THE UNIVERSITY OF CALGARY

A COMPARISON OF INTERNAL AND EXTERNAL BEHAVIORAL CHARACTERISTICS OF CHILDREN WHO WERE IDENTIFIED AS DISRUPTIVE IN RECEIVING AND ASSESSMENT GROUP HOMES

by

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled, "A Comparison of Internal and External Behavior Characteristics of Children Who Were Identified as Disruptive in Receiving and Assessment Group Homes" submitted by Judy L. Krysik in partial fulfillment of the requirements for the degree of Master of Social Work.

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ABSTRACT

A COMPARISON OF INTERNAL AND EXTERNAL BEHAVIORAL CHARACTERISTICS OF CHILDREN WHO WERE IDENTIFIED AS DISRUPTIVE IN RECEIVING AND ASSESSMENT GROUP HOMES

Judy L. Krysik

This study compared internalizing and externalizing behavioral characteristics of 47 children identified as disruptive in ten receiving and assessment group homes. The specific hypothesis proposes that:

> Children identified as disruptive, by staff in child welfare receiving and assessment group homes, will display higher levels of externalized behaviors as opposed to internalized behaviors.

The Child Behavior Checklist was used to collect data on 118 behavioral items. In addition, six demographic variables relevant to the internalized and externalized dimensions of behavior were identified. A standardized questionnaire pertaining to the demographic variables was developed. The questionnaire, together with the Child Behavior Checklist comprised the two instruments used to collect data on the 47 children.

Demographic data were reported as a means of describing the population. Descriptive statistics were used to report on each of the 118 behavioral sub-variables. The 118 behavioral sub-variables were further classified into eight or nine internalizing and externalizing syndromes for the three gender and age groups represented in the study. The final and broadest level of classification was the overall designation as Internalizers or Externalizers.

The findings indicate a substantive difference in behavioral typology, with a predominance of externalized behaviors. A difference of more than ten points between the mean standardized internal and external *T* scores allows the classification of the three gender and age groups as Externalizers. Scores are in the range of clinical pathology for all externalizing syndromes. The findings provide support that children identified as disruptive, by staff in child welfare receiving and assessment group homes; will display higher levels of externalized as opposed to internalized behavior.

Discussion concerning the implications of the findings for social work education, practice, policy, and research is presented.

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CHAPTER 1

INTRODUCTION

Child protection in Canada is a provincially legislated responsibility. In Alberta, the Child Welfare Act C-8.1, forms the basis for the delivery of child protective services. The intent of the *Child Welfare Act* is to support families and communities in providing adequate care, safety, and stimulation to children (Alberta Family and Social Services, 1989). As defined by the Child Welfare Act of Alberta, "child" means any person under 18 years-of-age (Province of Alberta, 1989).

Child Protective Services

As most children mature, they do not suffer psychiatric or psychological disorders (Kazdin, 1989). The majority of Alberta's children receive what is needed to develop a healthy sense of self-worth and social responsibility within the institution of the family (Alberta Family and Social Services, 1989). However, a minority of Alberta's children do experience circumstances in which their survival,

security, or development is endangered. The department of Alberta Family and Social Services is obligated to provide services to such children and to address the factors causing them to be identified as at-risk. Any of the following conditions constitute grounds for government intervention under Alberta's current child welfare legislation:

a. the child has been abandoned or lost;
b. the guardian of the child is dead and the child has no other guardian;
c. the guardian of the child is unable or unwilling to provide the child with the necessities of life, including failing to obtain for the child or permitting the child to receive essential medical, surgical or other remedial treatment that has been recommended by a physician;
d. the child has been, or there is substantial risk that the child will be, physically injured or sexually abused by the guardian of the child;
e. the guardian of the child is unable or unwilling to protect the child from physical injury or sexual abuse;
f. the child has been emotionally injured by the guardian of the child;
g. the guardian of the child is unable or unwilling to protect the child from emotional injury;
h. the guardian of the child has subjected the child to or is unable or unwilling to protect the child from cruel and unusual treatment or punishment; and
i. the condition or behavior of the child prevents the guardian of the child from providing the child with adequate care appropriate to meet the child's needs (Province of Alberta, 1989).

The *Child Welfare Act* directs that intervention within a family be exercised in the least intrusive manner to adequately protect the child (Alberta Family and Social Services, 1989). Therefore, a continuum of services is delivered via the child welfare system. Options for services

range from least intrusive action, such as referral to external agencies to the most intrusive, such as out-of-home placements. In 1981, an estimated 10,752 children received residential services in the province of Alberta (Johnston, 1983).

Residential placements, other than foster care, are often prescribed for children who cannot be maintained in the family home due to emotional and/or behavioral problems. Children referred for out-of-home care are generally not placed in residential treatment settings until they are very seriously emotionally disturbed (Balcerzak, 1989). A variety of behaviors are expressed by the children placed within child welfare residential services. Children within residential-care facilities are those operating at the far end of the behavioral continuum. These children are those referred to in the literature as the "children nobody wants." Both families and communities are incapable and/or unwilling to deal with them (Atkins, 1985).

Defining Problem Behavior

Developmental and cultural considerations both in childhood and adolescence pose obstacles to the study of childhood dysfunction (Kazdin, 1989; Johnson, 1989). Several problematic behaviors that would appear to be

maladjustment are relatively common in various stages of childhood. For example, fears, loss of temper, and defiance of authority are routine behaviors at various stages of child development (Kazdin, 1988; Kazdin, 1989; Achenbach, 1978). Problem behaviors characteristically appear at different ages as children undergo rapid changes in development (Kazdin, 1989).

Cultural variation defines behaviors that are considered normative in some cultures and deviant in others. For example, in parts of New Guinea, seven year old boys are expected to perform fellatio on older boys over a period of several years (Johnson, 1989). In the North American culture, any young child who repeatedly engages in fellatio with other children is likely to be regarded by human service professionals as sexually deviant (Johnson, 1989).

Assessment of childhood behavior disorders has been a relatively neglected field in comparison to parallel research with adults (Achenbach, 1978; Garber, 1984; Kazdin, 1988). Developmental considerations have contributed to the lack of attention devoted to the study of childhood behavior.

First, significant changes are likely to occur in problematic behaviors over the course of child development.

Problem behavior may disappear or be substituted with alternative problem behavior. The potential for behavioral change among children makes identification of stable disorders difficult (McMahon, 1987; Kazdin, 1988).

Second, assumptions regarding the psychological development of children and the limits in their capacities have functioned to delay research on affective disorders. For example, historically the view existed that children could not suffer major depression disorder (Kazdin, 1989).

Finally, clinically relevant behavior problems are rarely identified by children themselves. Therefore, children rarely refer themselves for therapy, which in turn reduces the demand for research (Kazdin, 1989). Clinical problems of children are usually identified by parents. Parent assessment of child deviance has been shown to be significantly related to their own symptoms of psychopathology (Kazdin, 1989).

The Measurement of Problem Behavior

Pioneering efforts on the classification of antisocial child behavior began in 1946 when Hewitt and Jenkins presented two diagnostic categories: unsocialized aggression, and socialized delinquency (Loeber & Schmaling,

1985). The Diagnostic and Statistical Manual of Mental Disorders (DSM-I, American Psychiatric Association, 1952) provided further impetus in the diagnoses, assessment, and treatment of childhood disorders (Kazdin, 1988). Two diagnostic categories specific to children, adjustment reaction and childhood schizophrenia were included in the DSM-I (Kazdin, 1988). In 1968, a revised edition of DSM-I was expanded to include "Behavior Disorders of Childhood and Adolescence." In 1980, the third edition of the DSM presented five major categories of disorders devoted to children. The 1987, DSM-III-R, re-evaluated categories of the DSM-III to incorporate research findings on alternative disorders and enhance the descriptive criteria used in applying the categories to children (Earls, 1989).

In the United States the DSM-III-R is the instrument that represents the range of currently recognized psychological dysfunctions among children (Kazdin, 1989). The DSM-III-R is consistent with the "International Classification of Diseases" which is used worldwide as a basis of identifying psychiatric disorders (Kazdin, 1989). Despite the widespread use and acceptability of the DSM-III-R several criticisms of the instrument have been reported. Reliance on a single assessment method, pseudospecificity of operational criteria, and the use of parents and children as the primary sources of information

are some of the major criticisms of the DSM-III and DSM-III-R (Kazdin, 1989; Kazdin, 1988; Taylor, 1983).

Contemporary approaches to the behavioral assessment of children advocate a systems view of child and family function and dysfunction (Nelson, 1983; Mash, 1987). Behavioral assessment regards behavior as situationally specific (Achenbach & Edelbrock, 1984). Therefore traditional methods as the interview used in the DSM have been criticized for failing to incorporate direct observation of behaviors in their natural settings (Achenbach & Edelbrock, 1984). Furthermore, the use of diagnostic labels is inconsistent with the concept of situationism (O'Leary, 1979).

One of the most frequently used measures in the study of child psychopathology is the Child Behavior Checklist (Kazdin, 1989; McIntyre & Keesler, 1986; Brodzinsky, Radice, Huffman, & Merkler, 1987). Interpretation of the Child Behavior Checklist takes into consideration developmental and gender specific considerations. Each child rated on the Child Behavior Checklist is compared with a normative, nonclinical sample of peers the same gender and age range. The Child Behavior Checklist (Achenbach & Edelbrock, 1983), also offers situational specificity. Separate versions may be completed by parents, alternative caretakers, teachers,

and the child. A further refinement has been the development of dimensional scales. In each version of the Child Behavior Checklist individual behaviors are rated for their frequency.

Internalized and Externalized Dimensions of Behavior

The Child Behavior Checklist clusters individual behaviors into behavior problem syndromes. Syndromes for all gender and age groups have been grouped into two broad categories: the internalizing and externalizing syndromes (Achenbach & Edelbrock, 1983). Examples of the internalizing syndromes include: Depressed, Immature, Uncommunicative, and Somatic Complaints. Examples of the externalizing syndromes include: Delinquent, Aggressive, Hyperactive, and Cruel (Achenbach & Edelbrock, 1983).

General consensus exists in the child related clinical literature regarding the existence of two broad classifications of childhood dysfunction: internalizing and externalizing (Kazdin, 1989). Kendall, (1987) states that if only one question could be asked when considering behavioral, cognitive, and emotional maladjustments in children it would be: "Is the child's problem an internalizing or externalizing problem?" Other terms that parallel the internalizing - externalizing dichotomy include

"conduct" versus "affective" disordered youth, and "acting out" versus "inhibited" behavior.

Internalizing and externalizing classifications reflect contrasting types of behaviors. Internalized behaviors refer to overly controlled or inward-directed behaviors such as anxiety and withdrawal. Externalizing behaviors consist of under controlled or outward-directed behaviors that are disruptive to the child's environment. For example, physical aggression, obscene language, and vandalism are externalized behaviors (Kazdin, 1989).

Placement of a child in a residential setting does not imply an improvement or cessation of the behaviors that brought the child into care. Behaviors may continue as they were, or may become exaggerated in group care. Residential staff observe the behaviors and classify each child as either "fitting in" or as "disruptive" to the program. Externalized behaviors require a more immediate response by staff than internalized behaviors. Therefore, one would assume that those children whom staff identify as disruptive are those children who display predominantly externalized behaviors.

Purpose of the Study

Children in Alberta may receive child protective services for any of the nine conditions outlined in the current child welfare legislation. Occasionally, child protective services take the form of out-of-home placements. Residential services, excluding substitute family care, are often reserved for those children displaying exaggerated behavior problems.

What defines behavior as "problematic" is dependent upon several factors. Developmental considerations examine the chronological age of the child in relation to the frequency, magnitude, and duration of each particular behavior. Cultural conceptions of behavior define behavior as normative in some cultures and deviant in others. The state of knowledge and technology available to human service professionals also impacts behavior classification.

The internalized and externalized differentiation of problem behavior is a common form of behavior classification. The purpose of this thesis is to examine the behavior of children in group care settings in relation to the internalized versus externalized behavior dichotomy.

The specific hypothesis proposes that:

> Children identified as disruptive, by staff in child welfare receiving and assessment group homes, will display higher levels of externalized behaviors as opposed to internalized behaviors.

CHAPTER 2

LITERATURE REVIEW

This chapter describes the dependent and demographic variables. The dependent variable is problem behavior. The values of the dependent variable are the predominance of either internalized or externalized behavior. The dependent variable is further delineated into 118 behavioral sub-variables as measured by the Child Behavior Checklist. Literature reviewing variables in relation to the internalizing versus externalizing behavioral hypothesis will be reviewed.

The demographic variables in the present study are: gender, age, parental structure, education, socioeconomic status, and ethnicity. These demographic components have been identified in the professional literature as being significant to the study of childhood behavior (Achenbach, 1978; Achenbach & Edelbrock, 1978; Atkins, 1985; Tolan, 1987; Kazdin, 1989).

THE DEPENDENT VARIABLE

Finite definitions of problem behaviors are nonexistent. What defines behavior as problematic is contingent upon a combination of factors. First, the norms and values of the particular environment will classify behavior as either acceptable or deviant (Johnson, 1989). Second, behaviors such as those listed in the Child Behavior Checklist, (e.g., teases a lot, poor school work, uses alcohol and drugs, shy or timid), appear to varying degrees in culturally defined "normal" children at various ages. The frequency, magnitude, and duration of a particular behavior will determine to some extent whether or not the behavior will be defined as a symptom of pathology (Mash & Terdal, 1981).

The classification of behaviors to form behavioral diagnoses or syndromes is difficult. Many behaviors can appear in more than one diagnostic category and most categories include several behaviors that may appear in various combinations in any child (Johnson, 1989). As classification criteria become increasingly stringent, "goodness of fit" becomes more difficult to achieve. Classification at a broad level such as the internal or external dimensions allows for the categorization of most children at the expense of homogeneity.

The literature supports the existence of two broad categories of behavior: internalized and externalized behavior. The categories reflect a distinction between fearful, inhibited, over controlled behavior, and aggressive, antisocial, under controlled behavior (Achenbach & Edelbrock, 1983).

Prediction of adult psychopathology from child behavior abnormalities (temporal consistency), is also supported at the broad level of behavior classification. Available data would suggest that aggressive, conduct disorder, hyperactive, and peer relationship difficulties are the most predictive of later adult problems (Mash & Terdal, 1981). For example, Fischer, Rolf, Hasazi, and Cummings, (1984) studied 541 children from preschool to ages 9 through 15. Results of the study indicated that externalizing symptoms were positively correlated with later externalizing and internalizing symptoms in the entire sample. Clarke and Clarke, (1988) cite evidence from three samples to support the existence of a single syndrome made up of a broad variety of antisocial behaviors appearing in childhood and continuing into adulthood.

Limited results exist in the prediction of adult disorders from childhood patterns of adaptation, with the exception of externalized behavioral pathology (Sroufe &

Rutter, 1984; McIntyre & Keesler, 1986). Robins (cited in Sroufe & Rutter, 1984) provides support for a higher incidence of severe pathology in adulthood among children seen at psychiatric clinics in comparison to a control group. In the prediction of adult schizophrenia, Robins reported that it was not the shy, withdrawn child that tended to manifest pathology. Rather, it was those children characterized by impulsiveness, aggression, and antisocial behavior who were over represented in the schizophrenia group.

Tolan, (1987) studied 199 male adolescents to determine the relationship between age of onset of delinquent behavior to subsequent delinquency. In addition to reporting greater total frequency, variety, and seriousness of delinquent behavior, the early onset group also demonstrated significantly greater frequency for each type of offense except rape and robbery. Clarke and Clarke, (1988) report the overall level of childhood deviant behavior to be a better predictor of adult deviance than was any particular childhood behavior.

The internalized versus externalized differentiation has been utilized in several studies as the basis for classification. Achenbach and Edelbrock, (1978) report that classification according to the internalized and

externalized dimensions has shown that externalizers outnumbered internalizers by about two to one among boys whereas this ratio was reversed for girls. Other studies include O'Brien-Towle and Schwarz, (1987) who correlated the variables of intelligence test scores, perinatal complications, parental pathology, and home stability with the internalizing and externalizing dimensions. Results indicated a positive correlation between the externalizing dimension and less stable home conditions. The internalizing dimension was positively correlated with intelligence scores.

Hornick, Phillips, and Kerr, (1989) used the Child Behavior Checklist to determine gender differences of foster children in relation to the internalized and externalized classification. Results of the study reported that the aged 12 to 16-year-old females in care showed more problems in general than did males of the same age in care, and that the females' problems were more internalized in nature. Offord, Boyle, and Racine, (1989) also utilized the externalized - internalized classification in a study of 3,294 children in Ontario. The results indicated more externalized behavior displayed among the boys and a prevalence of internalized behavior among the girls.

DEMOGRAPHIC VARIABLES

The identification of the internalized and externalized behavior dimensions is not an end in itself. The resulting classification depends largely upon its relationship with other variables. Six demographic variables: gender, age, parental structure, education, socioeconomic status, and ethnicity have been identified as relevant to the internalizing/externalizing behavior classification.

Gender

Variance in the rates of childhood dysfunction have been associated with several factors. Kazdin, (1989) reports that the prevalence of behavioral disorders are greater among boys than among girls. Rutter, (1982) and Atkins, (1985) also report that more boys than girls behave in disruptive or disturbing ways.

The Ontario Child Health Study, (Earls, 1989) found that the occurrence of behavior disorders among boys aged 4 to 10-years-old outnumbered that of girls an equivalent age by a ratio of between three and four to one. However, the ratio shifts toward one to one in early adolescence (Earls, 1989). As well, conduct disorder and hyperactivity (i.e., externalized behaviors) were reported to be more common

among boys than for girls in the 4 to 11-year-old and 12 to 16-year-old age groups. Emotional disorder and somatization (i.e., internalized behaviors) were found to be more common among girls than boys for both age intervals (Offord, Boyle, & Racine, 1989). Hornick, Phillips, and Kerr, (1989) studied 210 children between 12 and 16-years-of-age and found that the behavior problems of females in foster care were more internalized than for the males in foster care.

Sroufe and Rutter, (1984) document a sharp increase in the frequency of depression among girls reaching puberty. The propensity for behavior problems among boys to be external as opposed to internal among girls as reported by Offord, Boyle, and Racine, (1989) and Sroufe and Rutter, (1984) highlights differential socialization practices among the genders. Girls in our culture are socialized toward compliance, inhibition, passivity, and reliance on others (Sroufe & Rutter, 1984). Boys are shaped toward externalizing symptomatology and away from expression of tender feelings (Sroufe & Rutter, 1984).

In contrast, a 1985 study of 163 children, aged 6 to 11-years-old by Cohen, Wehrspann, Gotlieb, and Kershner reported no significant differences in the prevalence of internalizing or externalizing behaviors in relation to gender. As well, Pardeck, (1985) found that male and female

children experience similar rates of disruption in foster care resulting in subsequent replacement. A survey of the professional literature revealed gender as a relevant variable in relation to the internalizing and externalizing dimensions of behavior. Gender was included as a demographic variable in this study.

Age

Several models suggest a developmental progression from overt to covert behaviors among children (McMahon, 1987). Patterson, (1986) describes the progression as a training in coercive processes via parent-child interaction that leads to subsequent coercive and noncompliant behavior by the child.

Edelbrock, (cited in McMahon, 1987) has proposed a four step progression of externalized behaviors beginning with problems in the home and extending to problems in the school and community. A 1987 study of 202 psychiatric inpatient boys produced a low negative correlation between age and the internalizing and externalizing dimensions as measured by the Child Behavior Checklist (O'Brien-Towle & Schwarz, 1987). Age was included as a demographic variable in this study as its relevance in regard to the study of

internalizing and externalizing behavior is supported in the literature.

Parental Structure

The third demographic variable considered relevant for inclusion in this study is parental structure. Several studies cite parental structure as a correlate to the internalizing/externalizing behavior classification.

Whittaker, Fine, and Grasso, (1989) studied 332 adolescent males receiving residential treatment services in Michigan. The majority of the youths came from single parent families (53.2%). Approximately 12 percent included youths with no biological parent and a further 26 percent came from intact two-parent families.

O'Brien-Towle and Schwarz, (1987) report that the parents of internalizers in comparison to externalizers have fewer marital separations. Tolan, (1987) also identified parents' marital status as a variable in his multivariate equation on delinquency. In this study parental structure is presented as a nominal level variable with the possible responses of: one-parent family, two-parent family (biological), two-parent family (non-biological), no parents, one biological and one non-biological parent.

Education

In Alberta, there is one publicly funded system of education. This system is mandated to provide education programs to students through two dimensions, the public and separate schools. The *Province of Alberta School Act*, (1988) stipulates compulsory education for any individual who: is eligible to be enrolled in a school; at September 1 in a year is 6 years of age or older; and is younger than 16 years of age.

Sroufe and Rutter, (1984) report school failure in childhood to be a predictor of adult psychopathology. Offord, Boyle, and Racine, (1989) reported two variables, failed a grade and family dysfunction, as having significant main effects in the psychiatric disorder of hyperactivity. Whittaker, Fine, and Grasso, (1989) studied the educational background of 332 adolescent boys entering residential treatment at Boysville of Michigan. Findings from the Boysville study indicate that 73 percent of the sample had either been suspended or expelled from school in the six month period prior to placement.

The education variable was operationalized as a dichotomous variable in this study. Respondents were requested to chose "yes" if the child was registered in

school at the time of intake, or "no" if the child was not registered in school. The education variable was chosen as it appeared prevalent in related professional literature.

Socioeconomic Status

Several studies have included socioeconomic status as a relevant variable in the study of childhood behavior disorders. Achenbach and Edelbrock, (1978) report evidence that the frequency of specific problems varies with age, gender, race, and socioeconomic status of the child. In a study of 2,553 children, those children having a total behavior problem score greater than or equal to 100 on the Child Behavior Checklist were found to be of significantly lower socioeconomic status among all gender and age groups except for boys aged 6 to 11-years-old (Edelbrock & Achenbach, 1980).

Various measures of socioeconomic status have been presented throughout the literature. For example, Tolan (1987) used a two-factor index of socioeconomic status developed by Hollingshead and Redich. O'Brien-Towle and Schwarz, (1987) classified socioeconomic status by the education and occupation of the child's caretaker. This study presents socioeconomic status as a dichotomous nominal

level variable. Either the child's caretaker was or was not receiving income assistance at the time of placement.

Ethnicity

Concern about the effects of the child welfare system on Native American children is receiving increased attention. A highly disproportionate representation of Native American children with child welfare status is common across Canada (Johnston, 1983). Of the 10,752 children placed in Alberta's residential care system in 1981, 28.7 percent included Native American children (Johnston, 1983). An amendment to Alberta's child welfare legislation in 1985 encompassed specific consideration of Native American children.

Pardeck, (1985) reports that although there is a common belief among child welfare workers that the minority child is a likely candidate for unstable foster care, strong evidence exists that the caucasian foster child is more likely to experience multiple replacements. Edelbrock and Achenbach, (1980) found that black males were significantly over represented in the Hyperactive group and under represented in the Schizoid group. Among girls, blacks were under represented in the Hyperactive group and over represented in the Delinquent group. Whittaker, Fine, and

Grasso, (1989) reported racial composition of the 332 males youths entering Boysville of Michigan to be 47.9 percent black, 47.9 percent white, and 4.2 percent other.

This study presented the variable of ethnicity as a nominal level dichotomous variable. Each subject was classified as either Native American, including Treaty, Non-Treaty, and Metis status, or as Non-Native. Ethnicity was presented as a dichotomous variable because of the differentiation in the *Child Welfare Act* amongst Native American and Non-Native children.

SUMMARY

The dependent variable of the present study is problem behavior. The literature supports the existence of two general types of problem behaviors: internalized and externalized. Several studies have used the Child Behavior Checklist as a means of classifying the internalized and externalized behavior dimensions. Apart from the broad level of classification, the Child Behavior Checklist also provides a narrow classification schema. The internalized and externalized dimensions are delineated into eight or nine internalizing and externalizing syndromes for each gender and age group. The syndromes of the Child Behavior

Checklist are further delineated into 118 internalizing and externalizing behavioral items.

Six demographic variables are examined in the present study. Selection of the six demographic variables was based on a review of the professional literature. Gender, age, parental structure, education, socioeconomic status, and ethnicity were chosen because of their prevalence in the literature associated with internalized and externalized behavior.

CHAPTER 3

METHODOLOGY

This chapter highlights the study's setting, the population, and the measurement instruments. For the purposes of this study the term population is defined as: a complete set of individuals, objects, or measurements having some common observable characteristic (Elifson, Runyon & Haber, 1982). Four criteria were necessary for a child to be included in the population. Following the identification of a finite population, data collection for the measurement of the dependent and demographic variables began. Operationalization of the dependent variable is discussed in terms of its validity, reliability, and normative properties. Finally, demographic parameters of the population are presented.

THE SETTING

In Canada, the provision of child protective services is a provincial mandate. In Alberta, the *Child Welfare Act* governs the operative definition of service delivery. The

specific child welfare legislation in force during this period of study was proclaimed on July 1, 1985. The government department that directs the execution of child welfare legislation is called Alberta Family and Social Services.

Alberta Family and Social Services

Alberta Family and Social Services provides child protective services through a decentralized system of six geographic regions. Each region has a director who is designated by the Minister of Social Services. The Director is responsible for the delivery of services in a particular region. The current study was carried out in one of the six regions.

The region under study includes a large metropolitan city and its surrounding rural territory. Within the region there were two government offices delivering child protective services. One of the offices offered an investigation/intake program. The other office offered services of a longer duration, a family support program, a residential services program, and an adoption program.

The Residential Services Program. At times child protective services are delivered in the form of out-of-home

placements. The Alberta government offers a range of residential options for placement. A child may be placed in a foster home, a group home, or an institution. The Residential Services Program Consultants manage all placements excluding foster care. Group home care may be categorized into two types. Long-term group homes may care for a child from a period of three months to a number of years. Receiving and assessment group homes were intended to provide care on a short-term basis, ranging from one day to a recommended maximum of three months.

The Receiving and Assessment Group Homes. The type of group homes involved in this study were receiving and assessment group homes. Ten receiving and assessment group homes were contracted by the Residential Services Program of Alberta Family and Social Services in the designated region. All of the ten receiving and assessment homes participated in the study. The present study will identify these ten homes as Places 1 through 10. Each of the homes had six available openings for male or female children referred to them by Alberta Family and Social Services. The goal of each receiving and assessment home was to provide quality residential care, and assessment services to children in need of short-term treatment, assessment, shelter, and security (Jaeger, Blase, Fixsen, & Lantz, 1989).

Each child entering the receiving and assessment system does so through a standardized procedure. First, the child must have an open child welfare file with Alberta Family and Social Services. Second, the child's designated case manager must assess the child as being unable to be maintained in the family home, or in alternative family care due to reasons of moderate-to-severe emotional and/or behavioral problems. Third, following consultation with the casework supervisor, the case manager may proceed with a referral to the Child Welfare Regional Placement Committee. Only after the approval of an application for residential placement by a three-to-five member interdisciplinary regional placement committee, would a child be allowed access to a specialized residential resource such as a receiving and assessment home (Alberta Family and Social Services, 1989).

THE POPULATION

In order for a child to be included in the study, four criteria had to be met. The population was selected from a list of all children residing in the ten receiving and assessment group care facilities operating in the designated region during the period from May 31, 1987 to May 31, 1988. The Residential Services Program of Alberta Social Services identified 389 children who experienced receiving and assessment group care for at least one day in the period

under study. This particular calendar year was arbitrarily chosen.

The second level of inclusion focused upon the child being classified as disruptive to the respective receiving and assessment program. A list of all children in each home from May 31, 1987 to May 31, 1988 was compiled from regional office records and forwarded to each group home director. From this list, group home directors in conjunction with child-care staff were requested to identify those children they considered disruptive to the receiving and assessment program. This process identified 57 children (See Table 3.1).

Table 3.1
Number of Children Identified as Disruptive by Group Home

Group Home	*Number*
Place 1	10
Place 2	15
Place 3	11
Place 4	7
Place 5	6
Place 6	4
Place 7	3
Place 8	1
Place 9	0
Place 10	0
Total.....	57

The third criterion required each child to have a total behavior problem score above the 90th percentile for their gender and age group on the Child Behavior Checklist (See Table 3.2). For example, a female aged 13 would be above the 90th percentile for her gender and age group if her total behavior problem score was greater than 37.

In order to ascertain a child's score on the Child Behavior Checklist, group home staff were asked to complete a behavioral questionnaire for each child identified as disruptive. As can be seen from Table 3.3, the mean total behavior problem score for each gender and age group represented in the present study was significantly above the 90th percentile. For example, the mean behavior problem score for males aged 6 through 11 in this study was 96.

Table 3.2
Maximum Total Behavior Problem Scores
Within the Nonclinical Range

Age	*Female*	*Male*
4-5	42	42
6-11	37	40 *
12-16	37 *	38 *

* *Represents the gender and age groups included in this study.*

Table 3.3
Mean Total Behavior Problem Scores
by Gender and Age Group

Gender	*Age*	*90th Percentile Behavior Score*	*Group Mean*	*N*	*SD*
Boys	6-11	40	96.2	6	14.6
Boys	12-16	38	80.5	27	24.4
Girls	12-16	37	61.8	14	18.2

The score required to place a male aged 6 to 11 above the 90th percentile for behavior problems is 40. Application of the third criterion eliminated 5 of the 57 children.

Achenbach and Edelbrock, (1983) recommend that if a respondent has omitted scoring more than eight behavior items, information from the Child Behavior Checklist is not sufficiently comparable to the standardized data. Therefore, the fourth criteria demanded elimination of the subject if eight or more behavioral items were not scored by the respondent. Five subjects were omitted due to an excess of missing behavior information. Following application of all four criteria, the final population consists of 47 children (See Table 3.4).

Table 3.4
Criteria for Defining the Population

Number	*Criterion*	*N*
1	Receiving and Assessment Placement	389
2	Identification as Disruptive	57
3	Total Behavior Problem Score	52
4	Sufficient Behavioral Data	47
	Final Population.....	47

OPERATIONALIZATION OF THE DEPENDENT VARIABLE

The dependent variable, the predominance of either internalized or externalized behaviors was determined by each child's results on the behavior problem portion of the Child Behavior Checklist. The Child Behavior Checklist is a well recognized assessment tool for providing standardized descriptions of behavior among children (Walls, Werner, Bacon, & Zane, 1977; McMahon, 1987; Kendall, 1987).

Offord, Boyle, & Racine, (1989) utilized the Child Behavior Checklist to compare assessments of psychiatric disorder amongst children as rated by informants from different contexts (i.e., parents and teachers). Hornick, Phillips, & Kerr, (1989) used the Child Behavior Checklist to explore gender differences in behavioral problems of foster children. Mooney, Thompson, & Nelson, (1987) examined

the relationship of risk factors such as substance abuse by parent, not living with a natural parent, and psychiatric hospitalization of parent, with the severity and type of childhood disorder as measured by the Child Behavior Checklist. Brodzinsky, Radice, Huffman, and Merkler, (1987) used the Child Behavior Checklist to compare the prevalence of clinically significant symptomatology between adopted and non-adopted children. McIntyre and Keesler, (1986) used the Child Behavior Checklist to assess the prevalence of psychological disorders among 158 foster children.

The Child Behavior Checklist

The particular Child Behavior Checklist utilized in this study was designed to be completed by parents or alternative caretakers. A three-step response scale is incorporated into the 118 behavioral items. For each behavioral item that describes the child's behavior, either currently or within the past six months, the respondent is required to select a "2" if the item is very true, or often true of the child; a "1" if the item is somewhat true of the child; and a "0" if the item is not true of the child (Achenbach & Edelbrock, 1983).

Appendices A, B, and C outline the specific behaviors measured for each gender and age group represented in the

present study. The 118 behaviors are classified at two levels. At the broad level of classification behaviors are separated into internalizing and externalizing dimensions. As well, the behaviors are more narrowly grouped into a number of internalizing and externalizing syndromes (Appendix D).

The Behavior Problem Syndromes. The names of the syndromes are intended to be descriptive of the behaviors comprising the syndromes rather than clinical diagnoses (Achenbach & Edelbrock, 1983). Examples of the behavior problem syndromes include: Hyperactive, Aggressive, Delinquent, and Immature. The "Delinquent" syndrome for boys aged 6 to 11 represents 12 behaviors: steals outside the home; steals at home; destroys things belonging to his family or other children; vandalism; sets fires; is truant, skips school; runs away from home; hangs around with children who get in trouble; lies or cheats; destroys his own things; swears or uses obscene language; and is disobedient at school (Achenbach & Edelbrock, 1983).

Each behavioral item may contribute to more than one syndrome in the internalizing or externalizing categories. For example, the internalized item of "too fearful or anxious" belongs to both the Schizoid or Anxious syndrome, and the Depressed syndrome. A third category of syndrome

labelled mixed syndromes consists of a blend of internalizing and externalizing behavior items.

The Internal/External Classification. The computer-scored version of the Child Behavior Checklist automatically provides each child's: frequency scores on the 118 behavior items, syndrome *T* scores, and total internalizing and externalizing standardized *T* scores. The larger the difference between the total internalizing and externalizing standardized *T* scores, the "purer" the classification.

The internalizing/externalizing classification distinguishes between problems that are causing difficulties for the child's environment and problems that are kept within, and cause problems for the child (Kendall, 1987). Achenbach suggests that children not be classified as "Internalizers" or "Externalizers" unless their total behavior problem score exceeds the 90th percentile for their respective gender and age group, and unless there is a difference of at least ten points between the total internalizing and externalizing standardized *T* scores (Achenbach & Edelbrock, 1983).

Achenbach's criteria for classification of the broad band groupings (Internalizing and Externalizing) were

utilized in this study as they are supported in the professional literature. These arbitrary criteria for differentiating between internalizing and externalizing behavior, and clinical versus nonclinical symptomatology have been implemented in a number of research studies (Hornick, Phillips, & Kerr, 1989; Mooney, Thompson, & Nelson, 1987; Brodzinsky, Radice, Huffman, & Merkler, 1987; McIntyre & Keesler, 1986; Fischer, Rolf, Hasazi, & Cummings, 1984).

Validity

The Child Behavior Checklist was designed to record in a standardized format the behavioral problems and competencies of children aged 4 through 16. Construction of the Child Behavior Checklist began with descriptions of child and adolescent problems that were of concern to parents and mental health professionals (Achenbach & Edelbrock, 1983). These descriptions were derived from clinical and research literature, consultation with clinical and developmental psychologists, child psychiatrists, and psychiatric social workers. Draft versions of the descriptions were pilot-tested in three child-guidance clinics. Successive drafts of the instrument were discussed with parents and mental health professionals. The final 118 behavioral items represent a broad range of problems

relevant to children's mental health professionals and parents.

The Child Behavior Checklist has been compared to various other measurement tools to demonstrate validity. Edelbrock and Costello, (1988) provided an empirical test of the convergence between the Child Behavior Checklist and the DSM-III in assessing 270 clinically referred children aged 6 through 16. The results indicate a significant relationship among scores on the Child Behavior Checklist syndromes and the diagnoses derived from the DSM-III. The relationship suggests substantial convergence between the two different approaches to assessing child psychopathology (Edelbrock & Costello, 1988).

The internalizing and externalizing classification as determined by the Child Behavior Checklist has also been compared to similar classifications as determined by the Conners Parent Questionnaire, and the Quay-Peterson Revised Behavior Problem Checklist. Correlations between the Child Behavior Checklist total behavior problem score and the total scores of the other instruments ranged from r = .71 to .92 (Achenbach & Edelbrock, 1983). Mash and Johnston, (1983) found significant correlation among the Conners Abbreviated Rating Scale, the Werry-Weiss-Peters Activity Scale, and the Child Behavior Checklist (i.e., externalizing T scores r =

.82 to .87, and internalizing *T* scores *r* = .62 to .72) in a sample of 91 hyperactive and nonclinical children.

Reliability

Reliability refers to the extent to which independent administrations of the same or similar instrument will yield consistent results under comparable conditions (Bostwick & Kyte, 1985). Achenbach and Edelbrock, (1983) have assessed the Child Behavior Checklist for test-retest reliability, inter-rater agreement, and longer term stability.

Test-retest reliabilities were computed on the Child Behavior Checklist scores obtained by a single interviewer who completed the Child Behavior Checklist for 72 nonclinical children at a one-week interval. The overall interclass correlation between ratings for the 118 behavior problem items was $r = .95$, $p < .001$ (Achenbach & Edelbrock, 1983).

Achenbach also tested the stability of Child Behavior Checklist scores for outpatient children of a community guidance clinic. The children aged 6 through 16 were rated at intake, as well as at 6 and 18 month follow-up periods. The test-retest correlations for outpatients' scores over the six month period were in the $r = .60$ range for behavior

problem and competence scores of all gender and age groups. Over an 18 month period, correlations ranged from r = .46 to .76 in the various gender and age groups for behavior problems and competencies (Achenbach & Edelbrock, 1983).

Normative Comparisons

Construction of the Child Behavior Checklist began with the study of 2,300 children who had received mental health services (Achenbach & Edelbrock, 1983). However, positive scores on the Child Behavior Checklist do not necessarily indicate deviant behavior. As all children have at least some behavior problems, a normative sample of agemates was necessary to differentiate between clinical and nonclinical behavior. Samples of children who had not received mental health services in each gender and age group were randomly selected to provide data for normative comparisons (Achenbach & Edelbrock, 1983). The nonclinical samples did not deviate significantly in race or socioeconomic status from the clinical group (Achenbach & Edelbrock, 1983).

Scoring of the Child Behavior Checklist is based on calculating raw scores and standardized T scores for each of the internalizing and externalizing levels of classification. The standardized T scores permit comparison with a normative sample comparable across gender and age.

For example, a boy aged 8 may be compared to a nonclinical sample of boys aged 6 through 11. The term "nonclinical sample" refers to randomly selected children who had not received mental health services for at least one year prior to completion of the Child Behavior Checklist rating (Achenbach & Edelbrock, 1983).

Achenbach's scoring methodology provides both percentile ranks and normalized standardized *T* scores which are descriptive of clinical and nonclinical behavior problems. For each behavior problem syndrome, scores at or just below the 98th percentile of the distribution in the normative sample for the appropriate gender and age group have been chosen as the upper limit of the "normal" range. For the overall Internalizing and Externalizing classification, clinical cut-offs have been set at the 90th percentile. Scores at the broad level of classification are based on a larger number of items and tap a broader range of behavior than the more narrow syndrome classification.

Behavior items belonging to both an internalizing and an externalizing syndrome are counted once in both the total internalizing and externalizing standardized *T* scores. However, behavior items belonging to more than one internalizing syndrome are counted only once in the total internalizing score, and behavior items belonging to more

than one externalizing syndrome are counted only once in the total externalizing score.

DATA COLLECTION

Data collection began in June, 1988 with the assembly of a complete list of all children residing in receiving and assessment group care in the specified region from May 31, 1987 to May 31, 1988. On June 6, 1988 each of the ten group home directors was forwarded a list of all children residing in their program within the specified dates. Group home directors in conjunction with child-care staff, were requested to identify those children considered disruptive to the respective program.

Collection of data on the 118 behaviors listed on the Child Behavior Checklist, began on July 29, 1988. The demographic questionnaire and the Child Behavior Checklist were forwarded to the respective group home for each identified child. Data collection was completed April, 1989.

METHODOLOGICAL LIMITATIONS

A major methodological shortcoming of this study was that data were collected on a narrowly defined population. For instance, only those children identified as disruptive

to the ten receiving and assessment programs in the specified region in a one year period were included in the population. The stringent criteria for subject inclusion in the study limits generalization of the results. A lack of information on those children not identified as disruptive but residing in receiving and assessment care, raises the question of the predominance of internalized or externalized behavior of those not included.

Further to the first limitation, the child-care workers were aware that each child in the population was chosen because they had been identified as disruptive to the receiving and assessment group home. Although the child-care workers were not informed of the particular hypothesis, their knowledge of the child's identification as disruptive may have influenced their reports on the Child Behavior Checklist.

A third methodological limitation of this study was that accuracy of the data is reliant upon human memory. Data were based on the child-care workers' recollections of each child's behaviors. Reliance on memory has been criticized for its lack of reliability (Grinnell, 1988).

A final shortcoming of the methodology of this study was that data were collected from a singular source, the

child-care workers. Scores based on aggregated reports of multiple observers in diverse settings have been shown to be of greater validity than scores based upon a single context (O'Brien-Towle & Schwarz, 1987). The Child Behavior Checklist has been adapted for use by parents, alternative caretakers, teachers, and children.

DEMOGRAPHIC CHARACTERISTICS

Respondents were requested to provide information on six demographic variables identified as relevant to the study of childhood behavior (See Appendix E). The specific demographic variables surveyed include: gender, age, parental structure, education, socioeconomic status, and ethnicity.

Gender

As identified in Chapter 2, the professional literature generally supports a higher prevalence of externalized behaviors among male as opposed to female children. Gender was considered as a demographic variable in this study. As can be seen in Table 3.5, the final population consisted of 33 males and 14 females.

Age

Because of developmental considerations in childhood as outlined in Chapter 2, behaviors considered normative at one age may represent pathology at another age. Use of the Child Behavior Checklist requires separation of children into gender and age groups. Three distinct groups were represented in the present study. Six males were included in the 6 to 11-year-old age group. The 12 to 16-year-old age group included 27 males and 14 females (See Table 3.5). No subjects were included in the 6 to 11-year-old category of females.

As can be seen from Table 3.6, the average age of the males in the 6 to 11-year-old group was 9.2 years. The average age in both the male and female 12 to 16-year-old age groups was 14.4 years. The average age of the overall population was 13.7 years.

Table 3.5
Distribution of the Population
by Gender and Age Group

Gender	*Age*	*N*
Boys	6-11	6
Boys	12-16	27
Girls	6-11	0
Girls	12-16	14
Total.....		47

Table 3.6
Mean Age in Years
by Gender and Age Group

Gender	*Age*	*Mean Age*	*SD*
Boys	6-11	9.2	1.8
Boys	12-16	14.4	1.5
Girls	12-16	14.4	1.3
Totals.....		13.7	2.3

Parental Structure

The majority of the population came from single parent families (47%). However, if the various categories of two-parent families are combined (biological, non-biological, and blended), the number of two-parent families outnumbers single parent families by 21 to 20. These results are comparable to those previously cited in Chapter 2. A study of 332 adolescents by Whittaker, Fine, and Grasso (1989), reported 53.2 percent of the children as being from single parent families. Table 3.7 outlines the parental structure of each gender and age group included in the population.

Table 3.7
Parental Structure by Gender and Age Group

	Boys 6-11		*Boys 12-16*		*Girls 12-16*		*Totals*	
Parental Structure	*n*	%	*n*	%	*n*	%	*N*	%
1 Parent	1	17	15	60	4	34	20	47
2 Parent (Biological)	4	66	5	20	7	58	16	37
2 Parent (Non-biological)	-		1	4	-		1	2
No Parent	-		2	8	-		2	5
2 Parent (1 Biological and 1 Non-biological)	1	17	2	8	1	8	4	9
Totals.....	6	100	25	100	12	100	43	100
Missing	-		2		2		4	

Education

Analysis of the education variable demonstrates an overwhelmingly high proportion of the population (76%), as not registered in school at the time of intake to the receiving and assessment group home (See Table 3.8). These results are consistent with those previously cited in Chapter 2. Findings from the Boysville study (Whittaker, Fine, & Grasso, 1989) indicated that 73 percent of the sample had either been suspended or expelled from school in the six month period prior to placement.

Table 3.8
Education by Gender and Age Group

Was the child registered in school at intake?:

	Boys 6-11		*Boys 12-16*		*Girls 12-16*		*Totals*	
	n	%	*n*	%	*n*	%	*N*	%
Yes	2	33	6	22	3	25	11	24
No	4	67	21	78	9	75	34	76
Totals...	6	100	27	100	12	100	45	100
Missing	-		-		2		2	

The absence of a school program is consistent across the three groups in this study. The highest proportion of children registered in school are the 6 to 11-year-old males (33%). Only 22 percent of the males aged 12 to 16, and 25 percent of the 12 to 16-year-old females were registered in school at the time of intake. Data were missing for two of the female subjects for this variable.

Socioeconomic Status

Previously cited research by Edelbrock & Achenbach, (1980) indicated that in a sample of 2,553 children, those having a total behavior problem score equal to or greater than 100 were of significantly lower socioeconomic status. A relatively small proportion of the population in this study

Table 3.9
Socioeconomic Status by Gender and Age Group

Was the family receiving income assistance at intake?:

	Boys 6-11		*Boys 12-16*		*Girls 12-16*		*Totals*	
	n	%	*n*	%	*n*	%	*N*	%
Yes	-		2	8	3	23	5	11
No	6	100	24	92	10	77	40	89
Totals.....	6	100	26	100	13	100	45	100
Missing	-		1		1		2	

(11%), were included in families receiving income assistance at the time of intake. As can be seen from Table 3.9 the three groups were relatively consistent on the socioeconomic variable. Only five families in total (11%) were receiving income assistance. Data were missing on two subjects for this variable. These findings appear inconsistent with the previous cited literature.

Ethnicity

Only two of the children in the present study were classified as Native American. The remaining 44 children were Non-Native. Native American children were defined as children of Treaty, Non-Treaty, and Metis status. Data was missing for one subject (See Table 3.10).The professional

Table 3.10
Ethnicity by Gender and Age Group

	Boys 6-11		*Boys 12-16*		*Girls 12-16*		*Totals*	
	n	%	*n*	%	*n*	%	*N*	%
Native	-		2	7	-		2	4
Non-Native	6	100	25	93	13	100	44	96
Totals...	6	100	27	100	13	100	46	100
Missing	-		-		1		1	

literature documents an overwhelmingly high proportion of Native American children placed in child welfare residential care in the province of Alberta. Also supported (Pardeck, 1985), is the finding that the caucasian child is the most likely candidate to experience placement disruption.

SUMMARY

Alberta Family and Social Services provided a roster of all children placed in receiving and assessment group homes from May 31, 1987 to May 31, 1988 in the designated region. The roster was compiled from the files of the Residential Services Program. The director and child-care staff of each of the ten receiving and assessment group homes provided identification of those children considered disruptive to their respective programs, and subsequent demographic and

behavioral information on each identified child. Permission to gather the necessary information was granted by Alberta Social Services.

Four criteria were necessary for a child to be included in the study. The population was selected from a list of all children residing in the ten receiving and assessment group homes in the designated region during the period from May 31, 1987 to May 31, 1988. Second, each child was identified by group home staff as disruptive to the receiving and assessment program. Third, the total behavior problem standardized *T* score of each child on the Child Behavior Checklist was above the 90th percentile for problem behavior. Finally, data were not missing for any more than eight of the behavioral problem items for each subject. Following the application of all four criteria, the final population consists of 47 children.

The dependent variable is problem behavior. The values of the dependent variable are internalizing and externalizing behavior as measured by the Child Behavior Checklist. The Child Behavior Checklist is a standardized instrument with demonstrated validity and reliability. The instrument also provides normative comparisons that allow differentiation between clinical and nonclinical behavior.

Four major methodological limitations have been identified. First, a narrow definition of the population limits generalization of the findings. Second, the child-care workers' knowledge of the child's identification as disruptive may have biased their ratings on the Child Behavior Checklist. Third, child-care staff were requested to recall the behaviors of children who were no longer residing in the receiving and assessment group homes. Finally, the collection of data from a single source is not congruent with the behavioral concept of situationism.

Six demographic variables relevant to the internalizing/externalizing classification were identified from a review of the professional literature. The demographic variables include: gender, age, parental structure, education, socioeconomic status, and ethnicity. Data collection for the dependent and demographic variables began in July, 1988.

Data analyses of the demographic variables reveal a population consisting of 33 males and 14 females. The average age of all gender and age groups is 13.7 years. The population is predominantly Non-Native (96%). The distribution of one-parent and two-parent families is relatively even. A low proportion of the families (11%) were receiving financial assistance at the time of the child's

placement in the group home. The most striking factor was the high number of children not registered in school at the time of intake. Seventy-six percent of the children were not registered in school. The description of the population on the six demographic variables is consistent with the majority of the literature presented in Chapter 2. An exception occurs with regard to the variable of socioeconomic status. To be consistent with the literature it would be expected that more families would have been receiving income assistance.

CHAPTER 4

FINDINGS AND DISCUSSION

This chapter presents the values of the dependent variable on three levels. First, mean frequencies of the 118 behavioral sub-variables are presented. Second, the 118 behavioral sub-variables are categorized into internalizing and externalizing syndromes. At the final, and broadest level of differentiation, the 47 subjects are classified as either Internalizers or Externalizers. The directional hypothesis as stated on page 11 proposes that: Children identified as disruptive, by staff in child welfare receiving and assessment group homes, will display higher levels of externalized as opposed to internalized behaviors. The test of hypothesis is based on a comparison between the total mean standardized internal and external behavior problem *T* scores.

THE DEPENDENT VARIABLE

The dependent variable was operationalized through use of the Child Behavior Checklist. The Child Behavior

Checklist consists of 118 behavior problem items. Each behavior item is rated for frequency on a three point ordinal scale. A frequency of "2" denotes a behavior that is very true, or often true of the child; a frequency of "1" denotes a behavior item that is sometimes true of the child; and a frequency of "0" represents an item that is not true of the child. Through factor analyses of the 118 behavior problem items, Achenbach and Edelbrock, (1983) derived eight or nine behavior problem syndromes for each gender and age group. In addition to the narrow syndrome classification, Achenbach and Edelbrock have developed a higher-order Internalizing and Externalizing classification.

Behavioral Sub-Variables

Forty-seven children were rated for their frequency of behavior on the 118 behavior problem items. Appendix F presents the rounded mean frequencies of all behavioral sub-variables included in this study. Rounded mean frequencies were calculated by summing the responses for each behavior item, and dividing the sum by the number of children in the respective gender and age group. The resulting averages were rounded for presentation purposes. The Child Behavior Checklist three point scale was divided into three equal intervals. An average of 0 through .66 was rounded to 0, an

average of .67 to 1.33 was rounded to 1, and an average of 1.34 and greater was rounded to 2.

As can be seen from Appendix F, the behaviors with the greatest frequencies of occurrence across all groups are: argues a lot; disobeys at home; lacks guilt; hangs around with children who get into trouble; impulsive or acts without thinking; lying or cheating; stubborn, sullen, or irritable; sudden changes in mood or feelings; and swearing and obscene language. These behaviors are reported to be very true, or often true of the child across all gender and age groups. Behaviors having the lowest frequency of occurrence across all groups include primarily eating, sleeping, speech, and physiological problems. By reviewing Appendix F, it would appear that the behaviors occurring most frequently are predominantly externalized as opposed to internalized behaviors.

Behavioral Problem Syndromes

Because of behavior variation related to differences of gender and age, syndromes applicable to each group contain various configurations of problem behaviors. The syndromes are classified according to the internalizing and externalizing dimensions of behavior. However, a third category of syndrome labelled mixed refers to behavior

clusters that contain items of both externalizing and internalizing natures.

Norms for the behavior problem syndromes have been developed from Child Behavior Checklists completed for 1,300 children who had not received mental health services for at least the preceding year. The normative sample of children were randomly selected from census tract data, and approximated in socioeconomic status, age, and racial distribution the clinical sample which had provided data for derivation of the behavior problem syndromes. For each syndrome, scores at or below the 98th percentile of the distribution of the normative sample for the appropriate gender and age group have been chosen as the upper limit of the "normal" range. The 98th percentile corresponds to the standardized *T* score of 70 for all syndromes.

Boys Aged 6-11. Appendix G presents rounded mean frequencies of problem behaviors for boys 6 to 11-years-of-age by syndrome. By viewing Appendix G it is obvious that boys in the 6 to 11-year-old age group display higher frequencies of externalized as opposed to internalized behaviors. The majority of the high frequency scores fall within the externalized syndromes.

Presenting aggregate data tends to diminish individual differences and hide extreme cases. However, an aggregate profile is an effective way to present large amounts of data. Figure 4.1 provides a profile of boys 6 to 11-years-of-age. The profile is based on plotting mean syndrome *T* scores. The mean syndrome *T* scores incorporate each child's individual scores and were calculated through use of the Statistical Package for the Social Sciences[PC+V2.0].

The horizontal axis of Figure 4.1 is divided into three sections. The left portion of the axis displays syndromes included in the internalizing dimension. For example, Schizoid or Anxious, Depressed, Uncommunicative, Obsessive Compulsive, and Somatic Complaints are the internalized syndromes represented for boys 6 to 11-years-of-age. The center portion of the axis displays the one mixed syndrome, Social Withdrawal. The right portion of the axis contains the three externalized syndromes: Hyperactive, Aggressive, and Delinquent.

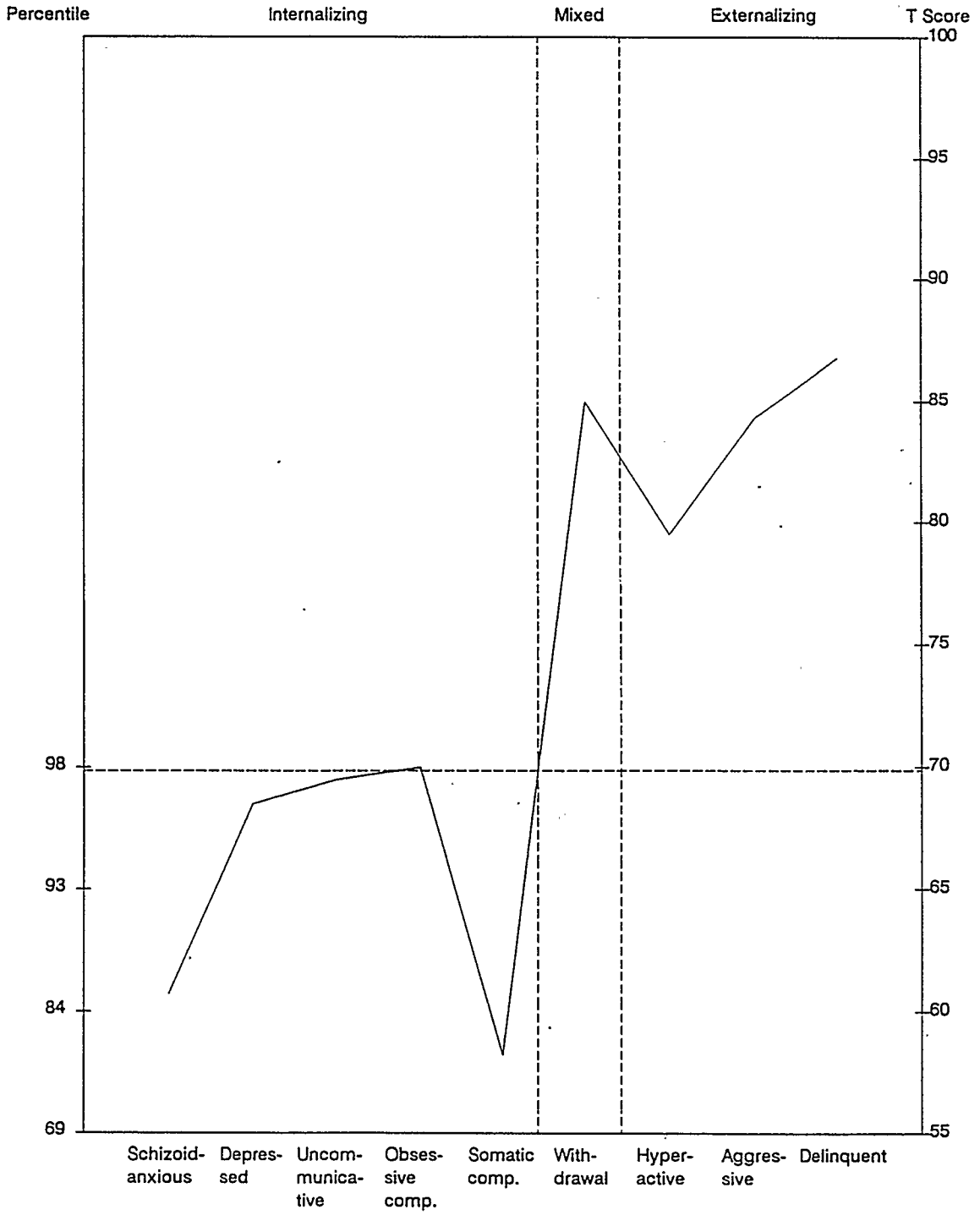
The vertical axes of Figure 4.1 provides a scale of percentile rankings on the left axis, and a scale of standardized *T* scores on the right axis. The horizontal line from the 98th percentile to the corresponding *T* value of 70 represents the clinical cutoff point for each syndrome. Any score falling above the horizontal line is considered to be

in the range of clinical pathology for the respective syndrome.

As can be seen from Figure 4.1, the mean standardized *T* scores for the externalized syndromes of boys 6 to 11-years-of-age are above the 98th percentile for problem behavior. The five internalized syndromes are within the normal to upper normal range for problem behavior.

Figure 4.1

Behavior Problem Profile of Boys Aged 6 to 11 by Syndrome

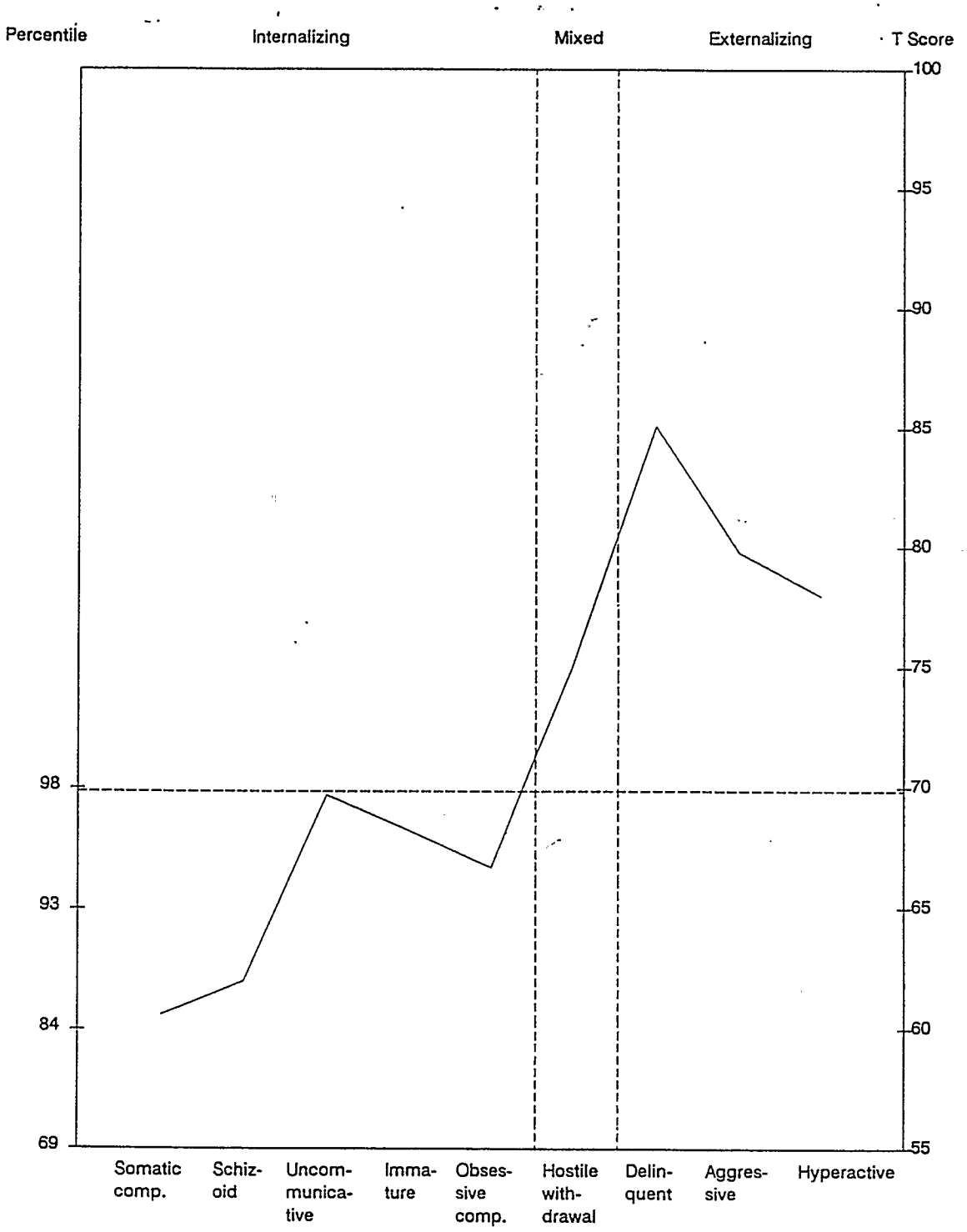


Boys Aged 12-16. Appendix H presents the rounded mean frequencies of problem behaviors for boys 12 to 16-years-of-age, as measured by the Child Behavior Checklist. The table of frequencies differentiates among those behaviors of an internalizing and externalizing nature. As is visible from Appendix H, a relatively large number of "2s" which are representative of the highest frequency of behavior appear in the externalizing syndromes.

The mean syndrome *T* scores for boys 12 to 16-years-of-age are plotted to produce Figure 4.2. The figure presents a profile of the behavior. The internalizing syndromes of Somatic Complaints, Schizoid, Uncommunicative, Immature, and Obsessive Compulsive are nonclinical in nature. However, behavior problems for the mixed syndrome, Hostile Withdrawal, and the three externalizing syndromes appear highly pathological. The respective mean standardized *T* scores for the externalizing syndromes of Delinquent, Aggressive, and Hyperactive are 85.1, 79.8, and 78.0. The maximum standardized *T* score attainable for each syndrome is 100.

Figure 4.2

Behavior Problem Profile of Boys Aged 12 to 16



Girls Aged 12-16. Appendix I presents the rounded mean frequencies of problem behaviors for girls 12 to 16-years-of-age. Consistent with the two groups of male subjects, the females in the population appear to display higher frequencies of externalized as opposed to internalized behavior.

Figure 4.3 is a graphic presentation of the mean syndrome *T* scores. As can be seen from Figure 4.3, the females 12 to 16-years-of-age have highly externalized behavior. The three externalized syndromes: Delinquent, Aggressive, and Cruel are all in the pathological range for problem behavior. However, behavior problems on the mixed and internalizing dimensions are nonclinical in nature.

Figure 4.3

Behavior Problem Profile of Girls Aged 12 to 16

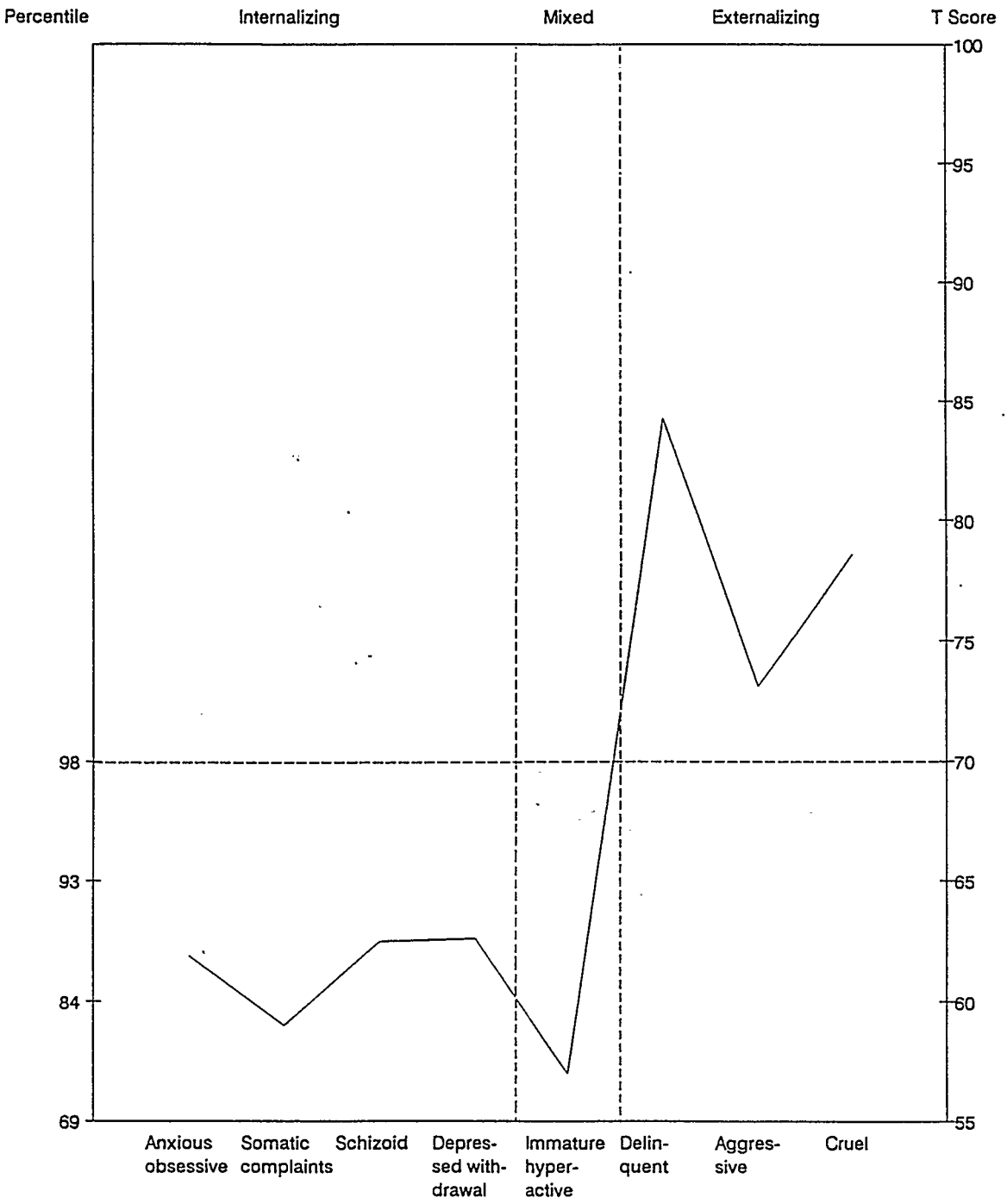


Table 4.1 presents mean standardized syndrome *T* scores for the three gender and age groups. When including each child's actual scores in the computation of mean group internalizing and externalizing syndrome *T* scores the entirety of the internalizing syndromes fall below the 98th percentile for problem behavior ($T \leq 70$). The externalizing

Table 4.1
Mean Standardized *T* Scores of Child Behavior Checklist Syndromes by Gender and Age Group

	Boys 6-11 N = 6		*Boys 12-16 N = 27*		*Girls 12-16 N = 14*	
Syndrome	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*
Internalizing						
Schizoid/Anxious	60.7	6.8				
Depressed	68.5	10.6				
Uncommunicative	69.5	10.1	69.7	6.8		
Obsessive Compulsive	70.0	12.2	66.7	9.8		
Somatic Complaints	58.2	3.9	60.6	9.2	59.0	6.1
Schizoid			62.0	7.7	62.5	6.2
Immature			68.2	8.2		
Anxious Obsessive					61.9	5.8
Depressed Withdrawal					62.6	5.0
Externalizing						
Hyperactive	79.5	6.5	78.0	9.5		
Aggressive	84.3	4.9	79.8	11.7	73.1	12.2
Delinquent	86.8	7.7	85.1	15.1	84.3	6.6
Cruel					78.6	7.5

syndrome *T* scores for the three gender and age groups all fall within the pathological range for problem behavior (*T* > 70). However, because each syndrome includes various numbers of behavior problem items, and each item is weighted for its contribution to the overall classification, a more empirical means than comparison among syndromes is necessary to differentiate between Internalizers and Externalizers.

TEST OF HYPOTHESIS

The overall classification of children as Externalizers or Internalizers requires the calculation of total external and internal mean standardized *T* scores. Table 4.2 presents the mean standardized *T* scores for the three groups on the overall internalizing and externalizing dimensions.

Table 4.2
Mean Standardized *T* Scores of the Internalizing and Externalizing Dimensions by Gender and Age Group

Gender	*Age*	*N*	*Mean External T*	*SD*	*Mean Internal T*	*SD*
Boys	6-11	6	82.0	3.5	70.5	5.1
Boys	12-16	27	79.8	8.3	67.2	4.6
Girls	12-16	14	74.2	8.3	59.9	4.6

For both the male and female children, classification by the overall internalizing and externalizing dimensions resulted in a population with mean standardized *T* scores in the clinical range for externalizing behaviors. The males 6 to 11-years-of-age formed a more homogeneous group in terms of externalized behavior than the older male and female groups. This is evidenced by the relatively high external *T* (82), and the relatively low standard deviation (3.5). With the exception of the 6 to 11-year old males, the overall mean standardized *T* scores for the internalizing dimension were in the nonclinical range. The mean standardized internal T score for boys 6 to 11-years-of-age is only slightly within the pathological range at $T = 70.5$.

To test the directional hypothesis that children identified as disruptive in receiving and assessment group homes will display higher levels of externalized as opposed to internalized behavior, the criteria suggested by Achenbach and Edelbrock, (1983) were employed. Achenbach and Edelbrock suggest that children only be classified as Internalizers or Externalizers if (a) their total behavior problem score exceeds the 90th percentile for their gender and age group, and (b) there is a difference of at least 10 points between their total internalizing and externalizing standardized *T* scores. The larger the difference between standardized *T* scores, the purer the classification. The use

of these criteria as a test of the hypothesis are validated by their comparative application in published research (Hornick, Phillips, & Kerr, 1989; Mooney, Thompson, & Nelson, 1987; Brodzinsky, Radice, Huffman, & Merkler, 1987; McIntyre & Keesler, 1986; Fischer, Rolf, Hasazi, & Cummings, 1984).

The mean difference is equal to the difference between the mean standardized *T* score of the total internalized and externalized dimensions for each gender and age group (See Table 4.3). For example, the mean standardized *T* score difference for boys 6 to 11-years-of-age is 11.5 (82.0 - 70.5 = 11.5). Therefore, as evidenced by Table 4.3, there is sufficient support to reject the null hypothesis for all three gender and age groups represented in the present study. The population exhibits substantively higher externalized as opposed to internalized behavior.

Table 4.3
Mean Differences between Internalizing and Externalizing Standardized *T* Score Means by Gender and Age Group

Gender	*Age*	*Number*	*External Mean*	*Internal Mean*	*Mean Difference*
Boys	6-11	6	82.0	70.5	11.5
Boys	12-16	27	79.8	67.2	12.6
Girls	12-16	14	74.2	59.9	14.3

DISCUSSION

Use of the Child Behavior Checklist to operationalize the dependent variable requires separation of the 47 children into three gender and age groups. The Child Behavior Checklist is sensitive to behavioral variation related to developmental differences in gender and age. Three groups are represented in the present study: boys aged 6-11, boys aged 12-16, and girls aged 12-16.

Data analyses of the dependent variable are presented at three levels. First, the rounded mean frequencies of the 118 behaviors were presented for each gender and age group. This level of classification demonstrates higher frequencies of externalized behaviors among the three gender and age groups.

Second, examination of the 118 behaviors in terms of their contribution to the externalizing and internalizing syndrome *T* scores also implies a population with predominantly externalized behavior. The Delinquent syndrome is the highest rated syndrome among the three gender and age groups. The mean standardized *T* scores for the Delinquent syndrome are: 84.3 for females 12 to 16-years-of-age, 86.8 for males 6 to 11-years-of-age, and 85.1 for males 12 to 16-years-of-age. A *T* score greater than 70 is the value

required to place a child above the 98th percentile for problem behavior based on a normative comparison.

Aggressive is the second most highly rated syndrome among the three gender and age groups. Mean standardized *T* scores for the Aggressive syndrome are: 84.3, for males 6 to 11-years-of-age, 79.8 for males 12 to 16-years-of-age, and 73.1 for females. The Aggressive syndrome represents a collection of behavior items such as: argues a lot, temper tantrums, physically attacks people, cruel to others, screams a lot, and unusually loud.

Mean standardized *T* scores for the internalizing syndromes all fall within the normal range. This does not indicate an absence of internalized behavior, but rather that the frequencies of internalized behaviors are considered to be within the norm for children of comparative gender and age. The highest rated internalizing syndrome is Obsessive Compulsive ($T = 70$) for boys 6 to 11-years-of-age. This syndrome includes such behaviors as: nightmares, daydreams, trouble sleeping, too fearful or anxious, hoarding, compulsive acts, and sleep walking.

The final level of classification empirically substantiates the observations made at the behavior item and syndrome levels. Examination of mean differences in

standardized *T* scores between the overall externalizing and internalizing dimensions allows classification of the three gender and age groups as Externalizers. These finding are consistent with the alternative hypothesis.

CHAPTER 5

CONCLUSIONS AND IMPLICATIONS

The purpose of this study was to examine the behavior of children in group care, specifically those children identified as disruptive by staff in child welfare receiving and assessment group homes. The feasibility of this study was enhanced by the availability of the Child Behavior Checklist developed by Achenbach and Edelbrock, (1983). The Child Behavior Checklist was used to measure the internalizing and externalizing dimensions of behavior. Cut-off scores that allow discrimination between nonclinical and clinical behavior have been established by Achenbach and Edelbrock, providing objectivity, reliability, and validity in the assessment of child psychopathology.

Chapter 2 examined six demographic variables associated with internalizing and externalizing behavior as identified in the professional literature. These six variables were: gender, age, parental structure, education, socioeconomic status, and ethnicity. A questionnaire was developed to collect the demographic data (Appendix E).

Following identification of those children considered disruptive to the ten receiving and assessment group homes by group home staff, data collection on the demographic and behavioral variables began as outlined in Chapter 3. A Child Behavior Checklist and a demographic questionnaire were forwarded to the respective group home for each identified child. Permission to collect the data was granted by Alberta Family and Social Services. Demographic data collected on the 47 children were presented in Chapter 3 as a description of the population.

Two statistical computer software programs were utilized for data analyses. The computerized version of the Child Behavior Checklist computes standardized *T* scores for the internalizing and externalizing behavior dimensions. Analyses of the demographic data and computation of mean standardized *T* values were performed through use of the personal computer version of the Statistical Package for Social Science$^{PC+V2.0}$. The findings were reported in Chapter 4.

For purposes of this study, children were only classified as having predominantly internalized or externalized behaviors if (a) their total behavior problem score exceeded the 90th percentile for their gender and age group on the Child Behavior Checklist, and (b) there was a

difference of at least 10 points between the mean standardized internal and external *T* scores. As was reported in the previous chapter, the 47 children identified as disruptive in the ten receiving and assessment group homes displayed substantively higher levels of externalized as opposed to internalized behavior. The aggregate of externalized syndromes are in the pathological range for all gender and age groups represented in the present study.

Essentially, two levels of implications must be considered when examining the findings. Preventative implications target factors that may minimize or eliminate conditions that affect or contribute to pathological behavior development. Service implications focus on factors that relate to the population studied. This chapter will examine the findings in light of preventative and service implications for social work education, practice, policy, and research.

PREVENTATIVE IMPLICATIONS

The present study utilized a "one-group posttest-only" research design. The purpose of the research design is exploratory. The lack of random sampling procedures and control for intervening variables renders the data unsuitable for generalizing beyond the particular group or

setting studied. However, this design does have utility in generating hypotheses which may be verified by using more rigorous research designs.

The range of difficulties presented by children and the range of possible causes for the difficulties are extensive. The ultimate aim of research on child psychopathology is to aid children by preventing maladaptive development. Social workers play a key role in the provision of services to children and are therefore prime candidates for gathering information for explanatory research endeavors.

The first set of implications relates to the particular histories of the 47 children that have led to their current states of behavior. Previous studies have verified that behavior disorders are frequent among children in alternative care. Most children who live in an alternative caregiving environment are from families handicapped by poverty and manifesting familial disruptions, cultural deprivations, and stresses that are associated with neglect and abuse (McIntyre & Keesler, 1986). Two of the research questions generated by this study are: (1) What are the factors that contribute to pathological levels of externalized behavioral development?, and (2) To what extent

does early onset externalized behavior influence subsequent adult behavior?

Understanding the factors that contribute to the development of pathological levels of externalized behavior requires the formulation and testing of predictive research equations. Six of many potential demographic variables were examined in the present study. The variables were chosen for their prevalence in the professional literature and are appropriate for inclusion in an explanatory research design.

Findings on the six demographic variables were generally consistent with comparable studies of children in out-of-home care as cited in Chapter 2. The majority of children identified for inclusion in the population are male as opposed to female by a ratio of 33:14. The average age of the total population is 13.7 years. No females are represented in the 6 to 11-year-old age group. The education variable revealed 73 percent of the population as not registered in school at the time of intake. Although seemingly high, this finding is consistent with Whittaker, Fine, and Grasso, (1989).

The number of one-parent and two-parent families were relatively equal. Examining other possible variations in family situations such as family functioning, or number of

marital separations might be of greater validity in the prediction of child behavior.

Low socioeconomic status has been reported as being associated with high levels of externalizing behavior among children. Only 11 percent of the children's parents were receiving income assistance at the time of intake. This finding does not necessarily indicate a deviation from previous findings, but rather the need for an alternative measurement of socioeconomic status. That 89 percent of parents were not receiving income assistance does not preclude the possibility that they were among the homeless or the working poor.

Native American children constituted only four percent of the population. While this finding is consistent with previous research, other minorities may have been represented in the 96 percent Non-Native population. A more precise measure of ethnicity would be favorable in terms of validating previous research.

The population in this study exhibits externalized behavior at the extreme end of the behavioral continuum. Possibilities exist for further comparison of this homogeneous group with other populations that have not manifested similar forms of development. Comparisons made

between distinct populations have the potential to highlight differences in the processes and structures that may lead to behavior pathology.

Of all the preventable social problems, children who manifest pathological levels of externalized behavior are among the most worthy of attention. As cited in Chapter 2, children with antisocial behavior present the highest risk for psychiatric disorder in adulthood. The incidence of externalized behavior in youth has been positively correlated with subsequent externalizing and internalizing behavioral disorders.

Children who manifest clinical levels of externalized behavior are costly to society in terms of incarceration, property destruction, and victimization of others (McIntyre & Keesler, 1986). In personal costs, studies indicate relatively high levels of homicide, suicide, unemployment, drug use, and family dysfunction (McIntyre & Keesler, 1986). Identification of a homogeneous group of children manifesting significant levels of externalized behavior presents an appropriate point from which to initiate further research efforts. However, the way to understand pathological behavior is not just by conducting descriptive studies, but also by testing hypotheses that propose to

modify risk factors through controlled treatment interventions.

Just as children are screened for hearing and vision problems, early screening could identify children who exhibit behaviors which longitudinal research has shown will continue to escalate and are predictive of long term adjustment problems. Ideally, systematic screening for behavior disorders would call attention to specific behaviors exhibited by the child, provide comparative data on the behaviors with other children of the same gender and age, and alert caregivers to the need for further assessment or intervention.

The assumption exists that treatment and preventative efforts are likely to be more effective when applied to the younger child. Such assumptions have yet to be well tested. The children in the present study manifested severe behavioral pathology at a relatively young age. The average age in the entire population is 13.7 years. Examination of children at various ages, and evaluation of differences in dysfunction are important areas yet to be explored.

SERVICE IMPLICATIONS

Current child welfare legislation in the province of Alberta directs that all services to families and children be delivered "in the best interest of the child" (Province of Alberta, 1989). The second, and perhaps more important set of implications refers to the broader social context that determines what services behaviorally disturbed children and their families will receive.

Shared Responsibility

Children similar to those described in this study are familiar to most child welfare social workers. Often the conversation about such children centers upon the difficulties they are likely to encounter later in life, or the problems they will present to society. When child welfare services are requested for children it is often only after other systems (educational, medical, and legal) have failed.

In Alberta, education is legislated as compulsory between 6 and 16-years-of-age. Although the educational system seeks to promote the social context in which children are expected to develop and become socialized to the dominant culture, this study shows that it is unable and/or

unwilling to benefit a proportion of the population it is mandated to serve.

Only 24 percent of the children in this study were registered in school at the time of placement. Perhaps more significant is the finding that only 33 percent of the boys in the 6 to 11-year-old age group were registered in school. Thirty-four of a possible 45 children for which data were available were not eligible to attend school. This finding represents a substantial gap between government legislation and practice. The roles of all major societal institutions must be reevaluated in determining responsibility for the provision of services to children such as those described in this study.

Deinstitutionalization

Considerable effort is being made to ensure that fewer and fewer children are placed or remain in institutions. The practice of placing disturbed children in group homes and institutions has been criticized for failing to produce skills and behaviors that children require to function in a normalized environment at the termination of services.

Deinstitutionalization has had a tremendous impact on the role of the social worker in the treatment and care of

children. The philosophy of Alberta Family and Social Services is consistent with the practice of deinstitutionalization. Now that more and more children are being kept in the community there is a demand for a different spectrum of services. The lack of attendance in educational programs compounds the difficulty of placing these children in a community setting. Indeed this particular population is representative of the children who are most difficult to place outside of institutional care.

Social workers are in a position to be leaders in the struggle for improved and expanded services for children. The emergence of treatment foster care is one example of an innovative service. Children who formerly would have been in institutions or those who have been institutionalized are now being discharged to family settings. The treatment foster care model has flourished in North America due to both its philosophic appeal, and its lower capital and operating costs compared to institutional care (Chamberlain, 1990). The idea that trained foster parents can be primary treatment agents for difficult-to-manage children is equally appealing to practitioners and policy makers. Family placements for this population must encompass therapeutic intervention, as well as caregiving.

The population in the present study scored consistently high on the externalized syndrome of Delinquency. The syndrome of Delinquency as measured by the Child Behavior Checklist includes 12 to 16 behaviors depending upon the gender and age group. Examples of Delinquent behavior problem items are: stealing outside the home, stealing at home, setting fires, running away, destroying own and others' belongings, swearing or obscene language, using alcohol or drugs, skipping school, impulsive behavior, and vandalism.

Wolf, Braukman, and Ramp, (1987) have described delinquency as an ongoing problem. Effective treatments for delinquency are described by Reid, (1986) as requiring constant attention although permanent successful results are seldom achieved. Children displaying high levels of externalized delinquent behavior can be maintained in community settings only as long as their social environment is carefully designed to provide them with structured support and supervision. Behavioral information is imperative to the design and implementation of individualized treatment programs that will potentially help to maintain behaviorally disturbed children in community settings.

Systematic studies on the effectiveness of treatment foster care for children with various types and degrees of externalized behavior should be undertaken. To date, evaluations of treatment foster care programs have been neglected. Outcome measures specific to the child need to be developed in addition to the more common types of process evaluation (Bryant, 1990).

Advocacy

In addition to educating and helping families, social workers have a responsibility to educate the communities in which children such as those described in the present study live. The expectation that communities will care for these children and respond openly to the needs of their families requires programs of community education based on who these children are. Much of the work with children who manifest pathological development is aimed not at removing or altering the causes of the problem, but rather at helping the children and others in their environment to cope. There is a need to build family and community networks that will support families and help children to function within the scope of their capabilities.

Major funding is necessary to develop a network of programs, resources, and supports that equal good community

care. To make the case for such funds requires both political skill and sound knowledge. Of primary importance for these purposes is the determination of the prevalence of clinical disorders in the general population, as compared to children in out-of-home placements.

Accountability

Social workers have a responsibility not only to advocate funds and programs for children, but to begin demonstrating more accountability for services rendered. In terms of services, they must ask themselves what is in the best interests of this population. Perhaps the most relevant process to determine the significance of child psychopathology is through long-term follow-up. Major adult disorders may be best understood through the longitudinal study of children who are potentially at risk for adult disorders.

Because of the relatively low rate of severe psychopathology in the general population, long-term studies of subjects known to be at risk are more feasible than traditional long-term studies of broad samples of children. Generally follow-up studies require costly research. In the end such research has the potential to produce valuable

information for directing both intervention, policy, and prevention.

SUMMARY

The results of the present study have identified several clinically significant features of externalizing behavior disorders which should serve as targets for assessment, intervention, and further research with the 47 children included in the present study. An essential function of the child welfare social worker is the ability to mobilize appropriate resources on behalf of identified clients. The linkage to appropriate resources presupposes a thorough knowledge of the child's behavioral functioning.

The field of social work has long included direct work with children and families as an area of expertise. The child welfare social worker is often the first professional a child and its family encounter when some difficulty in functioning is identified. Therefore, it is critical that social workers have detailed and current knowledge of childhood functioning, both normal and pathological.

The behavioral information produced in the present study is necessary to determine the extent and variety of services required. Information based on research provides an

articulated basis for beginning to understand and relate to other disciplines, the profiles and etiologies of behavior disordered children in an attempt to create a system of shared and responsible community care.

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APPENDIX A

PROBLEM BEHAVIORS OF BOYS AGED 6-11 BY SYNDROME

Problem Behaviors of Boys Aged 6-11 by Syndrome

Internalizing Syndromes

1 Schizoid or Anxious:

- Hears things that are not there
- Sees things that are not there
- Fears certain animals, situations or places, other than school
- Shy or timid
- Fears going to school
- Too fearful or anxious
- Nightmares
- Plays with sex parts in public
- Clings to adults

2 Depressed:

- Feels worthless or inferior
- Feels too guilty
- Feels he has to be perfect
- Feels or complains that no one loves him
- Worrying
- Unhappy, sad or depressed
- Fears own impulses
- Talks about killing self
- Complains of loneliness
- Cries a lot
- Too fearful or anxious
- Self-conscious or easily embarrassed
- Feels persecuted
- Sulks a lot
- Nervous, highstrung or tense
- Deliberately harms self
- Suspicious

3 Uncommunicative:

- Refuses to talk
- Secretive, keeps things to self
- Shy or timid
- Unhappy, sad, or depressed
- Stubborn, sullen or irritable
- Stares blankly
- Self-conscious or easily embarrassed
- Confused

4 Obsessive Compulsive:

- Strange ideas
- Too fearful or anxious
- Trouble sleeping
- Sleeps less than most children
- Strange behavior
- Obsessive thoughts
- Walks, talks in sleep
- Stares blankly
- Daydreams
- Nervous movements or twitching
- Hoarding
- Repeats certain acts over (compulsions)
- Overtired
- Confused
- Talks too much
- Nightmares

Problem Behaviors of Boys Aged 6-11 by Syndrome (Contd)

Internalizing Syndromes

5 Somatic Complaints (behaviors without medical cause):

- Stomachaches or cramps
- Headaches
- Nausea
- Aches or pains
- Vomiting, throwing up
- Constipated
- Dizziness
- Sleeps more than most children
- Overtired

Mixed Syndrome

1 Social Withdrawal:

- Not liked by other children
- Poor peer relations
- Withdrawn, does not get involved
- Likes to be alone
- Underactive, lacks energy, slow
- Gets teased a lot
- Prefers playing with younger children
- Feels persecuted

Externalizing Syndromes

1 Hyperactive:

- Cannot concentrate
- Acts too young for his age
- Poor school work
- Poorly coordinated or clumsy
- Confused
- Daydreams
- Impulsive
- Prefers playing with younger children
- Restless, hyperactive
- Speech problem
- Destroys own things

2 Aggressive:

- Argues a lot
- Disobedient at home
- Temper tantrums or hot temper
- Poor peer relations
- Stubborn, sullen or irritable
- Gets in many fights
- Cruel to others
- Threatens people
- Teases a lot
- Showing off or clowning
- Physically attacks people
- Unusually loud
- Not liked by other children
- Screams a lot
- Swearing or obscene language
- Disobedient at school
- Sulks a lot
- Bragging, boasting
- Lying or cheating
- Easily jealous
- Sudden changes in mood
- Demands a lot of attention
- Talks too much

Problem Behaviors of Boys Aged 6-11 by Syndrome (Contd)

Externalizing Syndromes

3 Delinquent:

- Steals outside the home
- Steals at home
- Vandalism
- Sets fires
- Truancy, skips school
- Disobedient at school
- Hangs around with children who get into trouble
- Runs away from home
- Destroys others' things
- Lying or cheating
- Destroys own things
- Swearing or obscene language

APPENDIX B

PROBLEM BEHAVIORS OF BOYS AGED 12-16 BY SYNDROME

Problem Behaviors of Boys Aged 12-16 by Syndrome

Internalizing Syndromes

1 Somatic Complaints (problems without medical cause):

- Nausea, feels sick
- Aches or pains
- Stomachaches or cramps
- Underactive, lacks energy
- Overtired
- Feels dizzy
- Vomiting, throwing up
- Rashes or other skin problems
- Problems with eyes
- Headaches
- Accident prone
- Constipated
- Worrying
- Too fearful or anxious
- Stares blankly

2 Schizoid:

- Feels too guilty
- Fears own impulses
- Too concerned with neatness or cleanliness
- Acts like the opposite sex
- Hears things that are not there
- Feels dizzy
- Feels he has to be perfect
- Clings to adults
- Worrying
- Fears going to school

3 Uncommunicative:

- Secretive, keeps things to self
- Underactive, lacks energy
- Refuses to talk
- Withdrawn, does not get involved
- Stares blankly
- Likes to be alone
- Unhappy, sad, or depressed
- Self-conscious or easily embarrassed
- Shy or timid
- Sulks a lot
- Suspicious
- Stubborn, sullen or irritable
- Sudden changes in mood
- Worrying
- Confused

4 Immature:

- Cries a lot
- Acts too young for his age
- Demands a lot of attention
- Clings to adults
- Wets the bed
- Prefers playing with younger children
- Whining

Problem Behaviors of Boys Aged 12-16 by Syndrome (Contd)

Internalizing Syndromes

5 Obsessive-Compulsive:

- Obsessive thoughts
- Repeats certain acts over and over (compulsions)
- Strange ideas
- Hoarding
- Fears own impulses
- Daydreams
- Bragging, boasting
- Unusually loud
- Strange behavior

Mixed Syndrome

1 Hostile Withdrawal:

- Not liked by other children
- Acts too young for his age
- Gets teased a lot
- Feels worthless or inferior
- Destroys own things
- Prefers playing with younger children
- Feels persecuted
- Withdrawn, does not get involved
- Complains of loneliness
- Poor peer relations
- Destroys others' things
- Feels or complains that no one loves him
- Poorly coordinated or clumsy
- Gets in many fights

Externalizing Syndromes

1 Delinquent:

- Steals outside the home
- Steals at home
- Hangs around with children who get into trouble
- Vandalism
- Lying or cheating
- Truancy, skips school
- Destroys others' things
- Uses alcohol or drugs
- Disobeys at school
- Runs away from home
- Destroys own things
- Poor school work
- Sets fires

Problem Behaviors of Boys Aged 12-16 by Syndrome (Contd)

Externalizing Syndromes

2 Aggressive:

- Threatens people
- Temper tantrums or hot temper
- Cruel to others
- Disobeys at home
- Swearing or obscene language
- Screams a lot
- Demands a lot of attention
- Nervous, highstrung or tense
- Physically attacks people
- Stubborn, sullen or irritable
- Teases a lot
- Easily jealous
- Sudden changes in mood
- Restless or hyperactive
- Impulsive
- Gets in many fights
- Sulks a lot
- Argues a lot
- Feels persecuted
- Unusually loud
- Suspicious
- Talks too much

3 Hyperactive:

- Cannot concentrate
- Restless or hyperactive
- Acts too young for his age
- Poorly coordinated or clumsy
- Nervous, highstrung or tense
- Disobeys at school
- Poor school work
- Showing off or clowning
- Impulsive
- Bites fingernails

APPENDIX C

PROBLEM BEHAVIORS OF GIRLS AGED 12-16 BY SYNDROME

Problem Behaviors of Girls Aged 12-16 by Syndrome

Internalizing Syndromes

1 Anxious Obsessive:

- Too fearful or anxious
- Worrying
- Cries a lot
- Feels worthless or inferior
- Feels she has to be perfect
- Fears own impulses
- Complains of loneliness
- Self-conscious or easily embarrassed
- Sleeps less than most children
- Feels or complains that no loves her
- Nightmares
- Fears going to school
- Feels persecuted
- Trouble sleeping
- Fears certain animals, situations, or places other than school
- Obsessive thoughts
- Feels too guilty
- Easily jealous

2 Somatic Complaints (problems without medical cause):

- Nausea, feels sick
- Stomachaches or cramps
- Aches or pains
- Headaches
- Feels dizzy
- Vomiting, throwing up
- Problems with eyes
- Fears going to school

3 Schizoid:

- Hears thing that are not there
- Thinks about sex too much
- Sees things that are not there
- Nightmares
- Fears certain animals, situations or places other than school
- Stares blankly
- Strange ideas
- Strange behavior
- Daydreams

4 Depressed Withdrawal:

- Withdrawn, does not get involved
- Unhappy, sad or depressed
- Stubborn, sullen or irritable
- Secretive, keeps thing to self
- Likes to be alone
- Underactive, lacks energy
- Sleeps more than most children
- Sulks a lot
- Refuses to talk
- Overtired
- Self-conscious or easily embarrassed
- Stares blankly
- Shy or timid

Problem Behaviors of Girls Aged 12-16 by Syndrome (Contd)

Mixed Syndrome

1 Immature-Hyperactive:

- Acts too young for her age
- Prefers playing with younger children
- Poorly coordinated or clumsy
- Cannot concentrate
- Not liked by other children
- Picks nose, skin, or other parts of the body
- Confused
- Hoarding
- Restless, hyperactive
- Clings to adults
- Gets teased a lot
- Stares blankly
- Daydreams
- Thumbsucking
- Poor peer relations

Externalizing Syndromes

1 Delinquent:

- Hangs around with children who get into trouble
- Lying or cheating
- Swearing or obscene language
- Truancy, skips school
- Poor school work
- Uses alcohol or drugs
- Disobeys at school
- Prefers playing with older children
- Steals at home
- Steals outside the home
- Impulsive
- Runs away from home
- Cannot concentrate
- Disobeys at home
- Secretive
- Lacks guilt

2 Aggressive:

- Temper tantrums or hot temper
- Unusually loud
- Stubborn, sullen or irritable
- Screams a lot
- Teases a lot
- Threatens people
- Physically attacks people
- Demands a lot of attention
- Swearing or obscene language
- Showing off or clowning
- Feels or complains that no one loves her
- Talks too much
- Sudden changes in mood
- Sulks a lot
- Gets in many fights
- Bragging, boasting
- Argues a lot
- Easily jealous
- Feels persecuted
- Disobeys at home
- Suspicious
- Cruel to others

Problem Behaviors of Girls Aged 12-16 by Syndrome (Contd)

Externalizing Syndromes

3 Cruel:

- Destroys others' things
- Cruel to animals
- Physically attacks people
- Not liked by other children
- Destroys own things
- Cruel to others
- Steals at home
- Threatens people
- Feels persecuted
- Gets in many fights
- Poor peer relations
- Vandalism

APPENDIX D

CHILD BEHAVIOR PROBLEM SYNDROMES BY GENDER AND AGE

Child Behavior Problem Syndromes by Gender and Age

	Internalizing Syndromes	*Mixed Syndromes*	*Externalizing Syndromes*
Boys 6-11	Schizoid or Anxious Depressed Uncommunicative Obsessive-Compulsive Somatic Complaints	Social Withdrawal	Delinquent Aggressive Hyperactive
Boys 12-16	Somatic Complaints Schizoid Uncommunicative Immature Obsessive-Compulsive	Hostile Withdrawal	Hyperactive Aggressive Delinquent
Girls 6-11	Depressed Social Withdrawal Somatic Complaints Schizoid-Obsessive		Cruel Aggressive Delinquent Sex Problems Hyperactive
Girls 12-16	Anxious-Obsessive Somatic Complaints Schizoid Depressed Withdrawal	Immature-Hyperactive	Cruel Aggressive Delinquent

NOTE: The behavior problem syndromes are listed in descending order of significance of contribution to the internalizing/externalizing factors.

APPENDIX E

DEMOGRAPHIC QUESTIONNAIRE

DEMOGRAPHIC QUESTIONNAIRE

Child's Name_____

Receiving Home_____

Note: If you are not certain about a response please do not answer the question.

1. What is the child's gender? Circle the correct response.
   0. Male
   1. Female

2. What was the child's age at intake? Write the number in years on the line below.
   _____years.

3. Was the child's family receiving income assistance at the time of intake to the receiving and assessment home? Circle the correct response.
   0. Yes
   1. No

4. Is the child a Native American (including treaty, non-treaty, metis status)? Circle the correct response.
   0. Yes
   1. No

5. What was the parental structure at the time of intake? Circle the correct response.
   0. One-parent
   1. Two-parent (Biological)
   2. Two-parent (Non-biological)
   3. No parent(s)
   4. Two-parent (One biological & one non-biological)

6. Was the child registered in school at the time of intake? Circle the correct response.
   0. Yes
   1. No

APPENDIX F

ROUNDED MEAN FREQUENCIES OF PROBLEM BEHAVIORS BY GENDER AND AGE

Rounded Mean Frequencies of Problem Behaviors by Gender and Age

Behaviors	*Mean Frequency* Boys 6-11	Boys 12-16	Girls 12-16
1. Acts too young	2	1	0
2. Allergy	0	0	0
3. Argues a lot	2	2	2
4. Asthma	0	0	0
5. Acts like opposite sex	0	0	0
6. Bowel movements outside toilet	1	0	0
7. Bragging, boasting	2	2	1
8. Cannot concentrate	2	2	1
9. Obsessions	1	0	1
10. Restless	2	1	1
11. Clings to adults	1	0	0
12. Lonely	1	0	0
13. Confused	1	1	0
14. Cries much	1	0	0
15. Cruel to animals	1	0	0
16 Cruel to others	2	1	1
17. Daydreams	2	0	0
18. Harms self	1	0	1
19. Demands attention	2	2	1
20. Destroys own things	2	1	0
21. Destroys others' things	2	1	0
22. Disobeys at home	2	2	2
23. Disobeys at school	2	2	1
24. Doesn't eat well	0	0	0
25. Poor peer relations	2	1	1
26. Lacks guilt	2	2	2
27. Jealous	1	1	1
28. Eats nonfood	0	0	0
29. Fears animals, situations or places	0	0	0
30. Fears school	1	0	0
31. Fears own impulses	1	0	0
32. Needs to be perfect	1	0	0
33. Feels unloved	2	1	1
34. Feels persecuted	1	2	1
35. Feels worthless	2	1	1
36. Accident prone	1	0	0
37. Fights	2	2	1
38. Is teased	2	1	0
39. Hangs around with children who get in trouble	2	2	2
40. Hears things that are not there	0	0	0
41. Impulsive or acts without thinking	2	2	2
42. Likes to be alone	2	0	0

Rounded Mean Frequencies of Problem Behaviors by Gender and Age (Contd)

Behaviors	*Mean Frequency* Boys 6-11	Boys 12-16	Girls 12-16
43. Lying or cheating	2	2	2
44. Bites fingernails	1	1	0
45. Nervous, highstrung, or tense	1	2	1
46. Nervous movements or twitching	0	0	0
47. Nightmares	0	0	0
48. Not liked by other children	1	1	1
49. Constipated	0	0	0
50. Too fearful or anxious	1	0	0
51. Feels dizzy	0	0	0
52. Feels too guilty	0	0	0
53. Overeats	0	0	0
54. Overtired	0	0	0
55. Overweight	0	0	0
56. Physical problems without known medical cause:			
a. Aches or pains	0	0	0
b. Headaches	0	0	0
c. Nausea	0	0	0
d. Eye problems	0	0	0
e. Rashes or other skin problems	0	0	0
f. Stomachaches or cramps	0	0	0
g. Vomiting, throwing up	0	0	0
h. Other	0	0	0
57. Physically attacks people	2	2	1
58. Picks nose, skin, other parts of body	1	0	0
59. Plays with own sex parts in public	0	0	0
60. Plays with own sex parts too much	0	0	0
61. Poor school work	2	2	1
62. Poorly coordinated or clumsy	1	0	0
63. Prefers playing with older children	1	1	1
64. Prefers playing with younger children	1	0	0
65. Refuses to talk	0	1	0
66. Repeats certain acts over and over	1	0	0
67. Runs away from home	1	2	2
68. Screams a lot	1	1	1
69. Secretive, keeps things to self	1	1	1
70. Sees things that are not there	0	0	0
71. Self-conscious or easily embarrassed	1	1	0
72. Sets fires	1	0	0
73. Sexual problems	0	0	1
74. Showing off or clowning	2	2	1
75. Shy or timid	0	0	0
76. Sleeps less than most children	0	0	0

Rounded Mean Frequencies of Problem Behaviors by Gender and Age (Contd)

Behaviors	*Mean Frequency* Boys 6-11	Boys 12-16	Girls 12-16
77. Sleeps more than most children	0	0	0
78. Smears or plays with bowel movements	1	0	0
79. Speech problems	0	0	0
80. Stares blankly	0	0	0
81. Steals at home	2	2	1
82. Steals outside the home	2	2	1
83. Stores up things he/she does not need	1	0	0
84. Strange behavior	1	0	0
85. Strange ideas	0	0	0
86. Stubborn, sullen, or irritable	2	2	2
87. Sudden changes in mood or feelings	2	2	2
88. Sulks a lot	1	1	0
89. Suspicious	1	2	1
90. Swearing or obscene language	2	2	2
91. Talks about killing self	0	0	1
92. Talks or walks in sleep	0	0	0
93. Talks too much	1	1	0
94. Teases a lot	2	1	0
95. Temper tantrums or hot temper	2	2	1
96. Thinks about sex too much	0	0	1
97. Threatens people	2	2	1
98. Thumb sucking	0	0	0
99. Too concerned neatness/cleanliness	0	0	0
100. Trouble sleeping	0	0	0
101. Truancy, skips school	1	2	1
102. Underactive, slow moving, lacks energy	1	0	0
103. Unhappy, sad, or depressed	1	1	1
104. Unusually loud	1	1	1
105. Uses alcohol or drugs	0	2	2
106. Vandalism	2	2	0
107. Wets self during day	0	0	0
108. Wets the bed	0	0	0
109. Whining	1	0	0
110. Wishes to be of opposite sex	0	0	0
111. Withdrawn, does not get involved	1	0	0
112. Worrying	1	0	0
113. Any problems not listed	0	0	0

Note. 0 = not true; 1 = sometimes true; 2 = often true.

APPENDIX G

ROUNDED MEAN FREQUENCIES OF PROBLEM BEHAVIORS FOR BOYS AGED 6-11 BY SYNDROME

Rounded Mean Frequencies of Problem Behaviors
for Boys Aged 6-11 by Syndrome

Internalizing Syndromes

1 Schizoid or Anxious:

0 Hears things that are not there
1 Too fearful or anxious
0 Sees things that are not there
0 Fears certain animals, situations, or places, other than school
1 Fears going to school
1 Clings to adults
0 Shy or timid
0 Nightmares
0 Plays with sex parts in public

2 Depressed:

2 Feels worthless or inferior
0 Feels too guilty
1 Too fearful or anxious
1 Feels he has to be perfect
1 Nervous, highstrung or tense
2 Feels or complains that no one loves him
1 Unhappy, sad or depressed
0 Talks about killing self
1 Complains of loneliness
1 Cries a lot
1 Worrying
1 Fears own impulses
1 Sulks a lot
1 Self-conscious or embarrassed
1 Feels persecuted
1 Suspicious
1 Deliberately harms self

3 Uncommunicative:

1 Refuses to talk
1 Secretive, keeps things to self
0 Shy or timid
1 Unhappy, sad, or depressed
2 Stubborn, sullen or irritable
0 Stares blankly
1 Self-conscious or embarrassed
1 Confused

4 Obsessive Compulsive:

0 Strange ideas
1 Too fearful or anxious
0 Trouble sleeping
0 Sleeps less than most children
1 Repeats certain acts over and over (compulsions)
1 Obsessive thoughts
0 Walks, talks in sleep
0 Stares blankly
0 Nervous movements or twitching
1 Hoarding
2 Daydreams
1 Strange behavior
0 Nightmares
0 Overtired
1 Confused
1 Talks too much

Rounded Mean Frequencies of Problem Behaviors
for Boys Aged 6-11 by Syndrome (Contd)

Internalizing Syndromes

5 Somatic Complaints (behaviors without medical cause):

0 Stomachaches or cramps
0 Headaches
0 Nausea
0 Aches or pains
0 Vomiting, throwing up
0 Constipated
0 Dizziness
0 Sleeps more than most children
0 Overtired

Mixed Syndrome

1 Social Withdrawal:

1 Not liked by other children
1 Prefers playing with younger children
1 Withdrawn, does not get involved
1 Underactive, lacks energy, slow
2 Gets teased a lot
2 Poor peer relations
2 Likes to be alone
1 Feels persecuted

Externalizing Syndromes

1 Hyperactive:

2 Cannot concentrate
2 Acts too young for his age
2 Poor school work
1 Poorly coordinated or clumsy
1 Confused
2 Daydreams
2 Impulsive
1 Prefers playing with younger children
2 Restless, hyperactive
0 Speech problem
2 Destroys own things

2 Aggressive:

2 Argues a lot
2 Disobedient at home
2 Swearing or obscene language
2 Temper tantrums or hot temper
2 Stubborn, sullen or irritable
2 Sudden changes in mood
2 Showing off or clowning
2 Demands a lot of attention
2 Disobedient at school
1 Not liked by other children
2 Physically attacks people
1 Talks too much
1 Screams a lot
2 Teases a lot
1 Unusually loud
2 Poor peer relations
1 Sulks a lot
2 Gets in many fights
2 Bragging, boasting
2 Cruel to others
2 Lying or cheating
2 Threatens people
1 Easily jealous

Rounded Mean Frequencies of Problem Behaviors
for Boys Aged 6-11 by Syndrome (Contd)

Externalizing Syndromes

3 Delinquent:

2 Steals outside the home	1 Runs away from home
2 Steals at home	2 Disobedient at school
2 Hangs around with children who get into trouble	1 Truancy, skips school
	1 Sets fires
2 Destroys others' things	2 Destroys own things
2 Vandalism	2 Lying or cheating
2 Swearing or obscene language	

Note. 0 = not true; 1 = sometimes true; 2 = often true.

APPENDIX H

ROUNDED MEAN FREQUENCIES OF PROBLEM BEHAVIORS FOR BOYS AGED 12-16 BY SYNDROME

Rounded Mean Frequencies of Problem Behaviors
for Boys Aged 12-16 by Syndrome

Internalizing Syndromes

1 Somatic Complaints (problems without medical cause):

0 Nausea, feels sick
0 Aches or pains
0 Underactive, lacks energy
0 Stomachaches or cramps
0 Headaches
0 Feels dizzy
0 Vomiting, throwing up
0 Rashes or other skin problems
0 Problems with eyes
0 Overtired
0 Worrying
0 Accident prone
0 Constipated
0 Too fearful or anxious
0 Stares blankly

2 Schizoid:

0 Feels too guilty
0 Fears own impulses
0 Too concerned with neatness or cleanliness
0 Acts like the opposite sex
0 Hears things that are not there
0 Feels dizzy
0 Feels he has to be perfect
0 Clings to adults
0 Worrying
0 Fears going to school

3 Uncommunicative:

1 Secretive, keeps things to self
0 Underactive, lacks energy
1 Sulks a lot
0 Withdrawn, does not get involved
2 Stubborn, sullen or irritable
1 Unhappy, sad, or depressed
1 Self-conscious or easily embarrassed
0 Shy or timid
1 Refuses to talk
2 Suspicious
0 Stares blankly
0 Likes to be alone
0 Worrying
1 Confused
2 Sudden changes in mood

4 Immature:

0 Cries a lot
2 Demands a lot of attention
1 Acts too young for his age
0 Prefers playing with younger children
0 Wets the bed
0 Whining
0 Clings to adults

5 Obsessive-Compulsive:

0 Obsessive thoughts
0 Repeats certain acts over and over (compulsions)
0 Strange ideas
0 Hoarding
0 Fears own impulses
0 Daydreams
2 Bragging, boasting
1 Unusually loud
0 Strange behavior

Rounded Mean Frequencies of Problem Behaviors
for Boys Aged 12-16 by Syndrome (Contd)

Mixed Syndrome

1 Hostile Withdrawal:

1 Not liked by other children
1 Destroys others' things
1 Acts too young for his age
1 Feels worthless or inferior
1 Feels or complains that no one loves him
0 Prefers playing with younger children
0 Withdrawn, does not get involved
1 Destroys own things
1 Poor peer relations
1 Gets teased a lot
2 Feels persecuted
2 Gets in many fights
0 Complains of lonliness
0 Poorly coordinated or clumsy

Externalizing Syndromes

1 Delinquent:

2 Steals outside the home
2 Steals at home
2 Hangs around with children who get into trouble
2 Vandalism
2 Lying or cheating
2 Truancy, skips school
1 Destroys others' things
2 Uses alcohol or drugs
2 Disobeys at school
2 Runs away from home
1 Destroys own things
2 Poor school work
0 Sets fires

2 Aggressive:

2 Threatens people
2 Temper tantrums or hot temper
1 Cruel to others
2 Disobeys at home
2 Swearing or obscene language
1 Screams a lot
2 Demands a lot of attention
2 Physically attacks people
2 Nervous, highstrung or tense
2 Stubborn, sullen or irritable
1 Teases a lot
1 Easily jealous
2 Sudden changes in mood
1 Restless or hyperactive
2 Impulsive
2 Gets in many fights
1 Sulks a lot
2 Argues a lot
2 Feels persecuted
1 Unusually loud
2 Suspicious
1 Talks too much

Rounded Mean Frequencies of Problem Behaviors
for Boys Aged 12-16 by Syndrome (Contd)

3 Hyperactive:

2 Cannot concentrate	2 Disobeys at school
1 Restless or hyperactive	2 Poor school work
1 Acts too young for his age	1 Bites fingernails
2 Nervous, highstrung or tense	2 Showing off or clowning
0 Poorly coordinated or clumsy	2 Impulsive

Note. 0 = not true; 1 = sometimes true; 2 = often true.

APPENDIX I

ROUNDED MEAN FREQUENCIES OF PROBLEM BEHAVIORS FOR GIRLS AGED 12-16 BY SYNDROME

Rounded Mean Frequencies of Problem Behaviors
for Girls Aged 12-16 by Syndrome

Internalizing Syndromes

1 Anxious Obsessive:

0 Too fearful or anxious
1 Nervous, highstrung, tense
1 Feels worthless or inferior
0 Feels she has to be perfect
0 Fears certain animals, situations, or places other than school
0 Complains of loneliness
0 Self-conscious or easily embarrassed
1 Feels or complains that no one loves her
0 Nightmares
1 Feels persecuted
0 Trouble sleeping
0 Feels too guilty
0 Fears own impulses
1 Easily jealous
0 Worrying
0 Cries a lot
0 Sleeps less than most children
0 Fears going to school
1 Obsessive thoughts

2 Somatic Complaints (problems without medical cause):

0 Nausea, feels sick
0 Stomachaches or cramps
0 Aches or pains
0 Headaches
0 Feels dizzy
0 Vomiting, throwing up
0 Problems with eyes
0 Fears going to school

3 Schizoid:

0 Hears thing that are not there
1 Thinks about sex too much
0 Sees things that are not there
0 Fears certain animals, situations or places other than school
0 Stares blankly
0 Nightmares
0 Strange behavior
0 Strange ideas
0 Daydreams

4 Depressed Withdrawal:

0 Withdrawn, does not get involved
1 Unhappy, sad or depressed
2 Stubborn, sullen or irritable
1 Secretive, keeps thing to self
0 Self-conscious or easily embarrassed
0 Sleeps more than most children
0 Sulks a lot
0 Refuses to talk
0 Overtired
0 Shy or timid
0 Likes to be alone
0 Stares blankly
0 Underactive, lacks energy

Rounded Mean Frequencies of Problem Behaviors
for Girls Aged 12-16 by Syndrome (Contd)

Mixed Syndrome

1 Immature-Hyperactive:

0 Acts too young for her age
0 Prefers playing with younger children
0 Poorly coordinated or clumsy
1 Not liked by other children
1 Cannot concentrate
0 Gets teased a lot
0 Picks nose, skin, or other parts of the body
0 Hoarding
1 Restless, hyperactive
0 Clings to adults
0 Confused
1 poor peer relations
0 Stares blankly
0 Daydreams
0 Thumbsucking

Externalizing Syndromes

1 Delinquent:

2 Hangs around with children who get into trouble
1 Steals outside the home
2 Lying or cheating
2 Swearing or obscene language
1 Truancy, skips school
1 Poor school work
2 Uses alcohol or drugs
1 Prefers playing with older children
1 Steals at home
1 Disobeys at school
2 Lacks guilt
2 Impulsive
2 Runs away from home
1 Cannot concentrate
2 Disobeys at home
1 Secretive

2 Aggressive:

1 Temper tantrums or hot temper
1 Unusually loud
2 Stubborn, sullen or irritable
1 Screams a lot
0 Teases a lot
1 Physically attacks people
1 Demands a lot of attention
0 Swearing or obscene language
2 Disobeys at home
1 Showing off or clowning
1 Feels or complains that no one loves her
0 Talks too much
2 Sudden changes in mood
0 Sulks a lot
1 Gets in many fights
1 Bragging, boasting
1 Threatens people
1 Feels persecuted
1 Cruel to others
1 Suspicious
2 Argues a lot
1 Easily jealous

Rounded Mean Frequencies of Problem Behaviors for Girls Aged 12-16 by Syndrome (Contd)

Externalizing Syndromes

3 Cruel:

0 Destroys others' things	1 Steals at home
0 Cruel to animals	1 Threatens people
1 Physically attacks people	1 Gets in many fights
1 Not liked by other children	1 Feels persecuted
0 Destroys own things	1 Poor peer relations
1 Cruel to others	0 Vandalism

Note. 0 = not true; 1 = sometimes true; 2 = often true.