

DISTINGUISHING BETWEEN SERIOUSLY
EMOTIONALLY DISTURBED AND
SOCIALY MALADJUSTED
MALE ADOLESCENTS

By

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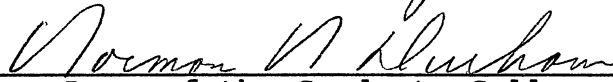
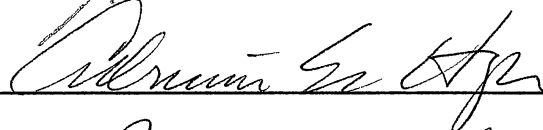
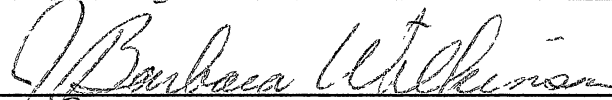
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CHAPTER I

THE RESEARCH PROBLEM

Introduction

With the enactment of The Education for All Handicapped Children Act (P. L. 94-142), the public schools were mandated to identify and provide services for children who are seriously emotionally disturbed. The legal definition of "seriously emotionally disturbed" is as follows:

- (i) The term means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree, which adversely affects educational performance:
 - (a) an inability to learn which cannot be explained by intellectual, sensory, or health factors;
 - (b) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers;
 - (c) inappropriate types of behavior or feelings under normal circumstances;
 - (d) a general pervasive mood of unhappiness or depression; or

(e) a tendency to develop physical symptoms or fears associated with personal or school problems.

(ii) The term includes children who are schizophrenic or autistic. The term does not include children who are socially maladjusted, unless it is determined that they are seriously emotionally disturbed (Federal Register, 1977, pp. 42478-42479).

Section i is based on Bower's (1960) definition. Section ii, which is an addition to this definition, was amended in 1981, by removing the autistic label from this classification (Bower, 1982).

Identification of seriously emotionally disturbed students has become the focus of considerable controversy in the field of special education and school psychology (Kauffman, 1980). Defining and identifying the socially maladjusted is also controversial. Social maladjustment is generally considered to involve volitional behaviors which are deemed inappropriate by society and which cause conflict with others (Rutherford, 1981; Smith & Neisworth, 1975; Wood, 1981). Disagreements as to what terminology should be used and how these terms should be defined are widespread. One particular area of controversy involves the differentiation between socially maladjusted and seriously emotionally disturbed children. This is "one of the most troublesome decisions facing the multidisciplinary team . . ." (Arkansas

Special Education Resource Center, 1989). Although some authors argue that such a distinction is invalid and inappropriate (Bower, 1982; Forness, 1988; Grosenick & Huntze, 1980; Kauffman, 1980, 1988), it is a necessity as P. L. 94-142 is currently written.

Significance of the Problem

There is no universally accepted definition of emotional disturbance (Kauffman, 1980). Lack of agreement and inconsistent use of terminology have made it difficult to determine the prevalence of seriously emotionally disturbed students, led to under-identification of the population, and ineffective research (Forness, 1988; Friedman, 1985; Kauffman, 1988; Kovacs & Paulauskas, 1986).

The prevalence of seriously emotionally disturbed children and youth is difficult to determine due to the lack of agreement on an operational definition (Friedman, 1984; Kazdin, 1989). Variability between state definitions suggests that a student could be identified as eligible for services in one state and not in another (Cullinan & Epstein, 1982a; Forness, 1988; Friedman, 1985; Grosenick & Huntze, 1980; Macmillan & Kavale, 1986). Morse (1985) notes that due to geography, teachers trained to work with a particular type of student may find themselves teaching a very different group.

Friedman (1984) reports that during the 1980-1981 school year, 13 states identified less than .05% of their students

as emotionally disturbed while five states identified 2% or more. According to Balow (1979), when one uses current definitions as operationalized by state and local agencies, prevalence estimates of emotional disturbance in school-age children range from .05% to 40%. This level of variability reflects the lack of agreement as to the nature of emotional disturbance.

Confusion over defining and identifying the seriously emotionally disturbed has been cited as one cause of under-identification and under-service of the population (Forness, 1988; Friedman, 1984, 1985; Kauffman, 1988; Rutter & Sandberg, 1985). Morse (1985) states that 3% of students are seriously impaired but that only 1% is estimated as being served. Braaten, Kauffman, Braaten, Polsgrove and Nelson (1988) argue that 3% is a conservative prevalence estimate and report that less than 1% of public school students are served. Tuma (1989) and Knitzer (1982) estimate that less than 1/3 of potentially eligible students are served. Marcus, Fox, and Brown (1982) conclude that the federal guidelines are too vague for schools to use in a precise manner. They call for development of more specific and workable guidelines by state and local districts.

Part of the controversy over identification of seriously emotionally disturbed students may be due to a lack of adequate research in the field. Definitions used in research may have added to the confusion rather than to clarification. Wood and Lakin (1982) examined 63 research reports in the

area of childhood emotional disturbance. They found that researchers rarely gave clear descriptions of the population studied. An author's choice of terminology which suggested an emotional disturbance rather than a behavioral disturbance appeared to be based on theoretical orientation instead of actual discriminable differences. The authors called for studies using rating scales to better define the population.

In reporting on the findings of The National Special Education and Mental Health Coalition, Forness (1988) notes confusion over distinguishing between severely emotionally disturbed and socially maladjusted children. He states that there has been only limited research to evaluate diagnostic and assessment tools. Mattison (1988) reports that the coalition identified the lack of research as one of the most important issues in the field. He notes a particular need for increasing our knowledge base through study of students who have been placed in classes for the seriously emotionally disturbed.

Following a study mandated by the United States Congress, Tallmadge, Gamel, Munson, and Hanley (1985) concluded that there is currently no need to change the definition of seriously emotionally disturbed but that more research is needed to resolve the issue of whether the socially maladjusted should be included and how the term should be defined.

Problem Statement

The need for further research to better define the seriously emotionally disturbed and socially maladjusted populations was the impetus for this study. Comprehensive review of the literature revealed that current classification (or nosological) systems have limited utility and supported the use of an empirical classification system based on factor analytic studies using behavior rating scales with multiple raters.

Factor analytic studies have consistently identified two broad-band dimensions of children's behavior problems which have been identified as "internalizing" and "externalizing" and a number of narrow-band syndromes (Achenbach, 1982a; Bullock & Brown, 1972; Kauffman, 1982; Mash & Terdal, 1988; Rothbaum & Weisz, 1989; Wahler & Dumas, 1987). Internalizing behaviors typically involve problems which cause suffering within the self. Externalizing behavior problems usually involve conflict with the environment and induce suffering in others (Achenbach, 1982a; Rothbaum & Weisz, 1989).

This study was based on the supposition that measures of behavior problems would discriminate between seriously emotionally disturbed and socially maladjusted children. Specifically, it was speculated that socially maladjusted and seriously emotionally disturbed children might be distinguished by their scores on rating instruments which measure internalizing and externalizing behavior problems.

The ability to significantly discriminate between groups identified as seriously emotionally disturbed and as socially maladjusted could be of value to school personnel by aiding in the development of a set of decision rules.

The Child Behavior Checklist, the Teacher's Report Form, and the Youth Self-Report which were devised by Achenbach and Edelbrock (1983, 1986a, 1987) were utilized in this study. The three instruments were designed to obtain ratings from parents, teachers, and youths. They yield scores on Internalizing and Externalizing scales and on a number of narrow-band scales (see Appendixes C, D, and E).

The problem examined in this study is: Are there significant discriminations between male adolescents currently identified as seriously emotionally disturbed and socially maladjusted male adolescents in their scores on the Child Behavior Checklist, the Teacher's Report Form, and the Youth Self-Report? Two intact groups of male middle school students participated in the study. One group consisted of public middle school students enrolled in special education programs for the seriously emotionally disturbed. The second group was comprised of public middle school socially maladjusted students enrolled in an alternative education program.

Hypotheses

The following null research hypotheses were formulated:

Hypothesis One: There is no significant discrimination between parents' ratings of seriously emotionally disturbed and socially maladjusted male adolescents as measured by the scales of the Child Behavior Checklist (CBC).

Hypothesis Two: There is no significant discrimination between teachers' ratings of seriously emotionally disturbed and socially maladjusted male adolescents as measured by the Teacher's Report Form (TRF).

Hypothesis Three: There is no significant discrimination between self-ratings of seriously emotionally disturbed and socially maladjusted male adolescents as measured by the Youth Self-Report (YSR).

Summary

In summary, the purpose of this study was to determine whether it is possible to significantly discriminate between groups of seriously emotionally disturbed and socially maladjusted male adolescents. This inquiry was developed due to the need for further research to determine the behavioral characteristics of the two groups and whether there is a valid basis for the exclusion of the socially maladjusted from services under P. L. 94-142.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The federal definition of a serious emotional disturbance used in P. L. 94-142 requires the exclusion of socially maladjusted students who are not also seriously emotionally disturbed. Public schools are thus placed in a position of having to distinguish between the seriously emotionally disturbed and the socially maladjusted.

This chapter will review problems of definition and terminology, classification systems, and the use of behavior rating scales.

Problems of Definition and Terminology

The following quote from Bower (1982) eloquently describes the difficulties educators are facing:

Along with the hazards of street crime, drunk driving, and Christmas shopping is that of defining what is meant by 'emotional disturbance.' With the unique exception of pregnancy, all human conditions including life and death exist to some degree and

are therefore open to legal, scientific, and community interpretation. As one moves from the extreme of a handicapping condition toward the mean, one reaches a point where the waters are sufficiently muddied to cause serious definitional problems (p. 55).

He concludes, "There is no question that 'emotional disturbance' is a particularly nasty and odious category for service and reimbursement purposes, especially as applied to schools" (p. 56).

There is widespread disagreement in the field on what terminology should be used. A variety of terms have been used to label students who exhibit emotional and/or behavioral problems. Terms found in a review of the literature include the following: emotionally disturbed, emotionally conflicted, emotionally handicapped, emotionally impaired, troubled and troubling, clinically maladjusted, socially maladjusted, behaviorally disordered, delinquent, mentally ill, behaviorally impaired, behaviorally disabled, and one-damn-thing-after-the-other children (Hallahan & Kauffman, 1988; Hobbs, 1982; Morse, 1985; Rutherford, Nelson, & Forness, 1988; Zabel, 1988).

Some have recommended that the term "seriously emotionally disturbed" used in P. L. 94-142 should be changed to "behavior disorder" (Epstein, Cullinan, & Sabatino, 1977; Forness, 1988; The Council for Children with Behavior Disorders, 1984). A position statement prepared by The

Council for Children with Behavior Disorders (1984) argues that the term "behavior disorders" is more descriptive and useful to educators, is less stigmatizing, affords more comprehensive assessment, is not linked to a particular theory of causation, and is more representative of those with behavior handicaps and those who are currently served. They report that the federal Office of Special Education Programs has judged the two labels to be equivalent in terms of the population they designate for services.

Cullinan and Epstein (1982b) agree that the term "behavior disorders" is essentially interchangeable with terms such as "emotional disturbance" and "maladjustment." In contrast, Ross (1974) views "behavior disorder" as a more accurate description of the socialization difficulties experienced by most children at some time in the maturation process. Hallahan and Kauffman (1988) concluded that the use of different labels seems to be a function of personal choice rather than distinctly different types of disorders.

Definition of Seriously

Emotionally Disturbed

Definitions of emotional disturbance have been criticized as vague, unclear, inadequate, and subjective (Harrington & Marks, 1985; Marcus, Fox, & Brown, 1982; Taylor, 1984). Eaves (1982) states that "despite the proliferation of journals and professional groups concerned with emotional disturbance, the definition and diagnosis of

the handicap remain largely muddled concepts." The federal definition, presented in Chapter I, has been criticized as having limited content validity and even less practical utility (Walker, Severson, Haring, & Williams, 1986).

Bower's definition of emotional disturbance is used most often by educators and served as the basis for the P. L. 94-142 definition (Bower, 1982; Taylor, 1984). Bower's definition was derived from the results of a study which began in 1958 and continued for more than six years. Two hundred classes in 75 school districts that included a child who was classified as emotionally disturbed were identified. The 207 emotionally disturbed students had been classified by mental health practitioners. The students were enrolled in elementary through senior high school. Teachers were told that their classes were randomly selected for the study and were asked to collect data on each student in the class. The following data were gathered: reading achievement test scores, amount of school absence in a four-month period, age-grade relationship, socioeconomic status, and scores on a "Class Play," a peer and self-perception inventory. Approximately 6,000 returns were analyzed to determine the major differences between the students classified as emotionally disturbed and their classmates. Five major differences were identified and are listed in Bower's definition and in the federal definition. Bower's definition did not include the qualifier "seriously" or Section ii of the federal definition.

Bower takes issue with these additions, stating that the federal definition is "contradictory in intent and content with the intent and content of the research from which it came" (p. 60). He points out that an emotionally disturbed child had to be socially maladjusted according to his definition. His definition had a school-related, behavior focus and avoided making assumptions about a child's clinical, intrapsychic condition (Bower, 1982).

Definition of Socially Maladjusted

Although the socially maladjusted are specifically excluded from services under P. L. 94-142, the regulations do not provide criteria for differentiating the socially maladjusted from the emotionally disturbed. Neel and Rutherford (1981) state:

The definition of the socially maladjusted is vague and open-ended. Because we are unsure who are the socially maladjusted, and who should serve them, a substantial number of children and youth systematically are excluded from the free and appropriate education mandated under the Education for All Handicapped Children Act of 1975 . . . Although frequently used to describe children whose behavior is considered socially inappropriate, social maladjustment has seldom been defined. Educational definitions are essentially nonexistent (p. 79).

Wood (1981) indicates that, due to P. L. 94-142, school personnel must distinguish between the behaviorally disturbed and the emotionally disturbed on the basis of value judgments and inferences about the causes of the disordered behavior. He considers behavior disturbances to include volitional behaviors which are a function of past learning and present environmental factors. He characterizes emotional disturbances as consisting of disturbing behavior which is a function of past experiences and the present inner emotional state. Wood states that the term "social maladjustment" generally refers to antisocial behaviors which lead to the attention of police, courts, and the correctional system. Smith and Neisworth (1975) view social maladjustment as involving behaviors which are disruptive to others, are socially unacceptable, and violate cultural norms. They include behaviors such as disobedience, disruptiveness, defiance, and/or incorrigibility.

The Oklahoma State Department of Education (1989) defines social maladjustment in the following manner:

When the student's inappropriate behavior is the result of a disturbance which is limited to conflicts between student and society, then a social maladjustment exists. The federal regulations expressly prevent the socially maladjusted from being classified as seriously emotionally disturbed unless the student is also

seriously emotionally disturbed according to the laws. Examples of social maladjustment are:

- a. Chemical dependency or substance abuse
- b. Conduct disorders or behavior disorders
- c. Anti-social personality disorders
- d. Oppositional disorders
- e. Juvenile delinquency
- f. Stealing, cheating, lying, firesetting, vandalism (p. 13).

Classification Systems

Current taxonomic systems have been criticized as lacking validity, reliability, and utility (Erickson, 1987; Melton, 1987). Kauffman (1982) states:

It is well recognized that current nosological systems for children are inadequate, scaled-down versions of those devised for adults (p. 51).

. . . distinguishing among various 'diagnostic' categories of children has presented seemingly insurmountable problems. If there is confusion in trying to distinguish among learning disabled, mentally retarded, and emotionally disturbed children, there is chaos in trying to make clear distinctions among subcategories of behavior disorders. The years have brought such a blizzard of confusing labels for behavioral difficulties, often with obtuse or idiosyncratic 'diagnostic

criteria' appended by their creators, that no one but a charlatan can seriously claim not to be 'snowed' (pp. 53-54).

Stein and Bogin (1978) criticize the Diagnostic and Statistical Manual of Mental Disorders and the Group for the Advancement of Psychiatry classification systems as having poor inter-rater and test-retest reliability and limited prescriptive validity. Further dissatisfaction with current classifications centers around the failure to consider environmental influences, overlapping diagnostic categories, implicit etiological assumptions, subjective criteria to derive and assign children to categories, and the static nature of categories for developing children (Mash & Terdal, 1988; Rutter & Sandberg, 1985; Tuma, 1989; Wahler & Dumas, 1987). Concern with these issues has led to a focus on an empirical approach through which more useful categories or dimensions have been derived (Mash & Terdal, 1988; Stein & Bogin, 1978; Thompson, 1986; Wahler & Dumas, 1987).

Research supporting the use of an empirical classification system is based on factor analytic studies using behavior rating scales. Numerous factor analytic studies have shown that behavior problems of children and adolescents can be reduced to two broad-band syndromes or dimensions and a number of narrow-band syndromes (Achenbach, 1982a; Bullock & Brown, 1972; Kauffman, 1982; Mash & Terdal, 1988; Rothbaum & Weisz, 1989; Wahler & Dumas, 1987). Thompson (1986) states that the findings are consistent

enough to suggest that the dimensions are "genuine and robust."

The two dimensions have variously been identified as "externalizing vs. internalizing," "undercontrolled vs. overcontrolled," "aggressive vs. overinhibited," "acting out vs. shy-anxious," and "conduct disorder vs. personality disorder" (Achenbach, 1982a). Externalizing behavior problems primarily involve conflicts with the environment and anti-social behavior excesses which induce suffering in others. Internalizing behavior problems usually involve problems which cause suffering within the self (Achenbach, 1982a; Rothbaum & Weisz, 1989).

Peterson (1961) conducted one of the first factor studies using a checklist for assessing problem behaviors. A sample of over 400 folders from a child guidance clinic were examined. A checklist of 58 items which described the problem behaviors identified in the reasons for referral was compiled. Teachers used the checklist to rate a sample of 831 students in kindergarten through sixth grade. Intercorrelations among the items were obtained and the resulting matrix was subjected to factor analysis. Two factors were identified which Peterson (1961) labeled "conduct" and "personality" disorders.

A follow-up study by Quay and Quay (1965) used a sample of 518 seventh and eighth graders who were rated on Peterson's checklist. Thirty-two of the 58 items which appeared in less than 10% of the sample were deleted from the

final analysis. Quay and Quay (1965) also reanalyzed the data for Peterson's (1961) fifth and sixth grade samples using only the intercorrelations for the 26 items retained in their study. A principal axis factor solution was obtained using varimax rotation criteria. The majority of the variance was accounted for by two factors for which Quay and Quay (1965) used Peterson's descriptors, calling Factor I "Personality Problems" and Factor II "Conduct Problems." A third factor, "Behavioral Immaturity," was identified for the eighth graders.

Several studies have also identified an "immaturity" factor (Pimm, Quay, & Werry, 1967; Quay, 1978; Quay, Morse, & Cutler, 1966; Quay, Sprague, Shulman, & Miller, 1969; Von Isser, Quay, & Love, 1980). It has been suggested that this factor may be a developmental delay phenomena (Pimm, Quay, & Werry, 1967; Quay, 1978).

Externalizing (conduct) disorders have a firm empirical base in factor analytic studies across age, gender, and cultural groupings (Kazdin, 1987; Quay, 1986). Studies have shown that at least 1/3 of teacher and parent referrals for professional help concern conduct problems (Gelfand, Jensen, & Drew, 1988; Herbert, 1987; Patterson, 1974). Two types of this disorder, "socialized" and "unsocialized-aggressive" have been identified (Quay, 1978, 1986). Quay (1986) states that the socialized conduct disorder emerges less frequently than the unsocialized-aggressive form and appears primarily in older children and adults. He suggests that the behavior

traits characteristic of the socialized conduct disorder do not result from a psychological disorder, but are "rationally acquired in response to environmental circumstances . . . [and] . . . have been reinforced by peers and by the delinquent or criminal subculture which has provided their socialization experiences" (Quay, 1978, p. 13). Kazdin (1987) stresses the need to distinguish the delinquent from the aggressive types of conduct disorders. The undersocialized aggressive type emerges almost without exception in factor analytic studies (Quay, 1986). According to Quay (1978), the undersocialized aggressive child tends to use a concrete problem solving approach, has a limited ability to perceive others' points of view, seeks a high level of sensory input and is less responsive to social reinforcers. Problem behaviors associated with the externalizing dimension have been found to include hostility, aggression, disobedience, delinquency, temper tantrums, rebellion, and overactivity.

Assessment of internalizing disorders may be more difficult than assessment of externalizing disorders as the subjective nature of the distress is harder for adult observers to accurately and reliably identify (Quay, 1978; Quay & LaGreca, 1986). Quay (1978) indicates that internalizers do not exhibit the limited reasoning skills found in conduct disorders but have less role-taking ability, decreased stimulation seeking, and reduced performance under stress. Internalizing behavior problems usually involve

phobias, chronic sadness, passivity, social withdrawal, bodily complaints, depression, and anxiety (Achenbach, 1982a; Forness, 1988; Rothbaum & Weisz, 1989).

Quay, Morse, and Cutler (1966) concluded ". . . these behavioral dimensions, objectively observable and reliably rated, provide a more useful way of looking at problem behavior children than does the application of psychiatric nosological labels which are of doubtful reliability even when applied to adults" (p. 300).

Use of Behavior Rating Scales

Research using behavior rating scales has been recommended to better define the emotionally disturbed population (Wood & Lakin, 1982). Behavior rating scales are designed to assess the degree to which an informant has observed the person being rated engaging in behaviors of interest. Parents and teachers typically serve as informants for children and adolescents. Kazdin (1987) describes parent and teacher rating scales as the most well-developed measures for assessment of multiple areas of dysfunction. Research has supported the validity of adult reports of child behavior (Kazdin, 1987; Nelson, 1971). Prior, Boulton, Gayzago, and Perry (1975) found that when parent and teacher ratings served as the basis for grouping children into normal and deviant categories, significant differences between the groups were found on their performance on intelligence and

achievement tests and the number of referrals to mental health centers.

Nelson (1971) conducted a study in which 1216 school children were rated by their teachers on two factors of the Devereux Child Behavior Rating Scales. Students whose scores on the Inability to Delay and Social Aggression factors exceeded the cutoff score were identified as conduct disordered. Ten boys and ten girls in the conduct disorders group were matched with controls of the same sex, age, intelligence quotient, and mental age who scored in the normal range on the Devereux. Direct observations were then made of each pair in a classroom setting. Significant differences between the two groups were found in terms of on-task behavior and rate of deviant behavior. Nelson (1971) concluded that teachers can identify children with emotional handicaps with a high degree of accuracy.

Bullock and Brown (1972) used their Behavioral Dimensions Rating Scale in a study of 1086 students enrolled in special programs for the emotionally disturbed. One hundred twelve teachers itemized the main behavior problems in the classrooms and completed the rating scale for each child. Results of the rating scale were analyzed through a principal components factor solution with varimax rotation. The following four factors were selected: Factor I - Aggressive/Acting Out, Factor II - Withdrawn, Factor III - Tense, Anxious, and Factor IV - Irresponsible/Inattentive. Factors I and II corresponded significantly to problems the

teachers reported. Bullock and Brown (1972) concluded that teachers are able to effectively observe and judge students' behavior patterns.

A review of research on the technical adequacy of behavior rating scales by Achenbach and Edelbrock (1978) revealed moderate to high test-retest reliability for the two broad-band externalizing and internalizing behavior patterns. Stability coefficients ranged from .83 to .93 for periods of 7 to 10 days, from .72 to .89 over periods of 10 days to several weeks, and from .49 to .68 over periods of 15 months to 5 years. Inter-rater reliability coefficients ranged from .70 to .83. Inter-rater reliability was found to be higher when the raters' roles were similar and when the children were observed in similar settings (Achenbach & Edelbrock, 1978).

Studies focusing on the effect of a rater's role support the use of multiple sources to gain a more comprehensive view of a child. Verhulst and Akkerhuis (1989) indicate that raters often disagree about the presence and degree of severity of emotional and behavioral problems. They conducted a study to determine the degree and direction of discrepancies in parent and teacher ratings while taking into account the child's age, sex, and type of problem. A total of 1,161 children, aged four to twelve, were selected from the general population and rated by parents and teachers on the Achenbach Child Behavior Checklist. Correlation coefficients of .27 for four to five-year-olds and .35 for

six- to twelve-year-olds were calculated between the parents' and teachers' Total Problem Scores. Parents tended to report more problems than did teachers. The direction of parent-teacher differences was not related to age or sex. For six- to twelve-year-olds, the higher agreement was for externalizing problems. The teachers generally scored the students higher on problems with peers and academic functioning, on strange behavior, and on acting too young. The authors concluded that teachers make a unique contribution when problems concern academic or social functioning.

A meta-analysis of 119 published studies using 269 samples was conducted by Achenbach, McConaughy, and Howell (1987) to determine the degree of consistency between different informants' ratings of subjects from 1 1/2 to 19 years of age. After Z transformation, each Pearson r was weighted by the degrees of freedom in the sample to account for different sample sizes. The mean r 's between all types of informants were statistically significant. The weighted mean Pearson r for ratings by informants in similar roles was .60 while the weighted mean r for ratings by informants in differing roles was .28. The weighted mean r between the subjects themselves and others informants was .22. The mean r for ratings of children aged 6 to 11 years old was significantly higher than for adolescents. Significantly more consistency was observed for undercontrolled than for overcontrolled types of problems. The authors suggested

6- to 11-year-olds and undercontrolled children may be easier to judge or may be more consistent in their behavior across situations. They concluded each type of informant contributes a considerable amount of variance which is not accounted for by other types.

Kaufman, Swan, and Wood (1980) conducted a study to determine the level of agreement between ratings by parents, teachers, educational diagnosticians, and psychologists. They also compared the consistency of agreement among the four raters for black and white children. Each of the 194 students had been identified as emotionally disturbed and were rated on the Referral Form Checklist by a different set of the four types of raters. Kendall's coefficient of concordance (W) was computed separately for each child and χ^2 analysis was performed to determine if there were significant differences between the groups of 129 white children and 65 black children. Results of the χ^2 analysis were not statistically significant. Seventy-two percent of the concordance coefficients were significant for the white children and 48% were significant for the black children. Teachers consistently perceived more problems than parents did while psychoeducational evaluators perceived fewer problems than did parents or teachers. The authors suggested that the differences may be the result of situational variables, the amount of contact, and differences in adults' tolerance and interpretation of behavior. They concurred with Achenbach et al. (1987) that each rater makes a unique contribution.

Summary

This literature review demonstrates the degree of difficulty schools face in identifying students who are seriously emotionally disturbed and in distinguishing them from students who are socially maladjusted. It supports the need for further research in this area and substantiates the use of empirically based assessment.

CHAPTER III

METHODOLOGY

Introduction

The primary purpose of this study was to determine whether there were significant differences between the ratings of seriously emotionally disturbed and socially maladjusted male adolescents on the Child Behavior Checklist (CBC), the Teacher's Report Form (TRF), and the Youth Self-Report (YSR). This chapter contains descriptions of the sample, instrumentation, procedures, and data analysis.

Sample

The study was conducted using two intact groups of students enrolled in a midwestern metropolitan public school system. One group consisted of 49 students enrolled in public middle school programs for the seriously emotionally disturbed. The second group consisted of 34 public middle school socially maladjusted students enrolled in an alternative education program for students with behavior problems.

The 49 males identified as seriously emotionally disturbed had been referred for special education placement by school personnel. Results of psychological evaluations and documentation of school-related problems were presented to a district placement team which determined eligibility for placement in the seriously emotionally disturbed program in accordance with P. L. 94-142 criteria. There was a total of seven classes for the seriously emotionally disturbed students located in three public middle schools. There were 17 seriously emotionally disturbed students in custody of the Oklahoma Department of Human Services who were living in group homes in Tulsa.

The 34 socially maladjusted male students were enrolled in The Learning Center, an alternative educational program for students with persistent behavior problems. Students were referred by personnel from their home schools. Psychoeducational evaluations were conducted prior to placement. A district committee consisting of The Learning Center principal, a school psychologist, a school nurse, and the director of middle schools determined if placement in the program was appropriate. Students identified as educable mentally handicapped or seriously emotionally disturbed were not accepted. The students attend classes at The Learning Center for half a day. The remainder of the day is spent at their respective public school in regular classes.

Scales derived from the test instruments vary according to the gender of the adolescent. There were only six females

enrolled in the two programs (2 seriously emotionally disturbed and 4 socially maladjusted). Therefore, analysis of the scales unique to females was not possible and they were eliminated from the study.

Written permission to participate was requested for each of the 83 male students. A parental consent form (Appendix A) was sent home with each student. Parents or legal guardians were requested to return the consent form to their child's teacher. For those students who did not return the consent form to school, forms were mailed to their homes with a stamped, addressed enveloped. This procedure yielded an overall return rate of 87%.

Parental consent was obtained for 96% (47) of the 49 seriously emotionally disturbed male students. The racial composition of this group was 81% white, 15% black, and 4% American Indian. For the 34 socially maladjusted male students, permission to participate was obtained for 76% (26). In this group, 85% were white and 15% were black. Ages of the subjects in both groups ranged from 12 to 16 years. The mean age was 13.6 years.

Instrumentation

The Child Behavior Checklist (CBC), the Teacher's Report Form (TRF), and the Youth Self-Report (YSR) developed by Achenbach and Edelbrock (1983, 1986a, 1987) were used in this study. Achenbach and McConaughy (1987) state that "one reason for developing empirically based assessment was the

lack of a satisfactory diagnostic system for children's behavioral/emotional problems" (p. 152). They assert that the CBC may be useful in determining eligibility for seriously emotionally disturbed placement under P. L. 94-142.

Child Behavior Checklist

Martin (1988) states the CBC "is the most sophisticated parent rating questionnaire now available for assessment of pathology and social competence in children" (p. 199). The CBC (Achenbach & Edelbrock, 1983) is a parent rating scale for use with children from 4 through 16 years of age. The first section of the instrument assesses three areas of the child's social competence: Activity Scale, Social Scale, and School Scale. The behavior problem section includes 118 items with a three-step response scale (2 = very true or often true, 1 = somewhat or sometimes true, 0 = not true). According to the manual, most parents with at least a fifth grade reading level can complete the CBC in an average of 15-17 minutes. The behavior problem section yields scores for two major syndromes (Internalizing and Externalizing). Narrow-band syndromes vary with the age and sex of the child.

Narrow-band syndromes were derived through principal components (factor) analyses using varimax rotation. The broad-band groupings were derived through second-order principal components analyses. The data were obtained from CBC's completed on 2,300 clinically-referred children at 42 mental health services. The sample included 250 boys and 250

girls aged 4 to 5, 450 boys and 450 girls aged 6 to 11, and 450 boys and 450 girls aged 12 to 16. The average socioeconomic status (SES) of the sample was 4.1 as scored on Hollingshead's (1957) seven-step occupation scale. The racial distribution of the sample was 81.2% white, 17.1% black, and 1.8% other (Achenbach & Edelbrock, 1983).

The CBC for twelve- to sixteen-year-olds, which was used in this study, yields 13 scores for boys. The scores are measures of Social Competence, Somatic Complaints, Schizoid, Uncommunicative, Immature, Obsessive-Compulsive, Hostile Withdrawal, Delinquent, Aggressive, Hyperactive, Total Problems, Internalizing, and Externalizing (see Appendix C).

Normative data were obtained on randomly selected children who had not received mental health services in the previous year. Samples of 50 of each sex at each age with SES and race distributions like the clinical sample were selected. The normative data were used to derive standard-scores for the factor-based behavior problem scales. Cumulative frequency distributions and percentiles were computed for each age/sex sample. Normalized T scores were assigned to raw scores at each percentile (Achenbach & Edelbrock, 1983).

The authors assessed test-retest reliability and inter-rater agreement. To assess test-retest reliabilities for individual items, scores were obtained from mothers of nonreferred children. For individual items, the overall correlation was .952 for the behavior problems and .996 for

the social competence items. The coefficient for 3-month stability of individual items was .838 for behavior problems and .974 for social competence items. The median correlation for one-week test-retest reliability for scale scores, total problem scores, and competence scores was .89 (Achenbach & Edelbrock, 1983).

Mean test-retest reliability correlations for inpatients' scores over a 3-month period were .74 for parents' ratings and .73 for ratings by child care workers for behavior problems. For outpatients, correlations for parent ratings over a 6-month period were in the .60's for all sex/age groups. Mean correlations over an 18-month period ranged from .46 to .76 (Achenbach & Edelbrock, 1983).

Interparent agreement on individual items was .985 for behavior problems and .978 for social competence items. The median correlation between mothers' and fathers' ratings on scale scores was .66.

As evidence of content validity, the CBC manual (Achenbach & Edelbrock, 1983) reports that all but two behavior problem items were scored significantly higher ($p < .005$) for a clinical sample than for a nonreferred sample. There were no significant differences on Item 2, Allergy or Item 4, Asthma. The clinical sample scored significantly lower ($p < .01$) on all social competence items than did the nonreferred sample.

Achenbach and Edelbrock (1983) demonstrated construct validity in the findings of a study of 51 clinically-referred

children in which each child was rated on the CBC, the Conners Parent Questionnaire, and the Quay-Peterson Revised Behavior Problem Checklist. The correlations between the total behavior problem score and the total scores on the other two tests ranged from .71 to .92. All but one of the correlations between the narrow-band scales were significant, ranging from .34 to .88.

As a measure of criterion-related validity, the authors (Achenbach & Edelbrock, 1983) compared the scores of demographically matched nonreferred children and children referred for outpatient mental health services. For all scores in all age/sex groups, the effect of clinical status was significant at $p < .001$. Variance in the total behavior problem score which was accounted for by the clinical status ranged from 34% in 4- to 5-year-old girls to 49% for 6- to 11-year-old boys (Achenbach & Edelbrock, 1983).

Teacher's Report Form

The Teacher's Report Form (TRF) (Achenbach & Edelbrock, 1986a) was based on the CBC and designed to obtain reports of pupil problems and adaptive functioning. There are separate scoring profiles for each sex for 6- to 11-year-olds and 12- to 16-year-olds. The first section of the checklist assesses school performance and four aspects of adaptive functioning. The second section includes 118 behavior problem items which are scored on a three-point response scale identical to that used in the CBC. As in the CBC, the

behavior problem section yields scores for the broad-band groupings of Internalizing and Externalizing. Again, narrow-band syndromes vary with the age and sex of the pupils.

Narrow-band syndromes were derived through principal components (factor) analysis with varimax rotation. Broad-band groupings were derived through second-order principal components analyses. The data were obtained from TRF's completed on 1700 pupils referred to special school services or mental health services for behavioral and social-emotional problems. The sample included 450 boys and 400 girls aged 6 to 11 and 450 boys and 400 girls aged 12 to 16. The average socioeconomic status was 4.2 as scored on Hollingshead's (1975) nine-step scale of occupations. The racial distribution of the sample was 76% white, 24% black, and 2% other.

The TRF for twelve- to sixteen-year-olds, which was used in this study, yields 12 scores for boys. The measures for boys include Adaptive Functioning, Social Withdrawal, Anxious, Unpopular, Obsessive-Compulsive, Immature, Self-Destructive, Inattentive, Aggressive, Total Problems, Internalizing, and Externalizing (see Appendix D).

Normative data were obtained from 665 teachers of grades one through ten in public and parochial schools. Fifty-one TRF's for each sex at each age from 6 through 16 years ($N = 1100$) were selected. As in the CBC, cumulative frequency distributions and percentiles were obtained on each

scale and normalized T scores were assigned (Achenbach & Edelbrock, 1986).

TRF ratings of 50 boys in special classes were used in a study of one-week test-retest reliability. The median Pearson correlation was .90. Fifteen-day test-retest reliability for a group of 117 girls and boys in special classes for disturbed pupils was .84. Stability correlations for a group of 21 boys were .74 for a 2-month interval and .68 for a 4-month interval.

Inter-rater agreement was assessed by having teachers and teacher aides rate 660 pupils in special classes. The correlations which ranged from .30 to .84 were all significant at $p < .05$. A median correlation of .57 was obtained (Achenbach & Edelbrock, 1986a).

To assess content validity, Achenbach and Edelbrock (1986) compared item scores of 1100 referred students with 1100 nonreferred pupils. Referred pupils scored significantly higher ($p < .005$) on all but one of the behavior problem items. They scored significantly lower ($p < .001$) on all adaptive functioning items than did nonreferred students (Achenbach & Edelbrock, 1986a).

As evidence of construct validity, Achenbach and Edelbrock (1986a) report findings of a study in which 104 behaviorally disordered boys were rated on the TRF and the Conners Revised Teacher Rating Scale. Correlations ranged from .62 to .90.

Referral for services for behavioral/emotional problems was used as a criterion to assess criterion-related validity. Samples of 1100 nonreferred and 1100 referred students aged 6 to 16 were demographically matched. For all sex and age groups, referred pupils scored significantly lower on adaptive functioning and higher on all problem scales. Referral status generally accounted for medium to large (13 to \geq 26%) percent of variance with the effects of SES, age, and race partialled out (Achenbach & Edelbrock, 1986a).

Youth Self-Report Form

The Youth Self-Report (YSR) was also based on the CBC and contains many of the same questions as the CBC and the TRF. It is designed for 11- to 18-year-olds with a mental age of at least ten years and fifth grade reading skills. Youths are asked to rate their own competencies and problems. The form can usually be completed in about 15 minutes. The 119 problem items use the same three-point response scale as the CBC and the TRF (Achenbach & Edelbrock, 1987).

As in the CBC and the TRF, the scales formed two broad-band groupings, Internalizing and Externalizing, for both sexes. The YSR yields 12 scores for boys. The measures are Competence, Depressed, Somatic Complaints, Unpopular, Thought Disorder, Aggressive, Delinquent, Self-Destructive/Identity Problems, Total Problems, Internalizing, and Externalizing (see Appendix E).

To derive the narrow-band syndromes, principal component (factor) analyses using varimax rotation were performed on YSR's completed by 486 boys and 441 girls who had been referred to 25 mental health services. The services included university child psychiatric clinics, community mental health centers, private practices, and inpatient services. Broad-band groupings were derived through second-order principal component analyses. The average SES of the sample was 4.7 as scored on Hollingshead's (1975) nine-step parental occupation scale. Racial distribution of the scale was 69% white, 22% black, 4% other, and 6% unknown (Achenbach & Edelbrock, 1987).

Three hundred forty-four boys and 342 girls were randomly selected to complete YSR's to obtain normative data. The adolescents selected had not received any mental health services in the previous year. As with the CBC and the TRF, cumulative frequency distributions and percentiles were computed on each scale for each sex. Normalized T scores were then assigned to raw scores at each percentile (Achenbach & Edelbrock, 1987).

Fifty adolescents from the normative group participated in a study of test-retest reliability. The median one-week test-retest correlation was .77 for 11- to 14-year-olds and .89 for 15- to 18-year-olds. Eight-month stability was assessed using a sample of 102 nonreferred 12- to 14-year-olds. A coefficient of .67 was obtained (Achenbach & Edelbrock, 1987).

Content validity was measured by comparing the item scores of 715 referred and 779 nonreferred adolescents matched for race and SES. The referred youths scored significantly ($p < .01$) higher on 89 of the 102 problem items and lower on 10 of the 17 competence items. The activities and total competence scales were not found to be valid indices of the need for mental health services (Achenbach & Edelbrock, 1987).

As a measure of criterion-related validity, Achenbach and Edelbrock (1987) analyzed YSR's of 715 referred and 779 nonreferred adolescents to assess the effects of referral status, age, SES, and race. Referred adolescents scored significantly ($p < .01$) higher on all problem scales and lower on the social scale and school performance. Variance in the total behavior problem score accounted for by clinical status was 11% for boys and 14% for girls. The total problem score for boys showed no significant effect for age or SES. For girls, age accounted for less than 1% of the variance and SES accounted for 1% of the variance (Achenbach & Edelbrock, 1987).

Procedures

Permission to conduct the study was obtained from a metropolitan school district research committee. The researcher then met with the principals of the three middle schools with seriously emotionally disturbed classes and the principal of The Learning Center to explain the study and to

request participation of the classes. After securing cooperation from each of the principals, the author met at each building with the teachers who would be involved to elicit their willingness to participate and to provide them with information regarding the responsibilities of participants. Topics discussed during this meeting included the purpose of the study, the parent consent form, instruments to be used, and data collection procedures.

Teachers sent the parent consent forms home with the students and collected those that were returned. A follow-up mailing was done as previously described. Teachers were asked to complete the TRF for each student in their first hour class for whom parental consent had been obtained. They were asked to follow the instructions printed on the TRF. Forms were completed for 100% (73) of the participating students.

The author visited each classroom to administer the YSR at a time arranged with the individual teachers. The students were told the author wished to learn how they viewed their interests, feelings, and behavior. They were assured of the confidentiality of their responses. Students who did not have parental permission to participate were provided with alternative activities by their teachers. Instructions on the YSR were read to the students as a group. Students then completed the form at their own pace. The author, teachers, and teacher aides individually assisted students who had difficulty reading the questions. Approximately one

hour was spent in each classroom for the initial testing session. Return visits were made as needed so that students who had been absent could complete the YSR on an individual basis with the author. Candy bars were given to all students in the classes as a token of appreciation for their cooperation. Forms were completed for 100% (73) of the participating students.

Parents or legal guardians who agreed to participate were asked to complete the CBC. The form, along with a letter of instructions (Appendix B), and a stamped, addressed envelope were mailed to parents or legal guardians of each of the students not living in group homes. The author delivered forms for the 17 students residing in group homes to the head counselor at each home. A return deadline of one week was requested. Those who did not return the completed form were contacted by phone if phone numbers were available. Follow-up mailings were made to those parents who had misplaced the form or who could not be contacted by phone. This procedure yielded a return rate of 80.8% (38) for the parents of the seriously emotionally disturbed students, 92.3% (24) for the parents of the socially maladjusted students, and 84.9% (62) for the total group.

Data Analysis

Discriminant function analysis was used to determine the extent to which scores on the CBC, TRF, and YSR discriminated between members of the two groups. Discriminant function

analysis allows for examination of the differences between two or more groups on the basis of their scores on two or more variables simultaneously.

To reduce the number of variables per subject, three separate discriminant function analyses were utilized as follows: (1) investigation of hypothesis one, the predictor variables consisted of Social Competence, Somatic Complaints, Schizoid, Delinquent, Aggressive, Uncommunicative, Immature, Obsessive-Compulsive, Hostile Withdrawal, and Hyperactive (Appendix C); (2) investigation of hypothesis two, the predictor variables consisted of Adaptive Functioning, Social Withdrawal, Anxious, Unpopular, Obsessive-Compulsive, Immature, Self-Destructive, Inattentive, and Aggressive (Appendix D); (3) investigation of hypothesis three, the predictor variables consisted of Competence, Depressed, Somatic Complaints, Unpopular, Thought Disorder, Aggressive, Delinquent, and Self-Destructive/Identity Problems (Appendix E). The Internalizing, Externalizing, and Total Problems variables from the CBC, TRF, and YSR were not entered into the equation because they were derived from and therefore not independent of the variables listed above. Post-hoc univariate F-tests were utilized to assess whether there were significant differences between the two groups on the Internalizing and Externalizing variables.

Of the 73 males included in the analysis, 11 had missing data from the CBC so the first discriminant function analysis was based on 62 cases. No cases were dropped from the second

or third discriminant function analyses due to missing data. Tabachnick and Fidell (1983) recommend that the sample size of the smallest group should exceed the number of predictor variables. They also indicate that unequal sample sizes present no special problems and that discriminant function analysis is considered to be robust to violations of assumptions.

An ancillary analysis was conducted to assess agreement between raters on scales the three forms have in common. The Wilcoxon Signed-Ranks test was used to analyze the following scores: TRF and CBC Obsessive-Compulsive, TRF and CBC Immature, YSR and CBC Delinquent, YSR and CBC Somatic Complaints, and YSR and TRF Unpopular. The Friedman Two-Way Analysis of Variance by Ranks test was utilized to assess agreement between scores on the CBC, TRF, and YSR Aggressive, Internalizing, Externalizing, and Total Problem scales and was followed with Nemenyi's specific comparison test. All computations were completed by using the SYSTAT program. The significance for all statistical tests was set at an alpha level of .05.

Summary

An intact group of socially maladjusted male adolescents and an intact group of seriously emotionally disturbed male adolescents from a midwestern metropolitan public school system were assessed on the Child Behavior Checklist, the Teacher's Report Form, and the Youth Self-Report.

Discriminant function analyses followed by univariate F-tests were utilized to test the three hypotheses concerning discriminable differences between the two groups. Supplementary tests were performed to assess inter-rater agreement.

CHAPTER IV

RESULTS

Introduction

Results of the statistical analysis employed in investigation of the three hypotheses are presented in this chapter. This study focused on the use of the Child Behavior Checklist (CBC), Teacher's Report Form (TRF), and Youth Self-Report (YSR) to discriminate between seriously emotionally disturbed and socially maladjusted adolescents. The results are reported in three sections due to the utilization of three separate discriminant function analyses.

Description of the Results

Section 1

A discriminant function analysis was used to analyze the scores obtained on ten scales of the CBC. The dependent variable was group membership. Post-hoc univariate F-tests were used to analyze scores on the broad-band groupings of Internalizing and Externalizing. Descriptive statistics (means and standard deviations) calculated using T scores derived from CBC norms are presented by group in Table 1.

Table 1

Descriptive Statistics for CBC Scores

Scale		Socially Maladjusted N = 24	Seriously Emotionally Disturbed N = 38	Combined N = 62
Social Competence	\bar{X}	27.58	25.21	26.13
	SD	8.59	6.80	7.57
Somatic Complaints	\bar{X}	58.75	67.79	64.29
	SD	5.23	8.26	8.45
Schizoid	\bar{X}	58.42	65.24	62.60
	SD	4.39	7.88	7.49
Delinquent	\bar{X}	66.33	72.18	69.92
	SD	6.63	7.88	7.91
Aggressive	\bar{X}	64.63	74.53	70.69
	SD	7.86	11.99	11.58
Uncommunicative	\bar{X}	60.42	69.58	66.03
	SD	5.76	10.04	9.69
Immature	\bar{X}	65.88	72.61	70.00
	SD	9.18	10.11	10.23
Obsessive-Compulsive	\bar{X}	59.25	69.42	65.48
	SD	7.09	8.74	9.50
Hostile Withdrawal	\bar{X}	65.92	74.90	71.42
	SD	8.64	9.19	9.94
Hyperactive	\bar{X}	65.58	76.58	72.32
	SD	11.48	10.76	12.21
Internalizing	\bar{X}	59.00	69.47	65.42
	SD	7.00	8.04	9.18
Externalizing	\bar{X}	64.58	72.32	69.32
	SD	7.31	7.89	8.50
Total Problems	\bar{X}	62.25	74.42	69.71
	SD	8.02	9.64	10.79

Note. \bar{X} = Mean Score; SD = Standard Deviation.

The mean T scores and the percentiles associated with the mean scores for the two groups are plotted in Figure 1. A matrix showing the correlation between scores on each of the CBC scales was calculated and is presented in Table 2.

Hypothesis One: There is no significant discrimination between parents' ratings of seriously emotionally disturbed and socially maladjusted adolescents as measured by the scales of the CBC. This hypothesis is rejected. The canonical correlation of 0.594 (Wilks' Lambda $F = 0.647$, $p < .01$) indicates the discriminant function provides a moderately high degree of association between discriminant function scores and group membership. The canonical correlation squared indicates that 35% of the variance demonstrated between the groups is accounted for by group membership.

Based on this function, 75.8% of the students were correctly classified (see Table 3). Of the 62 students, 15 would be misclassified using this function. The function over-predicted seriously emotionally disturbed students as belonging to the socially maladjusted group.

Canonical loading of the 10 CBC scales are presented in Table 4. Social Competence did not contribute significantly ($p < 0.232$) to the discrimination between the groups. All other subtests discriminated significantly ($p < .01$) between the groups. Obsessive-Compulsive and Somatic Complaints made the greatest contribution to the function. The seriously emotionally disturbed group had a higher mean score on each of the predictor variables except for Social Competence.

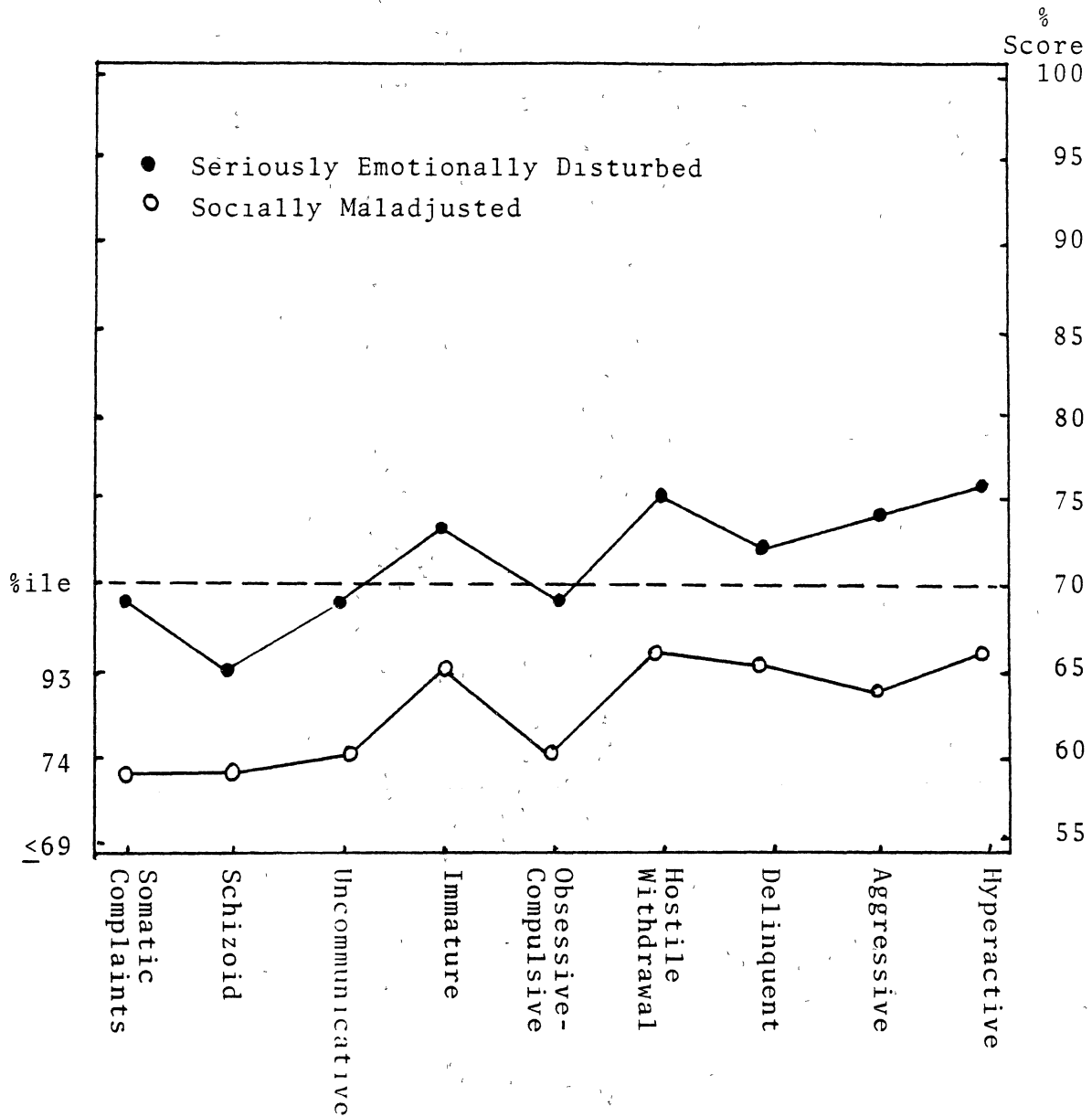


Figure 1. Mean scores for seriously emotionally disturbed and socially maladjusted groups on behavior problem scales of the Child Behavior Checklist.

Table 2

Correlation Matrix for CBC Scales

	SC	SMC	SZ	DL	AG	UC	IM	OC	HW	HY	IN	EX	TP
SC	1.000												
SMC	-0.321	1.000											
SZ	-0.154	0.580	1.000										
DL	-0.342	0.452	0.341	1.000									
AG	-0.342	0.590	0.381	0.657	1.000								
UC	-0.389	0.752	0.605	0.515	-0.595	1.000							
IM	-0.315	0.467	0.501	0.300	0.656	0.436	1.000						
OC	-0.269	0.698	0.598	0.478	0.702	0.677	0.570	1.000					
HW	-0.349	0.670	0.510	0.538	0.773	0.617	0.744	0.720	1.000				
HY	-0.458	0.619	0.396	0.636	0.768	0.536	0.626	0.620	0.733	1.000			
IN	-0.316	0.849	0.717	0.542	0.727	0.872	0.679	0.836	0.788	0.664	1.000		
EX	-0.419	0.604	0.391	0.817	0.937	0.609	0.628	0.676	0.777	0.844	0.735	1.000	
TP	-0.373	0.784	0.605	0.720	0.892	0.780	0.677	0.858	0.864	0.810	-0.911	0.917	1.000

Note: SC = Social Competence; SMC = Somatic Complaints; SZ = Schizoid; DL = Delinquent;
 AG = Aggressive; UC = Uncommunicative; IM = Immature; OC = Obsessive Compulsive; HW = Hostile
 Withdrawal; HY = Hyperactive; IN = Internalizing; EX = Externalizing; TP = Total Problem.

Table 3

Group Classification Using Parent Ratings

Actual Group	Predicted Group	
	SED	SM
SED	26 (68.4%)	12 (31.6%)
SM	3 (12.5%)	21 (87.5%)

Note. SED = Seriously Emotionally Disturbed; SM = Socially Maladjusted.

Table 4

Canonical Loadings of CBC Predictor Variables

CBC Scales	Loading	p
Social Competence	-0.211	0.232
Somatic Complaints	0.835	0.000
Schizoid	0.677	0.000
Delinquent	0.528	0.004
Aggressive	0.626	0.001
Uncommunicative	0.709	0.000
Immature	0.462	0.010
Obsessive-Compulsive	0.837	0.000
Hostile Withdrawal	0.670	0.000
Hyperactive	0.667	0.000

Note. Alpha level = .05.

Post-hoc univariate F-tests were utilized to determine whether there were significant differences between the groups on the Internalizing and Externalizing scales. The results are presented in Table 5 and indicate a significant difference ($p < .01$) between the two groups on these variables. Again, the seriously emotionally disturbed students scored higher on each variable.

Table 5

Univariate F-Test Results

CBC Scale	Source	SS	DF	MS	F	p
Internalizing	Between	1613.623	1	1613.623	27.493	0.000
	Error	3521.474	60	58.691		
Externalizing	Between	879.505	1	879.505	14.949	0.000
	Error	3530.044	60	58.834		

Note. Alpha level = .05.

Section 2

The T scores obtained on nine scales of the Teacher's Report Form (TRF) were analyzed using a discriminant function analysis. The T scores were derived from TRF norms. Table 6 provides descriptive statistics (means and standard deviations) for this data. Group membership was the

Table 6

Descriptive Statistics for TRF Scores

Scale		Socially Maladjusted N = 26	Seriously Emotionally Disturbed N = 47	Combined N = 73
Adaptive Functioning	\bar{X}	39.62	37.87	38.49
	SD	8.90	7.73	8.15
Social Withdrawal	\bar{X}	60.62	63.17	62.26
	SD	6.11	8.52	7.80
Anxious	\bar{X}	61.27	67.17	65.07
	SD	7.48	11.23	10.39
Unpopular	\bar{X}	64.65	66.62	65.92
	SD	9.67	11.24	10.68
Obsessive-Compulsive	\bar{X}	60.15	65.70	63.73
	SD	6.68	11.17	10.12
Immature	\bar{X}	63.58	67.32	65.99
	SD	8.68	9.25	9.17
Self-Destructive	\bar{X}	64.31	67.55	66.40
	SD	7.17	8.95	8.46
Inattentive	\bar{X}	61.50	60.21	60.67
	SD	8.60	6.68	7.39
Aggressive	\bar{X}	62.27	64.70	63.84
	SD	7.43	8.38	8.09
Internalizing	\bar{X}	60.04	64.62	62.99
	SD	10.56	11.58	11.37
Externalizing	\bar{X}	60.77	62.94	62.16
	SD	10.13	8.93	9.37
Total Problems	\bar{X}	61.62	66.28	64.62
	SD	10.97	10.14	10.61

Note. \bar{X} = Mean Score; SD = Standard Deviation.

dependent variable. Post-hoc univariate F-tests were used to analyze scores on the Internalizing and Externalizing scales. Figure 2 displays the mean T scores and the percentiles associated with the mean scores for the two groups on the TRF scales. A correlation matrix calculated between scores on the TRF scales is presented in Table 7.

Hypothesis Two: There is no significant discrimination between teachers' ratings of seriously emotionally disturbed and socially maladjusted adolescents as measured by the TRF. This hypothesis is rejected. The canonical correlation of 0.488 (Wilks' Lambda $F = 0.762$, $p < .05$) indicates there is a moderate degree of association between group membership and the discriminant function scores. The canonical correlation squared indicates that group membership accounts for 24% of the variance between the groups.

Table 8 reports the group classification based on this discriminant function. Based on this function, 73.9% of the students were correctly classified. Use of the function over-predicted seriously emotionally disturbed students as belonging to the socially maladjusted group.

Canonical loadings of the nine TRF scales used in the discriminant analysis are presented in Table 9. The Anxious and Obsessive-Compulsive scales made significant contributions to the discriminant function. The seriously emotionally disturbed group had a higher mean score on these two variables.

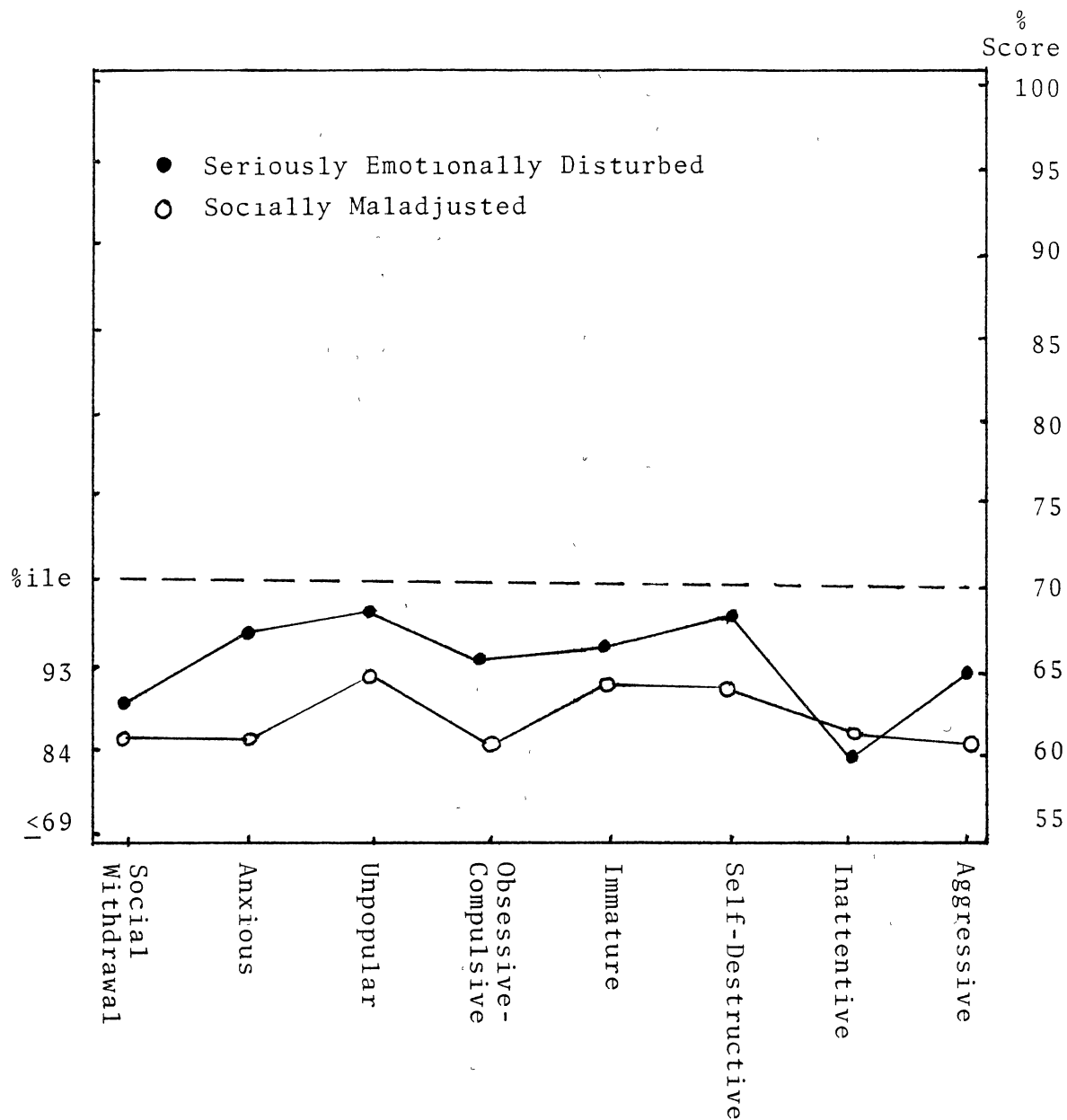


Figure 2. Mean scores for seriously emotionally disturbed and socially maladjusted groups on behavior problem scales of the Teacher's Report Form.

Table 7

Correlation Matrix for TRF Scales

	AF	SW	AN	UP	OC	IM	SD	IA	AG	IN	EX	TP
AF	1.000											
SW	-0.409	1.000										
AN	-0.316	0.722	1.000									
UP	-0.362	0.620	0.590	1.000								
OC	-0.553	0.697	0.734	0.589	1.000							
IM	-0.581	0.566	0.721	0.664	0.743	1.000						
SD	-0.617	0.535	0.493	0.501	0.663	0.647	1.000					
IA	-0.539	0.481	0.387	0.491	0.657	0.660	0.565	1.000				
AG	-0.673	0.434	0.425	0.395	0.547	0.578	0.701	0.650	1.000			
IN	-0.467	0.827	0.895	0.636	0.768	0.748	0.578	0.521	0.499	1.000		
EX	-0.749	0.492	0.465	0.495	0.594	0.651	0.723	0.726	0.913	0.584	1.000	
TP	-0.728	0.684	0.714	0.646	0.764	0.777	0.787	0.702	0.818	0.814	0.918	1.000

Note: AF = Adaptive Functioning; SW = Social Withdrawal; AN = Anxious; UP = Unpopular;
 OC = Obsessive-Compulsive; IM = Immature; SD = Self-Destructive; IA = Inattentive;
 AG = Aggressive; IN = Internalizing; EX = Externalizing; TP = Total Problem.

Table 8

Group Classification Using Teacher Ratings

Actual Group	Predicted Group	
	SED	SM
SED	32 (68.1%)	15 (31.9%)
SM	4 (15.4%)	22 (84.6%)

Note. SED = Seriously Emotionally Disturbed; SM = Socially Maladjusted.

Table 9

Canonical Loadings of TRF Predictor Variables

TRF Scale	Loading	p
Adaptive Functioning	-0.186	0.385
Social Withdrawal	0.286	0.182
Anxious	0.510	0.019
Unpopular	0.159	0.456
Obsessive-Compulsive	0.491	0.024
Immature	0.359	0.095
Self-Destructive	0.337	0.117
Inattentive	-0.151	0.480
Aggressive	0.262	0.221

Note. Alpha level = .05.

There was no significant difference between the two groups on the TRF Internalizing and Externalizing scales based on the results of the post-hoc univariate F-tests. Results of this analysis are presented in Table 10.

Table 10

Univariate F-Test Results

TRF Scale	Source	SS	DF	MS	F	p
Internalizing	Between	350.918	1	350.918	2.784	0.100
	Error	8950.068	71	126.057		
Externalizing	Between	78.604	1	78.604	0.895	0.347
	Error	6235.424	71	87.823		

Note. Alpha level = .05.

Section 3

A discriminant function analysis was utilized to analyze the T scores obtained on eight scales of the Youth Self-Report (YSR). The T scores were derived from YSR norms. The dependent variable was group membership. Students' T scores on the Internalizing and Externalizing scales of the YSR were analyzed with post-hoc univariate F-tests. Descriptive statistics (means and standard deviations) for this data are presented in Table 11. The mean T scores and

Table 11
Descriptive Statistics for YSR Scores

Scale		Socially Maladjusted N = 26	Seriously Emotionally Disturbed N = 47	Combined N = 73
Competence	\bar{X}	37.69	40.60	39.56
	SD	10.38	11.25	10.96
Depressed	\bar{X}	59.77	64.55	62.85
	SD	8.26	11.11	10.38
Somatic Complaints	\bar{X}	60.85	62.32	61.80
	SD	8.59	9.32	9.04
Unpopular	\bar{X}	59.39	66.34	63.86
	SD	7.18	9.90	9.58
Thought Disorder	\bar{X}	61.58	64.72	63.60
	SD	8.54	9.86	9.47
Aggressive	\bar{X}	59.85	64.49	62.84
	SD	5.80	11.10	9.77
Delinquent	\bar{X}	61.04	63.11	62.37
	SD	5.69	9.11	8.08
Self-Destructive/ Identity Problem	\bar{X}	59.54	64.28	62.59
	SD	8.15	9.43	9.23
Internalizing	\bar{X}	54.15	63.55	60.21
	SD	12.86	12.21	13.16
Externalizing	\bar{X}	57.46	61.00	59.74
	SD	10.56	11.33	11.12
Total Problems	\bar{X}	56.46	62.66	60.45
	SD	12.49	12.25	12.61

Note. \bar{X} = Mean Score; SD = Standard Deviation.

the percentiles associated with the mean scores for the two groups are plotted in Figure 3. A correlation matrix calculated between scores on the YSR scales is presented in Table 12.

Hypothesis Three: There is no significant discrimination between self-ratings of seriously emotionally disturbed and socially maladjusted adolescents as measured by the YSR. This hypothesis is rejected. The canonical correlation of 0.471 (Wilks' Lambda $F = 0.778$, $p < .05$) reflects a moderate degree of association between the discriminant function scores and group membership. The canonical correlation squared indicates 22% of the variance demonstrated between the two groups is accounted for by group membership.

This discriminant function correctly classified 71.2% of the students as presented in Table 13. Seriously emotionally disturbed students were over-predicted as belonging to the socially maladjusted group.

Canonical loadings for eight YSR scales are presented in Table 14. The Unpopular and Self-Destructive/Identity Problems scales made significant contributions to the discriminant function. The Depressed and Aggressive scales contributed moderately to the discrimination between the groups. The seriously emotionally disturbed group had a higher mean score on each of these predictor variables.

A follow-up analysis of the YSR Internalizing and Externalizing scales was conducted through the use of post-hoc univariate F-tests. The results are presented in

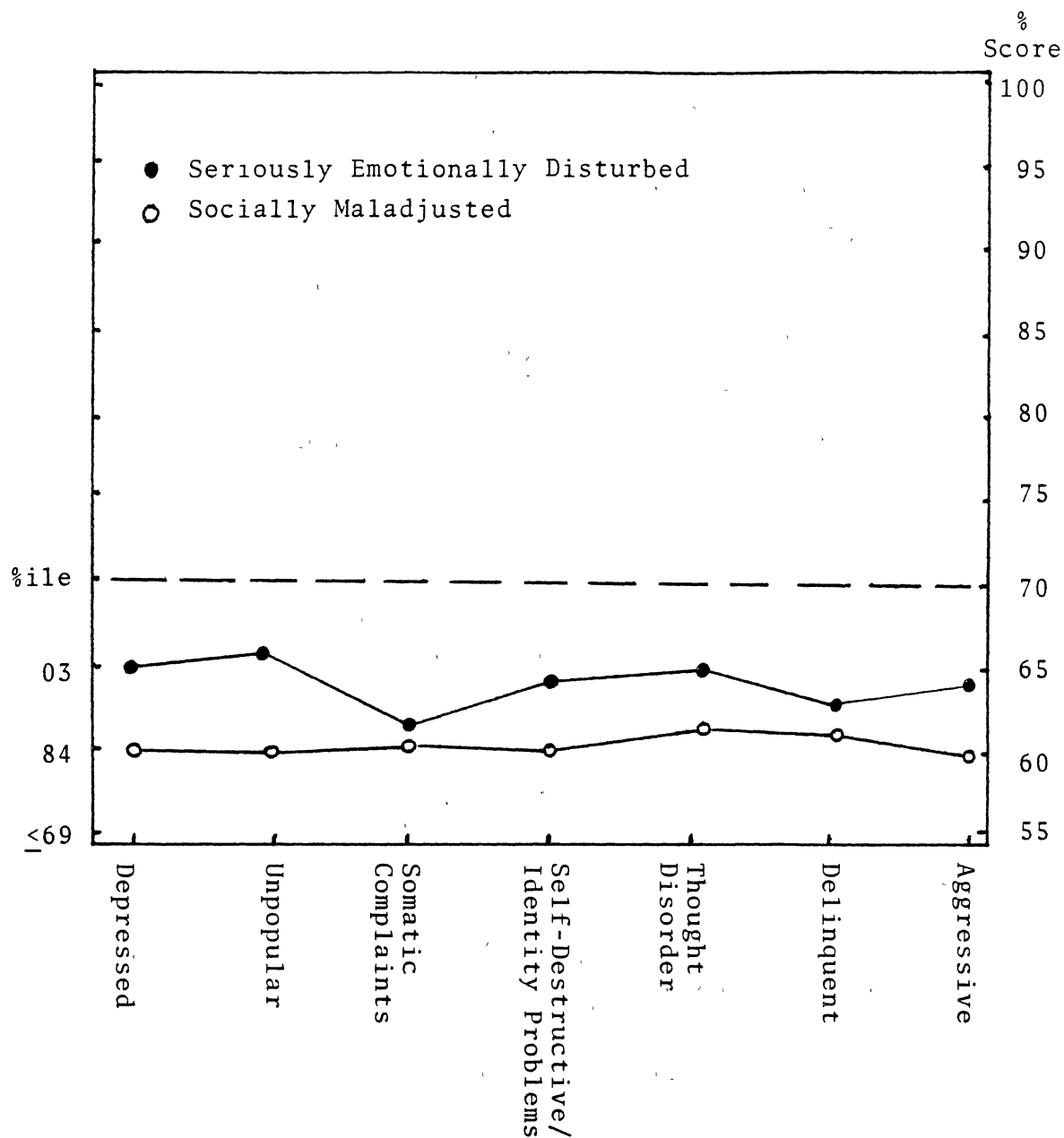


Figure 3. Mean scores for seriously emotionally disturbed and socially maladjusted groups on behavior problem scales of the Youth Self-Report.

Table 12

Correlation Matrix for YSR Scales

	CO	DE	SC	UP	TD	AG	DL	SI	IN	EX	TP
CO	1.000										
DE	0.038	1.000									
SC	0.345	0.617	1.000								
UP	0.119	0.854	0.678	1.000							
TD	0.209	0.669	0.613	0.620	1.000						
AG	0.237	0.605	0.727	0.691	0.441	1.000					
DL	0.020	0.528	0.501	0.540	0.342	0.670	1.000				
SI	0.049	0.696	0.540	0.789	0.537	0.480	0.465	1.000			
IN	0.159	0.841	0.688	0.904	0.710	0.664	0.541	0.742	1.000		
EX	0.156	0.533	0.635	0.601	0.447	0.819	0.856	0.478	0.680	1.000	
TP	0.107	0.747	0.730	0.769	0.722	0.670	0.640	0.646	0.888	0.762	1.000

Note: CO = Competence; DE = Depressed; SC = Somatic Complaints; UP = Unpopular;
 TD = Thought Disorder; AG = Aggressive; DL = Delinquent; SI Self-Destructive/
 Identity Problems; IN = Internalizing; EX = Externalizing; TP = Total Problem.

Table 13

Group Classification Using Student Ratings

Actual Group	Predicted Group	
	SED	SM
SED	31 (65.9%)	16 (34.1%)
SM	5 (19.2%)	21 (80.8%)

Note. SED = Seriously Emotionally Disturbed; SM = Socially Maladjusted.

Table 14

Canonical Loadings of YSR Predictor Variables

TRF Scale	Loading	p
Competence	-0.241	0.282
Depressed	-0.427	0.059
Somatic Complaints	-0.148	0.509
Unpopular	-0.700	0.002
Thought Disorder	-0.304	0.176
Aggressive	-0.441	0.051
Delinquent	-0.233	0.298
Self-Destructive/ Identify Problems	-0.479	0.035

Note. Alpha level = .05.

Table 15. The seriously emotionally disturbed group scored significantly higher on the Internalizing scale. There was no significant difference between the two groups on the Externalizing scale.

Table 15

Univariate F-Test Results

YSR Scale	Source	SS	DF	MS	F	p
Internalizing	Between	1478.916	1	1478.916	9.557	0.003
	Error	10987.002	71	154.747		
Externalizing	Between	209.593	1	209.593	1.712	0.195
	Error	8692.426	71	122.429		

Note. Alpha level = .05.

Ancillary Analyses

Secondary analyses were conducted to determine inter-rater agreement on scales the three forms have in common. The Wilcoxin Signed-Ranks test with an alpha level of .05 was used to analyze T scores on scales which appear on two forms as follows: TRF and CBC Obsessive-Compulsive, TRF and CBC Immature, YSR and CBC Delinquent, YSR and CBC Somatic Complaints, and YSR and TRF Unpopular. Parent ratings on the Immature scale were significantly higher ($p < .001$) than

those of teachers. On the Delinquent scale, parent ratings yielded significantly higher scores ($p < .000$) than the students' self-ratings. There were no significant differences on the other scales common to the two forms.

The Friedman Two-Way Analysis of Variance by Ranks test with an alpha level of .05 was utilized to assess agreement between raters on each of four scales which the CBC, TRF, and YSR have in common. Significant differences were found on each of the following scales: Aggressive ($p < .000$), Internalizing ($p < .019$), Externalizing ($p < .000$), and Total Problems ($p < .000$). Follow-up analyses for the Friedman tests were computed using Nemenyi's specific comparison test and an alpha level of .05. Parent ratings on the Aggressive, Externalizing, and Total Problem scales were significantly higher ($p < .05$) than ratings by either teachers or students. There was no significant difference between teacher and student ratings on these three scales. On the Internalizing scale, parent ratings were significantly higher ($p < .05$) than the students' ratings. There was no significant difference between parent and teacher ratings or teacher and student ratings on the Internalizing scale.

Summary

Results of the data analysis were presented in this chapter. The findings reflect significant discrimination between the seriously emotionally disturbed and the socially maladjusted groups on the CBC, TRF, and YSR instruments. All

but one of the CBC subtests contributed significantly to the difference between the two groups. The Anxious and Obsessive-Compulsive subtests were the primary contributors to the significant difference on the TRF. The primary contributors toward the significant difference on the YSR were the Unpopular and Self-Destructive/Identity Problems subtests.

On the CBC, the seriously emotionally disturbed group scored significantly higher on both the Internalizing and Externalizing scales. No significant difference was found between the two groups on the TRF Internalizing or Externalizing scales. The seriously emotionally disturbed group scored significantly higher on the YSR Internalizing scale. There was no significant difference between the two groups on the YSR Externalizing scale.

Results of the analysis of inter-rater agreement revealed significant differences on six of nine scales the CBC, TRF, and YSR forms have in common. In each instance, higher ratings by parents accounted for the significant differences.

CHAPTER V

SUMMARY AND CONCLUSIONS

Summary of the Investigation

School personnel across the nation are confronted with the difficult and confusing task of identifying students who are eligible for services under the "seriously emotionally disturbed" category of P. L. 94-142. A particular area of controversy involves the required differentiation between the seriously emotionally disturbed and the socially maladjusted. This study focused on the use of the Child Behavior Checklist (CBC), the Teacher's Report Form (TRF), and the Youth Self-Report (YSR) to determine whether there were significant differences between seriously emotionally disturbed and socially maladjusted male adolescents. This chapter includes a summary of the research study, limitations, conclusions, and recommendations for future research.

A review of literature reflected considerable disagreement in the field on how the terms "seriously emotionally disturbed" and "socially maladjusted" should be defined and on what terminology should be used. Criticism of the use of current classification systems with children was

reviewed. It has been suggested that use of empirical classification systems based on factor analysis studies using behavior ratings scales should be more useful (Mash & Terdal, 1988; Stein & Bogin, 1978; Thompson, 1986; Wahler & Dumas, 1987).

Factor analysis studies have consistently identified two broad dimensions of problem behaviors in children. The Internalizing dimension usually involves phobias, somatic complaints, sadness, depression, anxiety, passivity, and social withdrawal. Behaviors typical of the Externalizing dimension include conduct problems of aggression, rebellion, disobedience, delinquency, temper tantrums, and overactivity.

This study was conducted in an effort to increase our knowledge of the behavior patterns of seriously emotionally disturbed and socially maladjusted male adolescents and to determine whether there were significant differences between the two groups. Seventy-three male adolescents who were enrolled in a midwestern metropolitan public school participated in the study. One group was comprised of 47 male middle school students enrolled in classes for the seriously emotionally disturbed. The second group consisted of 26 socially maladjusted males enrolled in an alternative education program for middle school students with behavior problems. Discriminant function analyses were utilized to analyze scores of the two groups on the CBC, the TRF, and the YSR. These behavior rating scales were based on the Internalizing/Externalizing conceptual framework derived from

factor analysis (Achenbach & Edelbrock, 1983, 1986, 1987). Group membership was the dependent variable. Significant differences between the two groups were obtained on each of the three instruments.

Limitations

Conclusions reached from this study have limited generalizability. The sample may not be representative of populations from other school districts as intact groups were utilized and definitions of serious emotional disturbance and social maladjustment vary from district to district. This study was limited to males only, aged 12 to 15. There were not enough girls enrolled in the programs to allow for analysis of their scores. It is possible that different results may have been obtained had girls been included.

It should be noted that each instrument was normed on a population of referred and nonreferred youth. The present study focused on differentiating between two groups of students who would have been classified as "referred." The instruments may not be sensitive to differences between subgroups of students with serious problems.

The study is further limited by the relatively small sample size in relation to the number of variables. The sample size was necessarily limited by the number of students who were enrolled in the programs under consideration. Although three separate discriminant analyses were utilized

to reduce the number of variables per subject, the results should be interpreted with caution.

Summary of Findings and Conclusions

The findings of this study indicated that there are significant differences between the scores of socially maladjusted and seriously emotionally disturbed male adolescents on the CBC, the TRF, and the YSR. Three discriminant functions were calculated as described in Chapter III. Each discriminant function significantly differentiated between the two groups.

Ten CBC scales were included in the first discriminant analysis. Parent ratings did not reflect significant differences between the two groups on the Social Competence scale. The Somatic Complaints, Schizoid, Delinquent, Aggressive, Uncommunicative, Immature, Obsessive-Compulsive, Hostile Withdrawal, and Hyperactive scales were found to significantly contribute to the discriminant function. Parents of seriously emotionally disturbed students rated their children significantly higher on each of these nine scales than did parents of socially maladjusted students. As these results would suggest, parents of seriously emotionally disturbed students also rated their children as displaying significantly higher levels of Internalizing and Externalizing behavior problems than the parents of socially maladjusted students.

Only two TRF scales made significant contributions to the successful discrimination of the groups. Teacher ratings indicate the seriously emotionally disturbed students exhibit significantly more Anxious and Obsessive-Compulsive behaviors than the socially maladjusted students. Teacher ratings did not result in significant differences between the two groups on the Internalizing or Externalizing dimensions.

Eight YSR scales were included in the third discriminant function analysis. The seriously emotionally disturbed students described themselves as being significantly more Unpopular and having significantly more Self-Destructive/Identity Problems than did the socially maladjusted students. The remaining scales did not make significant contributions to the discriminant function although the Depressed and Aggressive scales did make moderate contributions. The Internalizing score was significantly higher for the seriously emotionally disturbed students.

Reflection upon these findings suggest that parents, teachers, and the students themselves agree the seriously emotionally disturbed students have a significantly higher level of problem behavior than the socially maladjusted students. They differ, however, in their perceptions of what types of behavior distinguish between the two groups. Parents of seriously emotionally disturbed students view their children as displaying a more severe level of problems across a broad range of behavior patterns than do parents of socially maladjusted students. Secondary analyses also

reveal that on six of nine scales common to the rating forms, parent ratings were significantly higher on problem behaviors than ratings by teachers or students. Only two TRF scales and two YSR scales successfully differentiated between the two groups.

A possible explanation for the greater number of differences observed by parents than teachers is that parents may have an opportunity to observe the students in a greater variety of situations than do the teachers. Parents also interact with their children on many different levels. The teachers of both groups work exclusively with students who have behavioral or emotional problems and have little opportunity to observe their students in relation to regular education students. Over time this likely affects their perception of normal behavior and thus could have had an effect on their ratings of the students.

Based on the literature, one might expect the seriously emotionally disturbed students to score higher on the Internalizing scale and the socially maladjusted students to score higher on the Externalizing scale. The findings of this study were not consistent with such a conclusion. On each instrument, the seriously emotionally disturbed students had numerically higher scores on both the Internalizing and Externalizing scales. They were rated significantly higher by parents on the CBC Internalizing and Externalizing scales and by themselves on the YSR Internalizing scale. There were no significant differences between the two groups on these scales on the TRF.

Achenbach and Edelbrock (1983) found that the Internalizing and Externalizing groupings are not mutually exclusive but, in fact, have a positive association. They indicate

. . . there is a general dimension among behavior problems that resembles the general (g) dimension among ability tests: Individuals who score very high in one area tend to be above average in other areas as well, whereas individuals who score very low in one area tend to be low in other areas (p. 33).

Their findings and the results of this study call into question the idea that the Internalizing-Externalizing dichotomy is of practical utility in the identification of seriously emotionally disturbed students.

The three discriminant functions which were derived in this study successfully classified 71-76% of the students. The seriously emotionally disturbed students were most often misclassified as belonging to the socially maladjusted group. It is possible that these misclassified students could be considered to be both socially maladjusted and seriously emotionally disturbed as is allowed for in the P. L. 94-142 definition. Considering the possible negative effects of labeling a child "seriously emotionally disturbed," use of these functions which would not tend to identify these students might be beneficial. However, this

would also mean that these students would be denied access to special educational services under P. L. 94-142.

While this study resulted in statistically significant differences between the two groups, the practical significance of the findings must also be considered. Generally, the seriously emotionally disturbed students were found to have a more severe level of behavior problems rather than a distinctly different type of behavior problems. This would suggest that the seriously emotionally disturbed have a greater need for special services, but not necessarily for a different type of educational services than the socially maladjusted. If the two groups had demonstrated significantly different types of behavior, then separation for instructional purposes might be considered appropriate. However, when one considers the results of this study and the fact that the goal of special education services is to assist the students in developing the skills to function successfully in an educational environment, separation of the two groups does not appear to have a valid basis.

Recommendations for Future Research

The following are recommendations for further research:

1. This study was limited by the relatively small number of students available for participation in the study. Replication of the study with a larger sample might provide more conclusive results.

2. Replication of the study using a sample which includes girls would provide important information.

3. Replication of the study using seriously emotionally disturbed students who are mainstreamed might be beneficial. This would permit the researcher to have regular education teachers rate the students and allow for comparison with ratings by special education teachers.

4. Replication of the study with a regular education comparison group would provide useful information.

5. A long-term study in which the students' behavior is rated upon entry into a special program and again a year later could be of value. It would be of interest to determine whether the differences between the groups widen after the seriously emotionally disturbed students have been removed from the regular education program or if the differences narrow after services have been provided.

Summation

The results of this study suggest that there are significant discriminations between seriously emotionally disturbed and socially maladjusted male adolescents. Further investigations are needed to determine whether the differences are substantial enough to warrant the exclusion of socially maladjusted students from services under P. L. 94-142. Investigations are needed which will assist educators in providing programs that will promote the emotional and social well-being of all students.

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APPENDIXES

APPENDIX A

PARENT CONSENT FORM

Dear Parent(s):

I am a school psychologist for the Tulsa Public Schools. I am conducting a research study using a behavior rating scale with middle school students. Each student in your child's class is being asked to participate.

For the study, a teacher and parent will be asked to complete a form to rate each student's behavior. Each student will be asked to rate his own behavior. It only takes 15-20 minutes to complete the forms. The students will complete their forms at school. Parent forms will be sent home.

I am asking for your help. I would like your permission for your child to participate. I would need for you to do two things:

1. Sign and return the parent permission form to your child's teacher.
2. Complete the parent rating form (Child Behavior Checklist).

All scores will be confidential. You may see your child's scores when the study is complete. If you have any questions or concerns, you may call me at 745-6416. Thank you for your help.

Sincerely,

Karen S. Fritz

Parent Permission Form

I give permission for _____ to
(Child's Name)

participate in this study. I am willing to complete the
Child Behavior Checklist.

(Date)

(Parent/Legal Guardian Signature)

APPENDIX B

INSTRUCTIONS TO PARENTS

Dear Parent(s):

Thank you for agreeing to participate in my research study. The students have been completing their forms at school. It has been a pleasure to work with them.

As I told you on the permission form, I need for you to complete a parent rating form. The Child Behavior Checklist is enclosed. It should take 15-20 minutes to complete.

Directions

Page 1. For page one, fill in the blanks at the top. Then list your child's activities as requested. Check the box which shows how much time your child spends in the activity and how well (s)he does compared to other children the same age.

Page 2. Read the questions and check the correct box. Explain your answer if needed.

Pages 3 & 4. For each item, describe your child's behavior now or within the last 6 months. Circle 0 if the statement is not true. Circle 1 if the statement is somewhat or sometimes true. Circle 2 if the statement is often or very true.

Please call me at 745-6416 if you have any questions. Mail the form back to me in the enclosed envelope. Please try to return the form within a week. Your help is truly appreciated. I will be happy to share the results with you when the study is complete.

Thank you,

Karen S. Fritz
School Psychologist
Tulsa Public Schools

APPENDIX C

SYNDROMES OF THE CHILD BEHAVIOR
CHECKLIST FOR BOYS AGED 12-16

CBC SYNDROMES FOR BOYS AGED 12-16

(Achenbach, 1982b)

Internalizing Syndromes

Somatic Complaints
Schizoid
Uncommunicative
Immature
Obsessive-Compulsive

Externalizing Syndromes

Hyperactive
Aggressive
Delinquent

Other (Mixed) Syndromes

Hostile Withdrawal

CBC SYNDROMES WITH SAMPLE ITEMS

(Achenbach, 1982b)

Aggressive: fights, argues, demands attention, impulsive

Delinquent: destroys others things, runs away, steals, sets
fires

Hostile Withdrawal: poor peer relations, is teased, lonely,
feels persecuted

Hyperactive: impulsive, can't concentrate, clumsy, nervous

Immature: acts too young, cries much, wets bed, whining

Obsessive-Compulsive: brags, obsessions, daydreams, strange
behavior

Schizoid: fears own impulses, dizziness, hears things, too
neat

Somatic Complaints: accident prone, constipated, headaches,
stares blankly

Uncommunicative: confused, likes to be alone, secretive,
moody

APPENDIX D

SYNDROMES OF THE TEACHER'S REPORT
FORM FOR BOYS AGED 12-16

TRF SYNDROMES FOR BOYS AGED 12-16

(Edelbrock & Achenbach, 1984)

Internalizing Syndromes

Social Withdrawal

Anxious

Externalizing Syndromes

Inattentive

Aggressive

Other (Mixed) Syndromes

Unpopular

Obsessive-Compulsive

Immature

Self-Destructive

TRF SYNDROMES WITH SAMPLE ITEMS

(Edelbrock & Achenbach, 1984)

Aggressive: argues, defiant, cruelty, lacks guilt

Anxious: feels guilty, sad, clings to adults, feels unloved

Immature: lonely, confused, screams, destroys own things

Inattentive: can't concentrate, fidgets, daydreams, messy
work

Obsessive-Compulsive: daydreams, strange behavior,
compulsions, nervous

Self-Destructive: harms self, suicidal talk, unclean,
hoarding

Social Withdrawal: likes to be alone, sulks, stubborn,
stares blankly

Unpopular: acts like opposite sex, is teased, not liked,
overweight

APPENDIX E

SYNDROMES OF THE YOUTH SELF-REPORT
FOR BOYS AGED 11-18

YSR SYNDROMES FOR BOYS AGED 11-18

(Achenbach & Edelbrock, 1986b)

Internalizing Syndromes

Depressed

Unpopular

Externalizing Syndromes

Delinquent

Aggressive

Other (Mixed) Syndromes

Somatic Complaints

Self-Destructive Identity Problems

Thought Disorder

YSR SYNDROMES WITH SAMPLE ITEMS

(Achenbach & Edelbrock, 1986b)

Aggressive: brags, mean to others, attacks people, shows off

Delinquent: mean to others, disobeys parents, prefers older
kids, threatens

Depressed: overtired, self-conscious, lacks energy, moody

Self-Destructive/Identity Problems: harms self, jealous,
sad, acts like opposite sex

Somatic Complaints: pains, nausea, won't talk, overeats

Thought Disorder: hears things, nightmares, stores up
things, repeats acts

VITA

Karen Sue Fritz

Candidate for the Degree of
Doctor of Philosophy

Thesis: DISTINGUISHING BETWEEN SERIOUSLY EMOTIONALLY
DISTURBED AND SOCIALLY MALADJUSTED MALE ADOLESCENTS

Major Field: Applied Behavioral Studies

Biographical:

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