the student responded to his/her environment in ways that were significantly different from age-appropriate expectations and markedly interfered with his/her learning and/or that of others;
-the student demonstrated more than one of the following characteristics:
    -inability to establish or maintain satisfactory relationships with peers or adults;
    -frequent demonstrations of inappropriate behavior or feelings under ordinary conditions;
    -a generally pervasive mood of unhappiness or depression;
    -severe difficulty in coping with the learning situation despite remedial measures;
    -development of physical symptoms or fears associated with personal or school problems;
    -severe difficulty in facing reality;
-the student is not mentally handicapped;
-the student is 5 years, 6 months or more of age, and his/her educational needs are best served in an elementary or junior high school setting; and
-the student's parents will agree to program placement.
(Monitoring and Assessment Services, E.P.S.B., 1985)

Procedure

In discussion with the Behavior Disorders Consultants it was decided that the special class teachers would observe and rate student behavior, administer academic assessments specifically for reading and mathematics and administer the Culture Free Self-Esteem Inventory (Battle, 1981), during the second week of school. These assessments were administered again at the end of the second year of

the program.

To rate student behavior, teachers were asked to use the Behavior Problem Checklist (Quay & Peterson, 1979). The individual academic assessments were also administered by the special class teachers as part of identifying individual academic needs. Teachers were allowed to select their own standardized instruments for this purpose provided they used the same instruments for pre and post assessments.

Instrumentation Used

Culture Free Self-Esteem Inventory for Children (CF-SEI)

The instrument used for measuring student self-esteem in this study was the Battle (1981) Culture Free Self-Esteem Inventory for Children, Form A (Appendix A). The CF-SEI Form A is a 60-item scale of which 50 items measure an individual's perception of him/herself in general, and in relation with peers, parents and school. Ten items on the instrument make up a lie scale which measures defensiveness.

Each item is answered by checking either a "yes" or "no" response---half of which reflect low self-esteem and half high self-esteem. Items are randomly placed and were selected from Gough and Heilbrun's Adjective List (1965), Coopersmith's Self-Esteem Scale (1967), or were designed by the author of the inventory. The scale is presented with instructions in Battle (1981).

In a test-retest reliability study conducted with 198

boys and girls enrolled in grades three through six, test-retest correlations for Form A ranged from 0.81 to 0.89 with values for boys ranging from 0.72 to o.93; and for girls from 0.74 to 0.90. The average means for the total group, males & females were 35.23, 34.86 and 35.86. Another study (Battle, 1978a) including boys and girls, grades one through eight, in 32 schools showed similar results with means of 36.54, 36.31 and 36.77 respectively.

For boys and girls in grades seven, eight and nine test-retest correlations in a study including 117 boys and girls were: boys, 0.93; girls, 0.89; and total 0.91. Test-retest correlations for grade seven subjects were 0.96; grade eight, 0.88; and grade nine, 0.88; thus demonstrating that the instrument possesses acceptable temporal reliability (Battle, 1981).

Findings from yet another study of 75 boys and girls enrolled in 37 schools in the Edmonton Public School system indicate that the test-retest correlations for subjects over a two-year period were significant on all scales: total, 0.65; general, 0.63; social, 0.57; academic, 0.53; and parents 0.41 (Battle, 1981).

A two-year test-retest reliability study of 33 grade six students indicated a correlation for the sample of 0.74 further supporting the test-retest reliability of Form A.

In terms of validity, a comparative study of the Culture-Free Self-Esteem Inventory (Form A) and the Self-Esteem Inventory (Coopersmith, 1967) done in 1976 found

that the correlations between the two instruments were significant for all grade levels when male and female scores were compared (Battle, 1981). Correlations for the total sample ranged from 0.71 to 0.80; for boys from 0.72 to 0.84 and for girls from 0.66 to 0.91.

In further studies (Battle, 1977b, 1980a) comparing the CF-SEI with Beck's Depression Scale (1974), correlations on the various scales were total 0.75, general 0.78, social 0.34 and personal 0.61 demonstrating that the two instruments compare favorably (Battle, 1981). The CF-SEI and the MMPI (Minnesota Multiphasic Personality Inventory) compare favorably as well (Battle, 1981), with correlations on the various scales of; total, 0.75; general, 0.72; social 0.42 and personal, 0.73.

Behavior Problem Checklist

The instrument used to rate student behavior was the Behavior Problem Checklist (Quay & Peterson, 1979). The BPC is an instrument for rating 55 behavior problems that frequently occur in children and adolescents. From factor analysis of behavior ratings on both deviant and nondeviant subjects, three primary subscales, Conduct-Problem, Personality-Problem, and Inadequacy-Immaturity were derived. The fourth scale, Socialized-Delinquency, was derived from factor analyzing case history records. The checklist also contains four items related to autism or childhood psychosis. The authors caution users of this scale that the purpose of the items is to alert profes-

sionals to possible problems if these behaviors are noticed.

In test-retest reliability studies, Evans (1975) found that repeated ratings over a two-week interval produced correlations between the first and second administrations of 0.85 (CP), 0.74 (PP), 0.82 (II), and 0.82 (SD), for the boys in the group. For the girls, the correlations were 0.91 (CP), 0.87 (PP), 0.93 (II), and 0.79 (SD). Less stablility, however, was shown when ratings were made a year apart by different observers. For 428 males, the correlations were 0.58 (CP), 0.39 (PP), 0.35 (II), and 0.21 (SD). For 378 females the correlations were 0.50 (CP), 0.28 (PP), 0.31 (II), and 0.40 (SD).

Glaving (1972) showed that "emotional disturbance" in school children is rather transitory and, therefore, relatively low test-retest correlations may be expected.

In this study, behavior ratings were made by the same observer with the intervals between the pre and post ratings being approximately two years.

Academic Achievement Measures

Instruments used to assess students' academic achievement were selected by the teachers and included:

Division 2 class: Burns/Roe Reading Inventory
Schonell Graded Word Spelling Test
Diagnostic Math Test-Level C
Supplement

Division 3 class: Neale Analysis of Reading Ability

Schonell Graded Word Spelling Test

Stanford Diagnostic Math Test

Analyses

In order to determine whether there was a change in self-esteem (as reported by students), and students' behavior disorders (as reported by teacher ratings) over the two-year period, both descriptive statistics (mean and standard deviation) and inferential statistics (t-test) were used. The dependent t-tests were used to determine whether there were any statistical differences between pre-test and post-test means for the means of self-esteem, behavior and academic achievement. Because of the small N, the emphasis, however, was on the descriptive statistics. Whenever the t-tests were used, the alpha level is set at =0.10.

In order to determine the relationship between student reported level of academic self-esteem and scores in language arts and mathematics, Pearson-product moment correlations were computed. These correlations were computed for the Total Group (N=11) and for the subgroups (Division 2, N=5 and Division 3, N=6). Pearson-product moment correlations were also computed to determine the relationship between student reported level of academic self-esteem and teacher ratings of behavior disorders.

Limitations

There are several factors which limited this study and should be considered when interpreting the results. As was

indicated there were only 11 subjects in this study, which means that any statistical interpretations should be viewed with caution.

Observations were made by parents and teachers as were ratings of student behavior. Because these people have a vested interest in the success of the program, their observations and ratings may have been biased. Independent observers may have produced different ratings and observations. Because different groups were rated by different teachers, one might consider interrater reliability as a limiting factor as well.

Another limiting factor was the number of uncontrolled variables which may have affected the behavior, achievement and self-esteem of the subjects. Factors such as marriage or family breakdown, family violence, substance abuse, or physical abuse, to mention a few, would adversely effect behavior.

One other factor to be mentioned has to do with parental involvement. Initially parents were very involved because they wanted to help reduce their children's behavior disorders. As the children became better able to control their behavior it was observed by the teachers and consultants that parental involvement became less. One could speculate that once their children became more controlled, the parents no longer felt the need to be involved.

Another limiting factor had to do with the change in personnel. Even though the same teachers were with the

program for two years, the instructional program aides changed every year.

Also, time may have been a limiting factor. These children were not in the program 24 hours a day or 12 months of the year. They returned to their homes at the end of each day and spent two months in the summer in their home environments. Several of the children became involved in gang behavior over these summer months making it impossible to provide consistent intervention for the two-year period.

Finally, the fact that the program was only two-years in length may be considered another limiting factor. A longer period of time may have produced different results.

CHAPTER IV

RESULTS

The results of this study are presented in this chapter. The analyzed results are summarized and presented in the tables included in this chapter. Results were reported for the total group, and then, for division 2 and 3 separately because the academic achievement instruments that were used were different for the two groups.

As indicated in Chapter III, the raw score means and standard deviations (pre and post-test) were computed for each of the subscales on the Culture-Free Self-Esteem Inventory and the Behavior Problem Checklist. These results are presented in Tables 1,2 and 3. Mean grade scores pre and post for academic achievement are also reported in these tables. The results from the t-tests, reported as * for a statistically significant difference and NS for a not statistically significant difference, are presented in Tables 1, 2 and 3 as well. Pearson-product moment correlation results are reported in Tables 4-9. Included at the end of this chapter for further information are individual anecdotal student profiles.

The results from Table 1 attempt to answer the question of whether treatment had an effect; that is, over the two-year period, are there differences in the mean scores from pre to post-test for the various means? If treatment had an effect, we would expect to see an increase in self-

Table 1

Means and Standard Deviations of Student Self-Esteem, Behavior Ratings and Academic Achievement (Pre and Post) Total Group

	Pre-Test		Post-Test		Significance
Culture-Free Self Esteem Inventory for Children	X	s	X	s	
Total Self-Esteem	34.2	11.2	38.2	6.0	S
Academic Self Esteem	5.5	2.9	6.7	2.1	S
Social Self Esteem	6.4	2.9	6.5	1.7	NS
Parental Self Esteem	7.8	2.0	8.0	1.5	NS
General Self Esteem	14.5	4.6	16.3	2.9	NS
Behavior Problem Checklist					
Conduct Problem	11.5	3.9	8.3	3.4	S
Personality Problem	6.6	5.1	1.1	0.8	S
Inadequacy/Immaturity	3.0	1.7	2.4	1.6	NS
Socialized Delinquency	2.4	1.7	1.6	1.8	NS
Psychotic Behavior	1.3	1.2	0.1	0.3	S
Academic Achievement					
Reading	4.4	1.3	5.3	1.3	S
Spelling	4.3	1.3	5.0	1.3	S
Mathematics	4.8	1.7	5.9	1.7	S

esteem, a decrease in behavioral problems and an increase in academic achievement.

From Table 1, it can be observed that the mean of the scores for Total Self-Esteem prior to treatment was 34.2 with a standard deviation of 11.2. On the post-test, the mean and standard deviation were 38.2 and 6.0, respectively. In terms of significance, this increase in self-esteem was significant at =0.10, however, it must be emphasized that the number of observations is small.

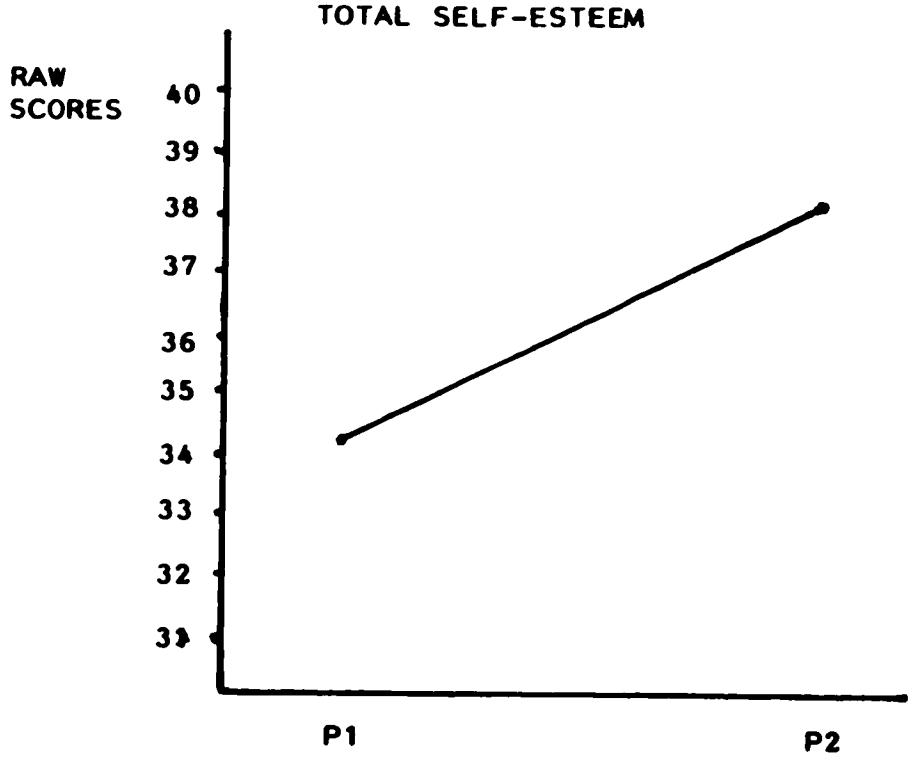
Similar results are presented for the self-esteem subscale scores. The subscale scores increase from pre-test to post-test, however, only academic self-esteem shows a statistically significant difference. The increases for Total self-esteem and for the subscales of self-esteem are depicted in Figures 1 and 2, respectively.

Even though a statistically significant difference occurred only on the academic self-esteem subscale, there were increases in the means on all the subscales. The lack of statistical significance could be attributed to three primary factors: a) the number of items in each subscale; b) the restricted sample size; and, c) the restriction in the range of scores.

Given the above, it may be more practically feasible to examine the degree of change (pre and post) over the two-year time to determine an answer to the question of whether there was a treatment effect. As Derry and Murphy (1986) state "...no real-world educational program designed

FIGURE 1

TOTAL SELF-ESTEEM

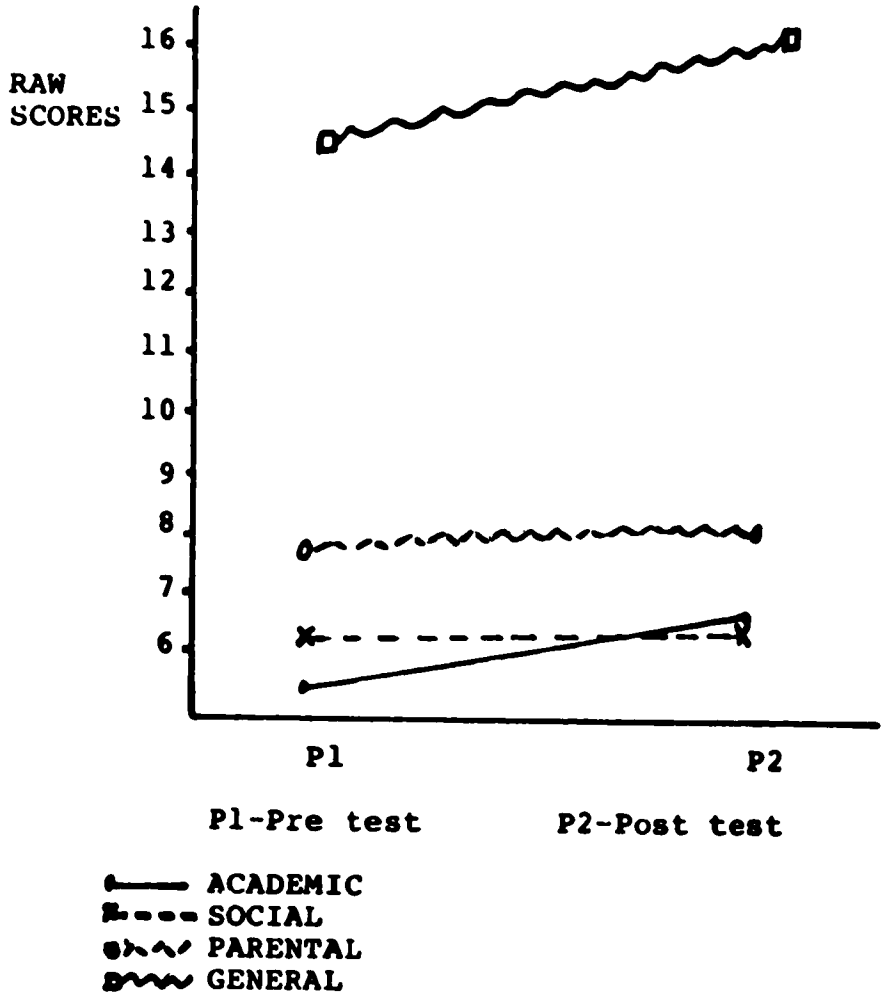


P1-Pre-test

P2-Post-test

FIGURE 2

SELF-ESTEEM SUBSCALES



to train a range of learning skills has yet achieved the 2 sigma standard for impact..." (p. 3.). In addition, research in the area of cognition has pointed to the fact that change occurs slowly and over years of practice (Derry & Murphy, 1986). Thus, it is this author's view that the statistical results be interpreted with caution and that a treatment effect did occur as indicated in overall increases of the means on self-esteem.

In the Behavior Problem Checklist, it is observed that all the subscale scores decrease from pre-test to post-test. Thus, for Conduct Problem which is characterized by "aggressive, hostile and contentious behavior" (Quay et al, 1966, p. 297) the mean score on pre-test was 11.5 (standard deviation 3.9) and the mean score on the post-test was 8.3 (standard deviation 3.4). For those interested in statistical significance, the means for Conduct Problem were statistically different at =0.10. Going on, we notice a decrease in Personality Problem which is "characterized by anxious, withdrawn, introvertive behavior" (Quay, et al, 1966, p. 297). The mean score on the pre-test was 6.6 (standard deviation 5.1) and the mean score on the post-test was 1.1 (standard deviation 0.8). These means were also statistically different at =0.10. In terms of the Inadequacy/Immaturity subscale usually characterized by "preoccupation, lack of interest, sluggishness, laziness, daydreaming and passivity" (Quay et al, 1966, p. 298), the mean score on the pre-test was 3.0 (standard deviation 1.7)

and the mean score on the post-test was 2.4 (standard deviation 1.6). As indicated in Table 1 there was not a significant difference noted on this subscale. No significant difference was noted on the Socialized Delinquency subscale either. This factor is characterized by delinquent, gang behavior (Quay, 1966). The mean score on the pre-test was 2.4 (standard deviation 1.7) and on the post-test was 1.6 (standard deviation 1.8). Finally, on the last subscale, Psychotic Behavior (which has only four items) and is characterized by odd, bizarre, repetitive behavior and incoherent speech (Quay, 1966), the mean score on the pre-test was 1.3 (standard deviation 1.2) and on the post-test was 0.1 (standard deviation 0.3). This was a statistical difference in the means at =0.10 as well. This should, however, be interpreted with caution due to few number of items on the scale.

To a certain extent, these results showing a decrease in behavior problems are confirmed by the anecdotal profiles (Appendix C). Teachers reported marked increases in on-task behavior (from as low as 20% on-task for pre, to as high as 80% on-task for post); and marked decreases in aggressive, acting-out behavior requiring either time-out or restraint. For some students, physical aggression was completely extinguished. It was also observed that students were better able to label and express their feelings and use more socially appropriate ways of expressing these feelings. As indicated in the profiles, students

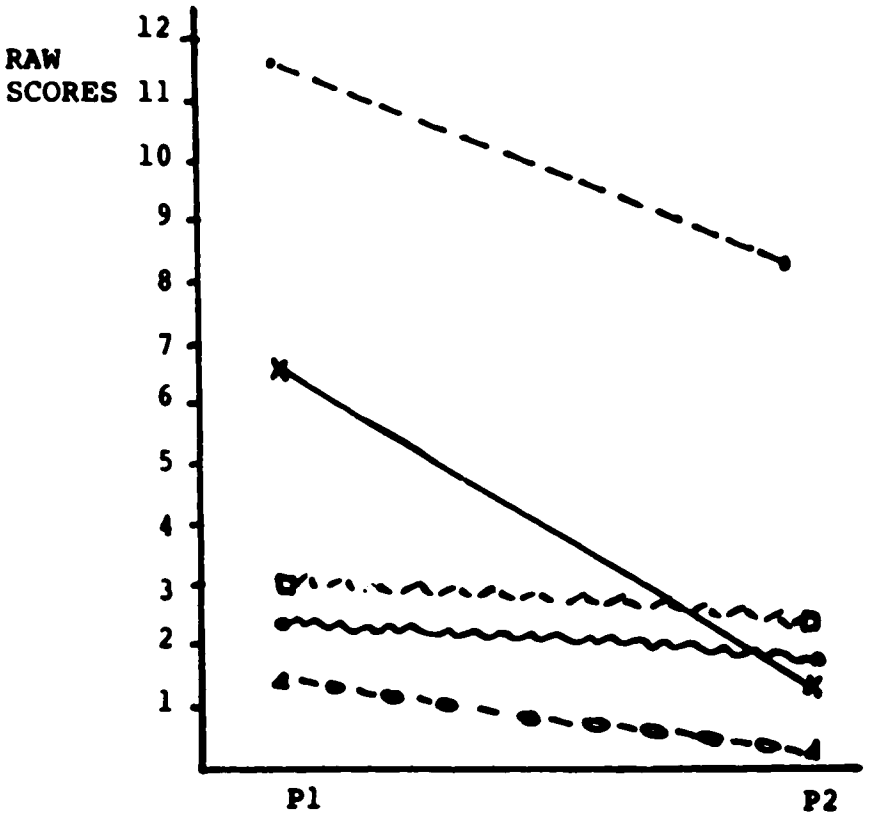
exhibited: "attention-seeking behavior", "loss of control resulting in physical attacks on other people or property to the point of requiring physical restraint to prevent injury on a daily basis for some", "self-mutilation", "verbal abuse and swearing", "off-task as high as 95% of the time", and "refusal to comply with teacher requests" (Appendix C). At the conclusion of the two-year program teachers were reporting the following: "on-task behavior 60-80% of the time", "assignment completion rate 80-100%", "able to respond appropriately to own and others' feelings 50-80% of the time", "reports of physical aggression requiring restraint ranged from 1-2 incidents/week to none". These decreases in behavior problems are depicted graphically in Figure 3.

Upon analyzing these pre-post ratings and observations, it is this author's view that a treatment effect did take place for these children.

Also from Table 1 it is reported that the mean grade score on the pre-test for reading was 4.4 (standard deviation 1.3), and for the post-test was 5.3 (standard deviation 1.3). For spelling, the mean grade score on the pre-test was 4.3 (standard deviation 1.3), and on the post-test was 5.0 (standard deviation 1.3). Finally, the mean grade score on the pre-test for mathematics was 4.8 (standard deviation 1.7), and 5.9 (standard deviation 1.7) for the post-test. Differences in pre-post means for all three academic areas are significant at =0.10 level. These

FIGURE 3

BEHAVIOR PROBLEM CHECKLIST



changes are depicted graphically in Figure 4 and are, in this author's view, further indication that a treatment effect did occur.

Reported in Tables 2 and 3 are results after the total group was divided into divisions. These results are reported because the academic assessment instruments (as indicated earlier) were different for the two divisions. Students were divided into divisions based on chronological age. Division 2 represents younger children than Division 3.

As can be observed, the results in Tables 2 and 3 follow the same trends as the results in Table 1. In Division 2 and 3 there is an overall increase in pre-post mean scores on self-esteem and an overall decrease in pre-post mean scores on behavior problems. The pre-post mean scores in academic achievement indicate an overall increase as well. Significant differences in pre-post mean scores were demonstrated for conduct problem and reading, spelling and mathematics for Division 2 and social self-esteem, personality problem, psychotic behavior, reading, spelling and mathematics for Division 3. Again the author cautions that these results be interpreted with caution because the sample size is extremely small.

To determine the extent to which self-esteem scores and academic achievement scores are related in this study, Pearson-Product moment correlations were computed. Table 4 presents the correlations between self-esteem scores and

FIGURE 4

ACADEMIC ACHIEVEMENT

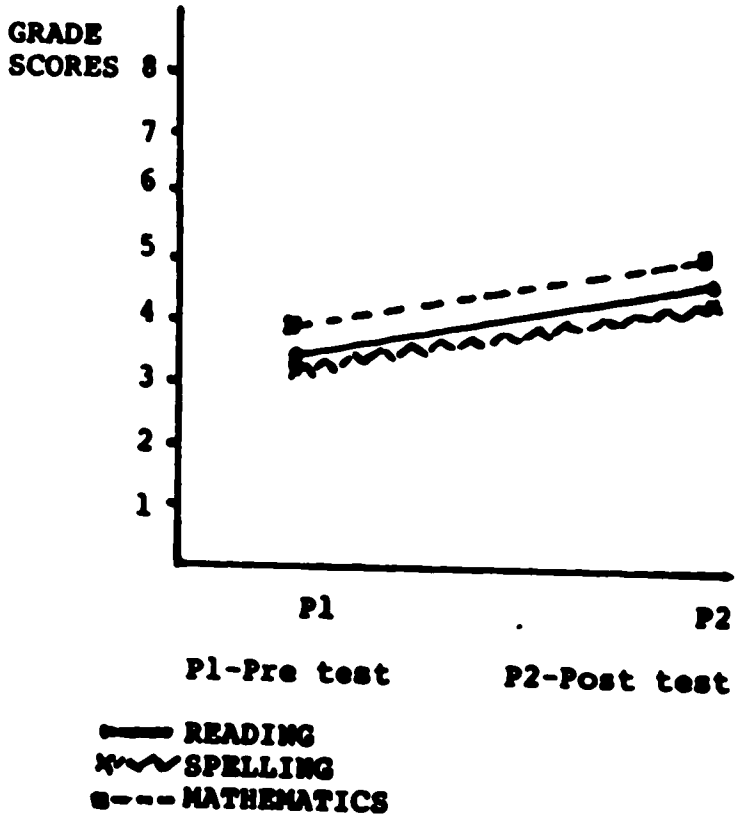


Table 2

Means and Standard Deviations of Student Self-Esteem, Behavior Ratings and Academic Achievement (Pre and Post) Division 2 (N=5)

	Pre-Test		Post-Test		Significance
Culture-Free Self Esteem Inventory for Children	X	s	X	s	
Total Self-Esteem	33.0	13.2	37.4	5.7	NS
Academic Self Esteem	6.2	2.6	7.4	2.9	NS
Social Self Esteem	6.0	3.3	6.4	1.3	NS
Parental Self Esteem	7.0	2.4	8.4	1.1	NS
General Self Esteem	13.8	5.6	15.2	2.2	NS
Behavior Problem Checklist					
Conduct Problem	11.4	4.1	7.2	4.6	S
Personality Problem	5.8	6.2	0.8	0.8	NS
Inadequacy/Immaturity	2.6	2.1	1.6	1.7	NS
Socialized Delinquency	2.0	2.0	0.6	0.9	NS
Psychotic Behavior	0.6	0.9	0.0	0.0	NS
Academic Achievement					
Reading	4.5	1.8	5.5	1.8	S
Spelling	4.2	1.4	5.2	1.5	S
Mathematics	4.6	1.7	5.5	1.6	S

Table 3

Means and Standard Deviations of Student Self-Esteem, Behavior Ratings and Academic Achievement (Pre and Post) Division 3 (N=6)

	Pre-Test		Post		Significance
Culture-Free Self Esteem Inventory for Children	X	s	X	s	
Total Self-Esteem	35.2	10.6	38.8	6.6	NS
Academic Self Esteem	5.0	3.3	6.2	1.2	NS
Social Self Esteem	6.7	2.9	6.7	2.1	S
Parental Self Esteem	8.5	1.5	7.7	1.8	NS
General Self Esteem	15.0	4.1	17.2	3.3	NS
Behavior Problem Checklist					
Conduct Problem	11.5	4.1	9.2	2.1	NS
Personality Problem	7.3	4.4	1.3	0.8	S
Inadequacy/Immaturity	3.3	1.5	3.0	1.3	NS
Socialized Delinquency	2.7	1.6	2.5	2.0	NS
Psychotic Behavior	1.8	1.2	0.2	0.4	S
Academic Achievement					
Reading	4.3	0.8	5.2	0.8	S
Spelling	4.3	1.3	4.8	1.3	S
Mathematics	5.0	1.8	6.2	1.9	S

Table 4

Correlations of Self-Esteem with Academic Achievement for Total Group (N=?1)

(Pre Intervention)

	Academic Achievement		
Self-Esteem	Read	Spell	Math
Total Self-Esteem	-0.12	0.09	0.50
Academic Self-Esteem	-0.19	-0.22	0.03
Social Self-Esteem	0.08	0.09	0.61
Parental Self-Esteem	0.10	0.47	0.61
General Self-Esteem	-0.17	0.11	0.55

(Post Intervention)

	Academic Achievement		
Self Esteem	Read	Spell	Math
Total Self-Esteem	-0.30	-0.17	0.29
Academic Self-Esteem	-0.04	0.08	0.42
Social Self-Esteem	-0.33	-0.09	0.23
Parental Self-Esteem	0.18	0.28	0.36
General Self-Esteem	-0.21	-0.00	0.36

academic achievement scores for reading, spelling, and mathematics for pre and post test.

Once again because of the small number of observations, the correlations do have to be interpreted with caution. Several aspects of Table 4 bear further note. In general, correlations between self-esteem scores and scores for reading, spelling and mathematics were low. For reading and spelling, most of the correlations hovered around zero, ranging from -0.19 to 0.09. Occassionally, a correlation might rise to 0.47 (parental self-esteem and spelling pre-test) or to 0.18 to 0.28 range (parental self-esteem and reading and parental self-esteem and spelling post-test).

Correlations between self-esteem scores and scores for mathematics were a little higher, ranging from zero to 0.61 with most ranging from 0.42 to 0.61 (academic, parental and general self-esteem and mathematics post-test) and (social, parental, and general self-esteem and mathematics pre-test).

Tables 5 and 6 report similar low correlations for the separate divisions for reading and spelling. Again the highest correlations for Division 2 appear to be between the scores on the self-esteem subscales and mathematics with correlations ranging from -0.39 to as high as 0.81. For Division 3, the correlations between self-esteem and mathematics ranged from -0.08 to 0.81 (academic self-esteem and mathematics pre-test and parental self-esteem

Table 5

Correlations of Self-Esteem with Academic Achievement for Division 2 (N=5)

(Pre Intervention)

	Academic Achievement		
Self-Esteem	Read	Spell	Math
Total Self-Esteem	-0.29	0.17	0.62
Academic Self-Esteem	-0.39	-0.04	0.27
Social Self-Esteem	-0.21	0.14	0.63
Parental Self-Esteem	-0.09	0.35	0.75
General Self-Esteem	-0.33	0.19	0.64

(Post Intervention)

	Academic Achievement		
Self Esteem	Read	Spell	Math
Total Self-Esteem	-0.14	0.01	0.67
Academic Self-Esteem	0.01	0.08	0.81
Social Self-Esteem	-0.29	0.15	0.54
Parental Self-Esteem	-0.22	-0.55	-0.39
General Self-Esteem	-0.09	0.11	0.56

Table 6

Correlations of Self-Esteem with Academic Achievement for Division 3 (N=6)

(Pre Intervention)

	Academic Achievement		
Self-Esteem	Read	Spell	Math
Total Self-Esteem	0.27	0.01	0.39
Academic Self-Esteem	-0.01	-0.33	-0.08
Social Self-Esteem	0.23	0.04	0.59
Parental Self-Esteem	0.83	0.72	0.48
General Self-Esteem	0.25	0.00	0.46

(Post Intervention)

	Academic Achievement		
Self Esteem	Read	Spell	Math
Total Self-Esteem	-0.59	-0.28	0.04
Academic Self-Esteem	-0.47	-0.09	0.18
Social Self-Esteem	-0.49	-0.23	0.08
Parental Self-Esteem	0.64	0.75	0.81
General Self-Esteem	-0.35	0.05	0.22

and mathematics post-test). Again, these scores must be interpreted with caution. Because overall these correlations tend to be low and not significant, it is not possible to say conclusively from this study what the relationship is between self-esteem and achievement.

Correlations between academic and total self-esteem and teacher rating of student behavior are reported in Tables 7-9. Once again scores for academic self-esteem and behavior ratings, hover around zero with most ranging between -0.16 to 0.29 (personality problem and academic self-esteem post-test and inadequacy/immaturity and academic self-esteem pre-test). Occassionally one is as low as -0.03 (personality problem and academic self-esteem pre-test) or as high as -0.44 (socialized delinquency and academic self-esteem pre-test).

Correlations between total self-esteem and behavior problems are also low with most scores ranging from -0.36 to 0.23 (socialized delinquency and total self-esteem pre-test and socialized delinquency and total self-esteem post-test). Scores as low as 0.07 (inadequacy/immaturity and total self-esteem post-test) and as high as 0.78 (psychotic behavior and total self-esteem pre-test) are reported as well.

Correlations between self-esteem and teacher rating of student behavior for the separate divisions are reported in Tables 8 and 9. Again scores are low and must be interpreted with caution due to very small sample size.

Table 7

Correlations of Academic & Total Self Esteem with Teacher Rating of Behaviors for Total Group (N = 11)

Pre	Self Esteem	
	Academic	Total
Conduct Problem	-0.42	-0.18
Personality Problem	-0.03	-0.09
Inadequacy Immaturity	0.29	0.28
Socialized Deliquency	-0.44	-0.36
Psychiotic Behavior	0.09	0.78

Post	Self Esteem	
	Academic	Total
Conduct Problem	-0.09	-0.11
Personality Problem	-0.16	-0.15
Inadequacy Immaturity	0.09	0.07
Socialized Deliquency	-0.06	-0.23
Psychiotic Behavior	0.43	0.68

Table 8

Correlations of Academic & Total Self Esteem with Teacher Ratings of Behavior for Division 2 Group (N = 5)

Pre	Self Esteem	
	Academic	Total
Conduct Problem	-0.34	-0.15
Personality Problem	0.41	0.24
Inadequacy Immaturity	0.48	0.39
Socialized Deliquency	-0.58	-0.39
Psychiotic Behavior	0.69	0.32

Post	Self Esteem	
	Academic	Total
Conduct Problem	0.14	0.21
Personality Problem	0.04	0.02
Inadequacy Immaturity	0.04	0.02
Socialized Deliquency	0.47	0.48
Psychotic Behavior	-	-

Table 9

Correlations of Academic & Total Self Esteem with Teacher Ratings of Behavior for Division 3 Group (N = 6)

Pre	Self Esteem	
	Academic	Total
Conduct Problem	-0.49	-0.22
Personality Problem	-0.35	-0.58
Inadequacy Immaturity	0.28	0.09
Socialized Deliquency	-0.29	-0.38
Psychotic Behavior	0.05	-0.19

Post	Self Esteem	
	Academic	Total
Conduct Problem	-0.57	-0.72
Personality Problem	-0.28	-0.36
Inadequacy Immaturity	0.14	1.66
Socialized Deliquency	-0.04	0.12
Psychotic Behavior	-0.91	-0.95

The correlations reported in this study are too low to provide any significant information with regard to the relationship between self-esteem and behavior disorders.

CHAPTER V

SUMMARY AND DISCUSSION

The purpose of this study was to examine the treatment effect of a two-year program for behavior disordered students, the relationship between self-esteem and academic achievement and between self-esteem and teacher rating of student behavior.

Because the sample size was so small it is important to execise caution when interpreting the results. Analysis of the results revealed that there was improved student reported self-esteem as evidenced by the increased mean scores on the post Culture-Free Self-Esteem Inventory; and a decline in disordered behaviors as evidenced by the decrease in mean scores on the Behavior Rating Checklist and by teacher observations of decreased incidents of aggressive, acting-out behavior. There was also improvement shown in academic achievement with an overall increase of 1 year in language arts and mathematics. These results indicate that a treatment effect did occur for these students during the two-year program.

As far as examining the relationship between self-esteem and academic achievement and self-esteem and behavior disorders, the correlations from this study were too low to report any significance.

In this investigation, academic self-concept and academic achievement were found to correlate to a small

degree but, because the sample size was so small, and the range so restricted, the results were somewhat artificial. Overall, however, there was an improvement in both areas, supporting other studies (Silvernail, 1981; Caplin, 1966; Torshen, 1971; Kifer, 1975; Battle, 1982; and Yaniw, 1983).

Perhaps what is more important is that overall, these students showed improvement in self-esteem and academic achievement and teachers rated their behavior as greatly improved. It would seem reasonable to expect that with increased academic achievement would come proportionate increases in academic self-esteem. This did not happen, to any great degree. Even though students' rate of learning was approaching that of "regular" students (a year within a year), they did not perceive themselves as better learners. This could be attributed to the fact that even though these students were improving, they still, for the most part, were considerably below grade level. For example, students in Division 3 (grades 7-9) were 1-3 years below grade level. These students may not show any significant improvement in perceived academic self-esteem until they are placed back in a regular classroom and are working at or near grade level.

Conclusions

One conclusion that can be drawn from this study is that education of a child involves more than just the teaching of the three "R's". Research has shown that affect and cognition are interrelated. As Piaget (1962)

noted, "We must agree that at no level, at no stage, even in the adult, can we find a behavior or a state which is purely cognitive without affect nor a purely affective state without a cognitive element involved" (p. 130). Student performance is a result of many variables. Students who feel good about themselves do better in school than those who have low self-esteem (Yaniw, 1983). It has been this author's experience that when children have serious emotional or behavioral problems, their academic performance can be seriously affected, and their behavior can influence the academic performance of other students in the class if they are allowed to continually disrupt the regular teaching process. From this study it appears that one way of helping children with serious behavior disorders is to provide small group settings in a highly structured environment with qualified staff to assist. This study showed that these programs can effect change and that these students can be helped given time and corrective intervention.

One interesting observation is that overall, the younger students in Division 2 seemed to demonstrate more improvement than the older students in Division 3. As Chapman (1988) observed, children's self-esteem seems to be fairly well established by grade 3. This suggests that perhaps diagnosis and intervention should happen as early in a child's school career as possible for students demonstrating learning disabilities and/or behavior disor-

ders. Perhaps through earlier intervention changes will be more profound and pervasive.

For children with behavior disorders, school can often, from day one, be a negative experience, resulting in lessened self-esteem. As Coombs & Snygg (1959) stated more than a quarter of a century ago, "the self-concept is a function of experience, what happens to students during their time spent in the educational system must be of vital importance in the development of the phenomenal self. Probably no other agency in our society outside the family has a more profound effect on the development of the individual's concept of self" (p. 277). Children with behavioral disorders can be difficult for peers and adults to like and to teach, often resulting in negative treatment. Not all educators have an understanding or tolerance for children with special needs (Schmid et al, 1984). This, compounded with the fact that a child's behavior must often be extreme before funding is made available for support and assistance, can lead to the child having many negative experiences furthering their belief that they are inadequate and inferior which in turn may cause more acting out behavior. This cycle must be broken and often requires intensive intervention.

Although this study does not prove that changing self-esteem results in proportionate changes in academic achievement, it does suggest than there is a relationship. It also suggests that given time and corrective interven-

tion, out-of-control students can learn self-control and social skills in order to return to the mainstream. Whether these behavioral changes were due to time and natural maturation rather than corrective intervention cannot be determined at this time because it is not known how these children would have reacted if left to their own devices.

Educational Implications and Suggestions for Further Research

1) While correlational studies often provide useful information, they do not determine causality. Which comes first, the disordered behavior or the negative self-esteem. Does academic failure result in acting-out behavior and lowered esteem or do behavior disorders result in decreased attentiveness and consequently, lowered achievement? What effect does "temperament", "personality", or "environment" have on a child's behavior and esteem. Further research should continue in these areas to examine whether these variables are related and whether this relationship is reciprocal or unidirectional.

2) Part of the intervention used in the classes in this study involved the direct instruction of pro-social skills. It would be interesting to examine the reasons why behaviorally disordered students seem to lack these abilities to evaluate experiences and make appropriate decisions in regard to behavior. This is especially important considering that not all behaviorally disordered students come from

disrupted or inadequate families but still show inadequate social skills and control.

3) In this study, a very small sample was used, partly because the severely behaviorally disordered represent only a small percentage of the regular population. Future research should look at larger samples of children with behavior disorders. It should also examine the treatment effects of a wide-variety of programs including mainstream for mild/moderate behavior disorders all the way to special classes such as were used in this study.

4). This study only examined programs for Division 2 and 3 students. There seemed to be more pronounced improvements for the younger students in Division 2 than for students in Division 3. Further research should examine treatment effects for students diagnosed as behavior disordered and placed in similar programs prior to grade 3. Perhaps intervention at a younger age (grade 1) will produce better and more long-lasting results than intervention at a later time in the child's life.

5) Treatment effect may have been a result of the intervention programs in this study or may have been a result of the natural maturation process. It was noted that positive changes did occur after the two-year period. It would be interesting to examine the effects of earlier intervention over longer periods of time.

6) Given that academic improvement did occur after two years in a special class, what kinds of academic gains

could be made over a longer period of time? Also, future research could examine the long term effects after children were returned to their regular classrooms. Was their a generalization effect for these children both academically and behaviorally?

7) It has been argued by many educators that violence is on the rise in schools today. Because violent behavior is often a behavior exhibited by behavior disordered students, does this mean there are more behavior disordered students in our schools today? It is also known that television and movies depict more violence than they have in the past. (Leibert, Neale & Davidson, 1973). Children have more access to these kinds of movies through the neighborhood video stores. Recently movies like "Lean On Me" and "Stand and Deliver" depict our schools as being in a state of chaos and disorder. Future research might examine whether the numbers of behavior disordered students is on the increase and what the effects that continual exposure to violence has on our young people today. It might also look at the skills, knowledge and attitudes that our future educators and administrators must have in order to teach effectively in the schools of tomorrow.

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APPENDICES

APPENDIX A

CULTURE-FREE SELF-ESTEEM INVENTORY FOR CHILDREN

by

James Battle, Ph.D.

Directions

Please mark your answer sheet for each of the 60 statements in the following way. If the statement describes how you usually feel, mark in "A" for YES on your answer sheet. If the statement does not describe how you usually feel, mark "B" for NO on your answer sheet. Please mark either A or B for each of the sixty statements. There are no "right" or "wrong" answers.

1.	I spend a lot of time daydreaming.	A. Yes B. No
2.	Boys and girls like to play with me.	A. Yes B. No
3.	I like to spend most of my time alone.	A. Yes B. No
4.	I ar satisfied with my school work.	A. Yes B. No
5.	I have lots of fun with my mother.	A. Yes B. No
6.	My parents never get angry at me.	A. Yes B. No
7.	I wish I were younger.	A. Yes B. No
8.	I only have a few friends.	A. Yes B. No
9.	I usually quit when my school work is too hard.	A. Yes B. No
10.	I have lots of fun with my father.	A. Yes B. No
11.	I am happy, most of the time.	A. Yes B. No
12.	I am never shy.	A. Yes B. No
13.	I have very little trust in myself.	A. Yes B. No
14.	Most boys and girls play games better than I do.	A. Yes B. No
15.	I like being a boy/girl.	A. Yes B. No
16.	I am doing as well in school as I would like to do.	A. Yes B. No
17.	I have lots of fun with both of my parents.	A. Yes B. No
18.	I usually fail when I try to do important things.	A. Yes B. No

19. I have never taken anything that didn't belong to me A. Yes B. No
20. I often feel ashamed of myself. A. Yes B. No
21. Boys and girls usually choose me to be the leader. A. Yes B. No
22. I usually can take care of myself. A. Yes B. No
23. I am a failure at school. A. Yes B. No
24. I find it hard to make up my mind and stick to it. A. Yes B. No
25. My parents make me feel that I am not good enough. A. Yes B. No
26. I never get angry. A. Yes B. No
27. I often feel that I am no good at all. A. Yes B. No
28. I have many friends about my own age. A. Yes B. No
29. Most boys and girls are smarter than I am. A. Yes B. No
30. Most boys and girls are better than I am. A. Yes B. No
31. My parents dislike me because I am not good enough. A. Yes B. No
32. I like everyone I know. A. Yes B. No
33. Children pick on me very often. A. Yes B. No
34. I like to play with children younger than I am. A. Yes B. No
35. I like to be called on by my teacher to answer questions. A. Yes B. No
36. I would change many things about myself if I could. A. Yes B. No
37. There are many times when I would like to run away from home. A. Yes B. No
38. I am as happy as most boys and girls. A. Yes B. No
39. I can do things as well as other boys and girls. A. Yes B. No
40. I often feel like quitting school. A. Yes B. No
41. I worry a lot. A. Yes B. No
42. My parents understand how I feel. A. Yes B. No
43. When I have something to say, I usually say it. A. Yes B. No

44. I never worry about anything.	A. Yes B. No
45. I am as nice looking as most boys and girls.	A. Yes B. No
46. Other boys and girls are mean to me	A. Yes B. No
47. I know myself very well.	A. Yes B. No
48. I am doing the best school work that I can.	A. Yes B. No
49. People can depend on me to keep my promises.	A. Yes B. No
50. My parents think I am a failure.	A. Yes B. No
51. I always tell the truth.	A. Yes B. No
52. I need more friends.	A. Yes B. No
53. I always know what to say to people.	A. Yes B. No
54. My teacher feels that I am not good enough.	A. Yes B. No
55. My parents love me.	A. Yes B. No
56. I never do anything wrong.	A. Yes B. No
57. Most boys and girls are stronger than I am.	A. Yes B. No
58. I am proud of my school work.	A. Yes B. No
59. I often get upset at home.	A. Yes B. No
60. I am never unhappy.	A. Yes B. No

APPENDIX B

Behavior Problem Checklist

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

_____ 40. Uncooperativeness in group situations
_____ 41. Aloofness, social reserve
_____ 42. Passivity, suggestibility, easily led by others
_____ 43. Clumsiness, awkwardness, poor muscular coordination
_____ 44. Hyperactivity, "always on the go"
_____ 45. Distractibility
_____ 46. Destructiveness in regard to own or others' property
_____ 47. Negativism,tendency to do the opposite of what is requested
_____ 48. Impertinence, sauciness
_____ 49. Sluggishness, lethargy
_____ 50. Drowsiness
_____ 51. Profane language, swearing, cursing
_____ 52. Nervousness, jitteriness, jumpiness, easily startled
_____ 53. Irritability, hot-tempered, easily aroused to anger
_____ 54. Enuresis, bed-wetting
_____ 55. Often has physical complaints, e.g. headaches,stomach aches

For scoring and interpretation as indicated in the checklist Manual

Factor Scores: CP _____ PP _____ H _____ SD _____ PB _____

STUDENT #1 PROFILE

APPENDIX C

D.O.B. 08/02/73

WISC-R IQ SCORE V-82 P-114 FS-91

BEHAVIOR PROFILE

PRE:

-was enrolled in a grade 5 program in the 84-85 school year

-severe difficulty in following classroom rules and routines 80% of the time

-behavior would be disruptive and attention-seeking 80% of the time

-high degree of difficulty completing more than 10% of assigned tasks during the day

-great deal of difficulty understanding and labelling feelings of himself and others

POST:

-was integrated into regular physical education program during last year of program

-follows classroom rules and routines 70% of the time

-attention seeking behaviors diminished to 15 % of the time

-completed assigned tasks 80% of the time

-as a result of the prosocial behavior training program student labelled and responded appropriately to others' feelings 85% of the time

FOLLOW-UP;

-during the 1988-89 school year, was enrolled in regular high school program, however, attendance was sporadic

STUDENT #2 PROFILE

D.O.B. 02/23/74

WISC-R IQ SCORE V-82 P-92 FS-86

BEHAVIOR PROFILE

PRE/POST

-student was enrolled in a Junior Adaptation program during the 84-85 school year

-complete loss of control to the point that student required physical restraint to prevent injury to self and others (September-once a week; March/April-2nd year-once a month)

-on one occasion, bit two teachers so badly that one required medical treatment

-would throw objects indiscriminately when upset (Sept.-twice/week; March/April-2nd year-once/two weeks)

-avoided work in group situations

-mutilated himself---observed thrusting a compass point through his hand

-came from abusive home situation with an alcoholic parent

FOLLOW-UP

-1988-89---placed in secure treatment in detention center because of involvement in deviant criminal behavior, however, physical self-abuse appeared to have stopped

STUDENT #3 PROFILE

D.O.B. 08/24/73

WISC-R IQ SCORE V-80 P-93 FS-85

BEHAVIOR PROFILE

PRE:

-enrolled in grade 5 program during 84-85 school year

-avoidance of work by resorting to immature behaviors (e.g. "I can't do it, I'm sick, I'm tired, You won't help me", etc.) 80% of the time each day

-physically aggressive--fighting with peers on a daily basis; attacked the school bus driver; choked a mentally retarded student on the bus and broke equipment on the bus

-frequently made the handicapped students on the bus cry and be afraid of him. Lost his bus privileges

-verbally aggressive--swearing, threatening, insulting, usually directed at weaker peers; bullying

-had difficulty labelling his feelings and feelings of others, resulting in constant negative communication 80% of the time in September

POST:

-demonstrated avoidance of work behavior only 30% of the time

-physical aggression---extinguished

-appropriately labelled and responded to feelings 70% of the time

FOLLOW-UP

1988-89---whereabouts unknown

STUDENT # 4 PROFILE

D.O.B. 11/22/71

WISC-R IQ SCORE V-87 P-98 FS-91

BEHAVIOR PROFILE

PRE/POST

-enrolled in grade 7 program during the 84-85 school year

-refused to take responsibility for own behavior (Sept.- 90% of the time on a daily basis; March/April of 2nd year- 30% of the time

-verbally abusive to peers and adults---swearing, threatening (Sept.-85% on a daily basis; April-2nd year-20% of the time)

-would throw desks, garbage cans, books and other objects when asked to do an assignment that interfered with what he was already doing (Sept.-85% on a daily basis; April- 2nd year-10% of the time)

-refused to take part in group activities (Sept.-90% of the time; April-20% of the time)

-refused to complete assignments (Sept.-80% of the time; April-20% of the time)

-tremendous difficulty establishing relationships with adults

-was suicidal

-both parents were substance abusers

-FOLLOW-UP

-during 1988-89 school year, student was enrolled in regular high school program, but dropped out to work

STUDENT #5 PROFILE

D.O.B. 11/19/73

WISC-R IQ SCORE V-101 P-104 FS-102

BEHAVIOR PROFILE

PRE:

-enrolled in grade 5 program in the 84-85 school year

-disruptive and attention-seeking behavior occurred 80% of the time

-attacked one of the behavior disorders consultants

-attacked one of the teachers---broke her finger

-totally trashed a classroom

-very little awareness of his own or others' feelings

-could not communicate with others when anxious or upset

-swore and walked away from situations 90% of the time

-numerous fist fights with peers both in class and school yard on a daily basis

-continuously tried to engage staff in power struggles

POST:

-resorted to attention-seeking behavior only 40% of the time

-was able to label and respond appropriately to own and others' feelings 50% of the time

FOLLOW-UP

-during 88-89 school year, there was a total family breakdown

-student went to three different junior high schools

-became involved in theft and other delinquent behavior

STUDENT #6 PROFILE

D.O.B. 10/07/73

WISC-R IQ SCORE V-101 P-104 FS-102

BEHAVIOR PROFILE

PRE:

-had been in 17 different foster homes in his life

-enrolled in grade 5 program for 84-85 school year

-placed in home-bound instruction program because behavior was too out- of- control for regular program

-physically and verbally aggressive toward peers and adults

-was restrained on the average of 5 times/day

-spent most of his school day in a time-out room to protect others from him

-destroyed school property

-did not complete assignments

-was assigned a full-time aide in an attempt to control his behavior

-in Sept. spent an average of 72 minutes/day in out of class time-out and required approximately 45 minutes of physical restraint/day.

POST:

-participated in the regular intramural program with no incidents of physical aggression

-required no restraints

-required an average of only 3 minutes/day in time-out within the classroom

-required only one/month outside class time-out with no physical restraint

-on-task completion approximately 80% per day

FOLLOW-UP

-during 1988-89 school year, was in a private Christian school and was reported as only experiencing academic difficulties

-was placed in a more permanent foster home

STUDENT #7 PROFILE

D.O.B. 02/10/76

CCAT IQ SCORES V-102 NV-103 Q-74

BEHAVIOR PROFILE

PRE:

-enrolled in a grade 3 program during the 84-85 school year

-physically aggressive toward peers several times daily

-would fight, hit and physically intimidate classmates

-daily defiance of teacher authority

-refusal to listen to teacher directions

-frequent physical attacks on teacher

-on-task behavior almost non-existent

-would leave instruction area without permission 98% of the time

-refused to participate in expected activities 98% of the time except for physical education

POST:

-given confirmed directions and teacher assistance, would demonstrate on-task behavior to complete assignments at instructional level 60% of the time

-physical aggression toward peers had been reduced from approximately 46 acts per week to 1 or 2 incidents/week

-never left classroom without permission

-gave both positive and negative feedback to peers and adults almost 100% of the time without resorting to physical measures

FOLLOW-UP

-during 1988-89 school year was enrolled in regular junior high and behavior was described as typical of a regular high student

STUDENT #8 PROFILE

D.O.B. 03/19/76

WISC-R IQ SCORE V-95 P-102 FS-98

BEHAVIOR PROFILE

PRE:

-enrolled in grade 3 program for 84-85 school year

-physical abuse of peers on a weekly basis

-frequent disruption of class and defiance characterized by outright refusals to comply with teacher and administration directions on a daily basis

-near constant refusal to communicate with teacher

-unwillingness to accept teacher assistance with school work

-running away from school and hiding approximately every second week

POST:

-defiant behavior was totally eliminated in class and in school

-running away behavior totally eliminated

-accepted teacher assistance with school work

-solicited teacher assistance in appropriate ways

-assignment completion 100%

-was able to communicate with teachers, peers and administration in appropriate ways

FOLLOW-UP

-was registered in regular out-of-district class

STUDENT #9 PROFILE

D.O.B. 12/07/74

WISC-R IQ SCORE V-114 P-102 FS-109

BEHAVIOR PROFILE

PRE:

-enrolled in grade 4 program in 84-85 school year

-intimidated peers by stalking them and "staring them down" on a weekly basis

-physically aggressive toward school property characterized by kicking and slamming doors when directed to time-out---several times a week

-would take little responsibility for own actions--- blamed others

-was verbally and physically aggressive toward teachers and administration characterized by swearing at staff, hitting and kicking (weekly occurrences)

-frequently left school without permission and went home once every two weeks

-off task 60% of the time

-assignment completion rate 5%

POST:

-ceased physical attacks on teachers

-physical aggression toward peers and property reduced from 24 severe incidents per month to 4 per month

-on task and assignment completion rate 80%

FOLLOW-UP

-during 1988-89 school year this student was hospitalized

in a 24-hour treatment program

STUDENT #10 PROFILE

D.O.B. 06/07/74

WISC-R IQ SCORE V-124 P-108 FS-119

BEHAVIOR PROFILE

PRE:

-enrolled in a grade 5 program in 1984-85

-extremely disruptive in class

-would wander around the class at will, visiting peers

-frequent call outs

-rolled on desk, acted "silly", argumentative with both teachers and classmates

-disobedient and defiant toward teachers on a daily basis

-extremely non-compliant and oppositional

-high level of physically and verbally aggressive acts toward peers in class as well as on playground

-would kick, slap, hit, poke, physically abuse and intimidate peers several times a day

-abusive and profane language frequently directed at peers and property

-minimal on-task and assignment completion rate---5%

POST:

-learned to behave in socially appropriate ways

-on-task and assignment completion rate moved to 80%

-physical aggression toward peers reduced from 20 per week to 2 per month

FOLLOW-UP

-still very aggre3sive---was reported to have "trashed" his home and threatened his mother with a knife

-was enrolled in regular class for 1988-89 school year

STUDENT #11 PROFILE

D.O.B. 01/17/77

WISC-R IQ SCORE V-124 P-123 FS-126

BEHAVIOR PROFILE

PRE:

-enrolled in grade 3 program in the 1984-85 school year

-extremely argumentative with staff 90% of the time

-disobedient and defiant toward teachers and staff (4 times per day)

-frequent physical aggression toward peers, fighting in class and on the playground, bullying younger peers on a daily basis

-easily frustrated and highly explosive in class, temper tantrums involving yelling, throwing objects on a daily basis

-extremely disruptive in class, approximately 75% of the time off task, work refusal 75% of the time

POST:

-on task behavior level approximately 60% of the time

-assignment completion rate 95%

-incidence of defiance declined from 20 incidents/week to 4/week

-incidence of physical aggression toward peers including fighting, bullying and throwing objects has declined from approximately 80 instances/month to 5/month

-classroom disruptiveness reduced from 75% of instructional time to one or two incidents/day

FOLLOW-UP

-enrolled in regular class during 1988-89 school year