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## The Effect of Parent Christian Life Identity On Problem Behavior in Children with Learning Disorders

Philip A. House

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The Effect of Parent Christian Life Identity  
On Problem Behavior in Children with  
Learning Disorders

by

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(Advisor: James D. Foster, Ph.D.,  
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Presented to the Faculty of  
George Fox College  
in partial fulfillment of  
the requirements for the degree of  
Doctor of Psychology  
in Clinical Psychology

Newberg, Oregon

February 5, 1992

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September 9, 1991

Dear Mr. House:

You have our permission to reproduce the Child Behavior Checklist and Teacher's Report Form in your dissertation.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jill Brown".

Jill Brown for T.M. Achenbach, Ph.D.  
Publications Manager

Approval

The Effect of Parent Christian Life Identity  
On Problem Behavior In Children with  
Learning Disorders

by

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The Effect Of Parent Christian Life Identity

On Problem Behavior In Children with

Learning Disorders

Philip A. House

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Abstract

The purpose of this study conducted in the Summer and Fall of 1991 was to determine whether parent Christian life identity ameliorates problem behavior in children with learning disorders. The Child Behavior Checklist (CBCL) and Child Behavior Checklist-Teacher Report Form (CBCL-TRF) were used to measure problem behavior of children aged 6-11 with identified learning disorders. Groupings of parents by active Christian and other (in-active Christian or non-Christian) life identity were studied. The central hypothesis was that children with identified learning disorders whose parents have an active Christian identity will have lower levels of social-emotional and behavioral problems than learning

disordered children whose parents do not claim an active Christian life identity.

Groupings by parent life identity and child problem behavior reporter (parent or teacher) were analyzed using a series of one-way and 2 X 2 ANOVA's. The broad-band scale scores from the CBCL or CBCL-TRF were the dependent variables. Child problem behavior was not found to differ significantly between groups of parents. Three ANCOVA's were performed to control for socioeconomic variables and the findings remained unchanged.

Active Christian parents may nonetheless be more or less effective in coping with the effects of learning disorders in their children. This could influence the rate for clinic referral without affecting symptom severity on any referred children.

Teachers were found to report a significantly lower level of internalizing problem behavior, which is consistent with results from other cross-informant studies of learning disordered children. When groupings by learning disorder severity were analyzed using a series of one-way ANOVA's, teachers reported significantly lower levels of internalizing problem behavior for children with moderate learning disorders

than for children with either mild or severe learning disorders. Moderately learning disordered children may be better accommodated in the schools than mild or severely learning disordered children and therefore exhibit fewer internalizing-type problem behaviors in that setting.

Parents seeking interventions for their children beyond those offered by the schools may demonstrate care and concern for their child resulting from values and beliefs which are not exclusive to parents with an active Christian life identity.

### Acknowledgements

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My family, especially my wife, has been a constant encouragement and support to me. My parents also are deeply appreciated for their caring response in the midst of many changes in their lives. In addition I express deeply felt thanks to a good friend, Dave Wesen. Without each of these individuals I would not have finished this degree.



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## CHAPTER 1

### INTRODUCTION

Research on learning disorders in children has primarily focused on cognitive aspects of the problems (Fisk & Rourke, 1979; Lyon, 1983; Lyon, Stewart & Freedman, 1982; Saltz & Morris, 1981); however, a growing body of research is now confirming that many children experience social, emotional, and behavioral problems that relate to their learning disorders (Achenbach, McConaughy, & Howell, 1987; Brumback & Weinberg, 1990; Gresham, 1988, 1990; Gresham & Elliott, 1987; McConaughy, 1985, 1986; McConaughy & Ritter, 1986; Rutter, Tizzard, & Whitmore 1970; Schumaker, Hazel, & Pederson, 1988; Sturge, 1982).

The research into the interpersonal environment of children with learning disorders has been characterized by considerable confusion (Gresham, 1990; Porter & Rourke, 1985). This literature demonstrates that children with learning disorders

examining various patterns of learning disorder, but the relationship between brain function and behavior in learning disordered children is an emerging field of research at present (Gaddes, 1980; Rourke, 1982, 1985).

Although the majority of learning disordered children are not diagnosed as having serious emotional disturbance, emotional and behavioral adjustment is a problem for many. The literature is limited in addressing environmental and familial factors which influence their adjustment. It has been suggested that involvement in a church, religious belief, spiritual faith in the present, and hope for the future, maintained and communicated by parents, are of great value and give a sense of meaning and purpose to children with various physical and learning disorders (Eareckson, 1981; Johnson, 1988; Ross, 1984; Tada, 1986; Voysey, 1975; Wheeler, 1983). Active parental religious belief and faith is reported to reduce parental feelings of helplessness and being out of control and assists in the family definition of the event of having and rearing a disabled child (Cook, 1990). However, the literature does not indicate whether parental religious beliefs and practices

## Review of the Literature

### Social-Emotional and Behavioral Adjustment of Children with Learning Disorders

In spite of the special education services for children with learning disorders that have been mandated in the public schools through the Education for All Handicapped Children Act of 1975 (Public Law 94-142, 1975), learning difficulties are frequently accompanied by emotional stress and behavior problems (Brumback & Weinberg, 1990; Gresham, 1990; Rogers & Saklofske, 1985; Vaughn, 1985). These special education services were supposed to help reduce the stress placed upon handicapped students by curriculum and school programs which did not adequately accommodate for their disabilities, yet even with special school services, the presence of social-emotional and behavioral adjustment problems in children with learning disorders remains prevalent (Gresham, 1990; Vaughn, 1985).

One of the first studies of adjustment of learning disordered children found that 83% of problem readers showed serious maladjustment in social and/or personal domains (Fabian, 1955). In the years since

The results of the rating scales used have been found to correlate with school achievement in general (Hoge & Luce, 1974), and have been among the best indicators of learning disorders (McConaughy & Ritter, 1986; McKinny & Feagans, 1983; Mykelbust, Boshes, Olson, & Cole, 1969). Teacher ratings have shown children with learning disorders to be less socially adept and desirable, less task oriented, less verbally facile, less organized, and less responsible than normal children (Bickett & Milich, 1990; Bryan & McGrady, 1972; McKinny & Feagans, 1983; McKinny & Forman, 1982; Vaughn, 1985).

An extensive research project on children with learning disorders has been conducted by McKinny and his colleagues in North Carolina. Teacher ratings were obtained with the Classroom Behavior Inventory (CBI). Consistent differentiation of normal from learning disabled children on academic competence dimensions of independence/dependence, task orientation/distractibility, and intelligent behavior was noted. Results were less consistent on social and affective dimensions (Feagans & McKinny, 1981; McKinny, 1984; McKinny & Foreman, 1982).

There has been little research addressing the question of whether specific cognitive deficits in learning disordered children may be clearly associated with particular social-emotional and behavioral disorders. Deficits in the functioning of the left hemisphere of the brain, as established by neuropsychological evaluation, have been demonstrated to underlie a pattern of learning disorders characterized by poor reading (word recognition) and spelling skills (Rourke, 1982, 1985). Right hemisphere deficits have been related to adequate word recognition and spelling skills, but weak arithmetic problem solving, reading comprehension, and higher order concept and problem solving abilities (Rourke, 1982, 1985). Glosser and Koppell (1987) examined sixty-seven learning disordered children aged seven to ten. They discovered that children with left hemisphere impaired cognitive profiles demonstrated increased levels of dysphoria, anxiety, and social withdrawal. The right hemisphere impaired cognitive profile children had low levels of dysphoria and anxiety, but increased somatic complaints. The children with non-lateralized cognitive impairment demonstrated increased attention deficit problems and

(Sabatino & Mauser, 1978; Sturge, 1982). In their attempt to identify subtypes of learning disorders, McKinny (1984) and McKinny and Feagans (1983) discovered that forty-seven percent of their sample demonstrated distinct antisocial characteristics. Other problems with high rates of occurrence along with learning disorders have included social withdrawal (Bryan, 1974; Ritter, 1978), and delinquency (Meltzer, Levine, Karniski, Palfrey & Clarke, 1984; Morgan, 1979; Mulligan, 1969). In a sample of incarcerated adolescents from a national survey, 44% were found by Morgan (1979) to have histories of academic under-achievement and learning disorders. These types of findings led other researchers to speculate that learning disorders may predispose a child to delinquency (Bryan, 1978; Underwood, 1976; Zinkus, Gottlieb & Zinkus, 1979).

It is less clear what proportion of learning disordered children show antisocial features. Recent research (Glosser & Koppell, 1987; Porter & Rourke, 1985) indicates that learning disorders in children are not accompanied by a particular cluster of social-emotional characteristics; in fact, there is an



In order to clarify the link between learning disorders and problem behavior, further research is needed. The methodologies designed to identify relationships between learning disorders and social-emotional and behavioral problems need to encompass the heterogeneity of personality functioning in children with learning problems (Rourke, 1988). In addition, the environmental and familial factors which may ameliorate problem behavior in children with learning disorders need to be identified. Existing literature, however, has only begun to address environmental and familial factors which may influence problem behavior in children with learning disorders.

#### Family Correlates of Learning Disorders

In spite of the limited research into family correlates of learning disorders, many researchers have remarked that a child with significant problems implies a handicapped family (Featherstone, 1980). Studies have discussed the alteration of normal psycho-social development and increased individual and family adjustment problems that can be anticipated for children with varying kinds and degrees of handicapping conditions (Johnson, 1988; Wright, 1983).

child developmental processes, but attachment of children to parents appears to be important to a child's ability to handle various forms of adversity (Goodyer, 1990). The many studies of family social disadvantage and the influence this has on children, led Fergusson, Horwood and Lawton (1990) to conclude that social advantage or disadvantage does have a pervasive effect on a child's well-being and influences a child's generalized vulnerability to a wide range of childhood problems.

To understand how families influence social adjustment, researchers have attempted to find common characteristics among parents and siblings of handicapped children. Konstantareas and Homatidis (1989), in a study of 56 parents of 28 learning disabled children 6 to 16 years of age in Ontario, Canada, found that increased parental stress was reported by the younger half of mothers in their sample and by fathers with a lower self-concept. The mothers of these children reported greater stress than their husbands. This was particularly true of mothers of middle or upper socioeconomic status.

Smets and Hartup (1988) examined 120 families referred for treatment to six outpatient clinics in

Friedrich and Friedrich (1981), in a study of 34 handicapped and 34 non-handicapped children, found that families with handicapped children experience more stress and less marital satisfaction, enjoy less psychological well-being, show more need for support, and tend to be slightly less religious than do families without a handicapped child.

In summary, it appears that children with learning disorders are influenced by and in turn influence their families. Early family relations establish foundations for child social-emotional development and attachment to parents appears important to children's ability to handle stress and adversity. Family social disadvantage and lack of family cohesion and/or adaptability may cause children to be more vulnerable to childhood problems or to display more problem behavior. Families of learning disordered children experience greater stress, lower parental self-concepts and less psychological well-being, less marital satisfaction and higher rates of divorce, need more external support, and parents tend to be slightly less religious than parents without handicapped children.

permeates a parent's personality and thus reinforces the child's basic trust in the world's trustworthiness. (p. 64)

Such a psychological force, displayed by families of children with various handicaps, makes a religious and spiritual response an adaptive coping skill rather than a defensive response (Johnson, 1988).

This view of religious belief as supportive and beneficial for handicapped children is consistent with suggestions of Elkind (1970). Elkind reviews the stages of cognitive development theorized by Piaget and indicates how religious adaptations at each stage resolve conflicts which emerge from developing cognitive capabilities. Although he does not specifically address handicapped children, his suggestions appear to apply to them.

In support of this view of the value of religion, researchers over the past ten years have examined the relationship between spiritual and social-emotional well-being and physical health. Bufford (1987) reviews this research and reports a positive relationship between spiritual well-being and some indicators of psychological health such as self esteem, internal locus of control, social skill,

suggested that social adaptation of children is influenced by family socioeconomic status and religious denominational affiliation. This research suggests that parental religious belief and practice has some positive influence on the social-emotional and behavioral adjustment of children.

#### Psychological Assessment and Rating Scales

In order to adequately measure the social-emotional and behavioral adjustment of children with learning disorders, psychological assessment is required. Responsible psychological practice demands that clinical judgment be tested against various kinds of evidence, extending beyond assessments that are limited to the psychological clinic (Barnett & Zucker, 1985; Knoff, 1990). Unfortunately, national surveys of clinicians have found that the most commonly used child psychological assessment procedures are clinic bound and consist of intelligence, achievement, and perceptual-motor tests, clinical interviews, and projective personality measures and frequently fail to incorporate behavior rating scales (Goh & Fuller, 1983; Goh, Teslow & Fuller, 1981; Keogh, Kukik, Becker, McLoughlin, & Kukik, 1975; McConaughy, 1985;

child; and (8) permit quantitative distinctions to be made concerning qualitative aspects of child behavior that are often difficult to obtain through direct observational methods. (p. 282)

#### Behavior Rating Scales - Teacher Rating

Teachers are the adults who spend the most time with children other than parents. They appear well qualified to judge the behavior of children and have proven to be reasonably informed reporters (Achenbach & Edelbrock, 1986). The results of teacher rating scales have correlated well with school achievement (Hoge & Luce, 1974), and have been among the best indicators of learning disorders (McConaughy & Ritter, 1986; McKinny & Feagans, 1983; Mykelbust, Boshes, Olson, & Cole, 1969).

Teacher reports of child adjustment have been important in the assessment of children for the reasons listed by Achenbach and Edelbrock (1986):

1. School is a central developmental arena in which problems arise that may not be evident elsewhere.
2. School-based social and academic skills are important for successful adaptive development in our society.

achievement rather than representing a broad spectrum of social-emotional and behavioral problems. It is not surprising that the behavioral dimension found to be the most reliable in the teacher ratings involved high distractibility and low task orientation (Achenbach, 1978; Achenbach & Edelbrock, 1979).

Thus, it is obvious that teacher ratings alone provide a somewhat restricted and situation-specific view of a child's behavior. Their ratings do not clearly reveal whether social-emotional and behavioral problems are manifest outside the school environment in a broader domain (Achenbach & Edelbrock, 1983). However, they are a convenient source of child behavior ratings (Schaughency & Lahey, 1985).

#### Behavior Rating Scales - Parent Rating

Less structured than the school environment is the home, which imposes a different set of social and emotional stresses on children with learning disorders. Stresses at home can occur in day-to-day interactions with parents, siblings, and peers, as well as in their struggle with completion of homework. If the child with a learning disorder does not have adequate coping skills, social-emotional and behavioral problems are likely to occur at home as

Rogers, 1982; Rickard, Forehand, Wells, Griest, & McMahon, 1981) have cautioned against over-reliance on mothers' perceptions of their children's problem behaviors and have suggested that mothers may inaccurately label their children as deviant due to their own personal adjustment problems (Forehand, Lautenschlager, Faust, & Graziano, 1986; Patterson, 1980, Webster-Stratton, 1988). Little research has been conducted on the accuracy of fathers' perceptions of their children's behaviors (Schaughency and Lahey, 1985; Webster-Stratton, 1988). Research findings have shown that parent and teacher ratings sometimes result in inconsistent symptom patterns (Greenberg, Deem, & McMahon, 1972; Rosenberg, Harris & Reifler, 1988).

In spite of these limitations, parents remain the most frequent source of information about a child's functioning for the independent practitioner (Schaughency & Lahey, 1985). Recent approaches to defining children's behavior problems (Schachar, Rutter, & Smith, 1981), as well as empirical evidence supporting the variability of ratings of children's behavior in different environmental settings (Achenbach & Edelbrock, 1985), provides an impetus to reexamine parent ratings of symptoms of children's



child behaviors. The study documented a high degree of replication between different sites for the same categories of informants and a high level of congruence between adult informants in different settings (Loeber, Green, Lahey, & Stouthamer-Loeber, 1991). They found that although prevalence rates of child behaviors as reported by parents and teachers were only moderately correlated, the prevalence rankings were high (ranging from .74 to .87). They suggested that differing informants may not observe the same prevalence of problem behavior but that informant ranking of observed problem behavior in differing situations was highly consistent.

Reports of child problem behavior by teachers who observe a child in only one situation may reflect child behaviors that are unique to that situation (Phares et al., 1989). Thus, this suggests that only modest correlations between parents and teachers in different situations can be expected. This was supported in a meta-analysis of 119 research studies by Achenbach et al. (1987), and suggests that situational specificity limits the reports of teachers. Although low or modest correlations between parent and teacher reports appear to raise doubt about

identical situations average around  $r = .60$ . They suggest this indicates considerable consistency among informants (parents, teachers, observers, and mental health workers). Achenbach et al. (1987), further state that the moderate correlations among informants suggest the need to obtain reports from more than one informant whenever possible in order to account for variations in child behavior which may be situation and informant dependent.

#### Review of Selected Behavior Rating Scales

Widely available and frequently used behavior rating scales include: (a) Child Behavior Checklist, (b) Conners Parent Rating Scale - Revised, (c) Eyberg Child Behavior Inventory, (d) Personality Inventory For Children, and (e) Revised Behavior Problem Checklist. These are briefly reviewed below.

Child Behavior Checklist. In an effort to reexamine parent ratings of children, Achenbach and Edelbrock (1983) demonstrated the efficacy of examining a wide variety of potential problems with a parent rating scale for children referred to mental health clinics. They developed the Child Behavior Checklist (CBCL) and their research with the CBCL resulted in four different patterns of empirically

presented as standard scores with a T-score of 70 (98th percentile) indicating a cut-off score differentiating between clinical and normal samples. Extensive work with the parent form has been carried out, while the teacher form is a more recent measure and less research has been conducted with it. A further review of the CBCL and CBCL-TRF is provided in Chapter 2. This rating scale is the most fully-developed child behavior rating scale currently available and provides a broad view of parent and teacher opinions about a child (Barkley, 1988, 1990).

Conners Parent Rating Scale - Revised. Another commonly used rating scale is the Conners Parent Rating Scale - Revised (CPRS-R; Goyette, Conners, & Ulrich, 1978). The revised CPRS was significantly reduced in number of items from the original version of the CPRS. A companion teacher report form, Conners Teacher Rating Scale - Revised (CTRS-R; Goyette, Conners, & Ulrich, 1978) is designed for the school setting. Normative data are available on both forms of this scale for boys and girls aged 3 to 17 years (Goyette et al., 1978). There are few items assessing internalizing or neurotic disorders thus the value of the scale in assessing internalizing disorders is

scale, but is an inventory of child personality characteristics. Its recent revision incorporated the use of factor-analytically based scales, making it similar to the other behavior rating scales reviewed. The PIC is limited in its clinical value due to its outdated normative data base, manner of item selection for the inventory, and the true-false scoring procedure which fails to yield information on the frequency or severity of problem behavior (Barkley, 1988, 1990).

Revised Behavior Problem Checklist. Another popular behavior rating scale is the Behavior Problem Checklist. The original Behavior Problem Checklist (BPC; Quay & Peterson, 1975) is one of the most commonly used behavior rating scales. It is appropriate for rating by parents, teachers, or other adults experienced with a child. It identifies broad dimensions of child psychopathology. Normative data exist for children aged 5-14. It has been shown to discriminate among various groups of children.

The Revised Behavior Problem Checklist (RBPC; Quay & Peterson, 1983) is an expanded form of the BPC and permits broader assessment of common childhood behavior problems. It can be used by both parents and

assists in the accounting for multiple aspects of a child's functioning.

### Operational Definition of Terms

#### Christian Life Identity

For the purpose of this study, an active Christian parent was defined as one who claimed a Christian religious preference, indicated that religion was important to him or her, and attended church at least once per week. By contrast, other parents might claim a Christian religious preference but their frequency of attendance at church was less than once per week, or they did not rate religion as important to them. This operational definition was based on a study of spiritual well-being and maturity scales by Bufford (1984) where the importance of religion, frequency of church attendance, and religious knowledge accounted for most of the variance with Spiritual Well-Being when scale items were examined. It was assumed by this researcher, based on Bufford's (1984) findings, that these demographic items appear to separate those parents who practice their Christian faith in their daily life from those

measure, in the normal range or above ( $IQ \geq 80$ ) and exhibiting achievement at least one standard deviation below the intelligence measure score in one or more achievement area (reading, mathematics, or written language) on a group or individual standardized achievement test, earning a percentile score  $\leq 25$  in one or more achievement area. This discrepancy approach to defining "learning disorder" required that the standard score distributions of both measures be converted to  $z$  scores so that they might be appropriately compared. Converting test scores on the intelligence measure and achievement measure to  $z$  scores allowed for the relative comparison of the scores when the standard score distributions for the measures were not the same. Regression of IQ on achievement (Reynolds, 1984) was not taken into account and a near-perfect correlation between intellectual ability and academic achievement was assumed. This procedure was considered appropriate because standard score or  $z$  score comparisons and regression procedures have been found to result in similar identification of discrepancy (Valus, 1986).

In keeping with the learning disabilities criteria established by the Education for All

This operational definition of learning disorders is consistent with currently proposed reforms in the learning disabilities classification process which include the merging of remedial (Chapter I) and special education programs for children with low achievement and mild handicaps, as well as changing the system to allow services without formal labeling of children displaying significant academic problems (Algozzine & Ysseldyke, 1983; Wilson, 1991). This definition is also supported by recent neuropsychological research which indicates that the patterning of abilities of children with learning problems indicates they are a heterogeneous population (Porter & Rourke, 1985; Taylor, 1989).

The identification of learning disorders is complicated by the absence of a specific "syndrome" or grouping of unvarying traits (Telzrow, 1990). Thus, there has been an inability of researchers to clearly describe learning disorders (Kistner & Torgesen, 1987; Reschly, 1988a, 1988b; Taylor, 1989). This is unlike most other handicapping conditions for which objective validating criteria are available (e.g., vision or hearing handicaps). Learning disorders have been in large part defined by politically determined criteria

### Problem Behavior

The Child Behavior Checklist (CBCL) and Child Behavior Checklist - Teacher's Report Form (CBCL-TRF) were used to operationally define problem behavior for this study. The CBCL is a dimensional scale that provides a profile of a child across a range of symptom areas. It includes a list of 118 specific behavior problems and has additional spaces for any problem not listed. This list of 118 items includes a broad range of problems relevant to children's mental health and reportable by parents and teachers. Behavior is a problem when it is viewed by others as detrimental to the child or to other individuals.

### Summary

Recently, there has been increased emphasis on the social-emotional adjustment difficulties of children with learning disorders. Emerging research is demonstrating an apparent link between learning disorders and social-emotional and behavioral adjustment problems. These problems reach beyond the school classroom setting into the home and community.



beyond the psychological clinic. Measures that record behavior of child problem behavior in school, home, and community settings are available to the clinician. One behavior rating measure that holds promise is the Child Behavior Checklist (CBCL) with its parent and teacher forms (Achenbach & Edelbrock, 1983, 1986).

The purpose of this study was to determine whether parent Christian life identity might ameliorate problem behavior in children with learning disorders. The following question was explored: Could it be that children with learning disorders whose parents have an active Christian life identity have lower levels of social-emotional and behavior problems than children with learning disorders whose parents do not profess an active Christian life identity?

#### Research Hypothesis and Questions

The following hypothesis was tested in this study: Children with learning disorders whose parents are active Christians will have lower levels of parent and teacher reported problem behavior than children with learning disorders of other parents (in-active Christians or non-Christians).

## CHAPTER 2

### METHOD

This chapter presents the methodology of the study in four sections: (a) a description of the participants, (b) a description of the instrumentation used, (c) a summary of the procedures used to carry out the study, and (d) a discussion of the statistical design.

#### Participants

The 38 participants in this investigation were selected from a population of children, aged 6 through 11, who had learning problems or poor academic performance and had been referred to two private outpatient psychological clinics located in Portland, Oregon between January 1989 and August 1991. The participants were selected from the clinic records following their identification as having learning problems which met the operational definition of learning disorders. The participants had all been

had been obtained at the time of initial referral of the subjects and were available in the clinic files. Potential subjects who did not have both a parent and teacher Child Behavior Checklist (CBCL) in their file, were not included in the study.

Information about parent education and combined family income was also obtained in an attempt to control for additional confounding variables since previous research has shown these socioeconomic status factors to be relevant. Years of education was reduced to three levels: those having no college; those having less than four years of college; and, those with four or more years of college.

The project was explained to the parents of the participants after initial identification of the population. They were contacted by mail with an introductory letter (see Appendix A) and they responded to a brief demographic survey questionnaire (see Appendix B). Those parents not responding within two weeks were contacted by telephone and their response to the questionnaire was requested. Consent to participate in the study was assumed with the return of their demographic questionnaire or positive

frequency of church attendance. Other demographic information extracted from the clinic record for this study included: gender of child, gender of parent rating CBCL, race of parent(s) and child, adoption, marital status of parents, number of children in the family, age of parents and age of referred child, and child's grade in school. Scores on intelligence measures and achievement measures were also gathered from the clinic records.

#### Child Behavior Checklist

The Child Behavior Checklist (CBCL) (see Appendix C) is an omnibus measure of child behavior problems and competencies designed to be completed by parents. The parent form of the CBCL (Achenbach & Edelbrock, 1983) consists of 118 items, each rated on a 3-point scale (0 = not true, 1 = somewhat or sometimes true, 2 = very true or often true) for how true the item is of the child now or within the past six months. The CBCL can be filled out by most parents in about 15 minutes. The items constitute multiple behavior-problem scales derived separately for boys and girls in different age groups. Factor analyses by the authors (Achenbach & Edelbrock, 1983) have shown that the scales form two

12-16 age levels: Internalizing T, Externalizing T, and Sum T. The narrow-band behavior problem scales are not totally comparable, as the factor analyses that served as the basis for the development of the scales produced somewhat different scales reflecting sex and age differences in children in the prevalence and patterning of specific behaviors. Some narrow-band scales are similar across age and sex groups, while some are unique to particular groups. To reflect sex and age differences in the prevalence and patterning of specific behaviors, separate profiles were constructed for each sex at ages 4-5, 6-11, and 12-16. These age ranges were chosen by the authors of the CBCL because they demarcate important transitions in biological, cognitive, social-emotional, and educational development.

Scale scores from the CBCL are converted to normalized T scores. Unlike ordinary T scores, which are linear transformations of raw scores, normalized T scores are based on the percentile of the raw score distribution. This results in a particular percentile approximating a particular T score across all scales of the CBCL. The T scores of the CBCL therefore may not have an exact mean of 50 and standard deviation of

problem scales of the CBCL-TRF. Pearson correlations for one week test-retest reliabilities averaged .89 for behavior problem scales. The behavior problem scales showed good stability over 2- and 4- month intervals with average test-retest correlations of .77 and .64, respectively. Correlations between corresponding scales of the CBCL-TRF and the Conners Revised Teacher Rating Scale ranged from .62 to .90.

Three measures of the parent and teacher forms of the CBCL are directly comparable: Internalizing T, Externalizing T, and Sum T. These total behavior problem scores are more strongly related to child clinical status than either subscale scores or the incidence of any single symptom (Achenbach & Edlebrock, 1986). Consequently, total problem behavior scores from the CBCL and CBCL-TRF were chosen for examining child problem behavior in this study.

Some limitations to the comparability of these problem behavior scale scores are acknowledged. The authors of the CBCL and CBCL-TRF are currently attempting to identify the relations between the CBCL and the CBCL-TRF. They report Pearson correlations for Internalizing, Externalizing, and Sum problem scale scores of the parent and teacher profiles. The

### Procedures

This researcher worked in cooperation with the psychologists and counselors of two private psychological clinics located in Portland, Oregon, a city ranked twenty-seventh in size in the 1990 United States census. Approximately one-half of their clients profess to be Christians. The population was selected from clinic files of children with learning problems who were clients between January 1, 1989 and August 1, 1991. The sample of participants for this study was selected from the clinic files, after meeting the initial selection criteria (age 6 through 11, identified learning disorder, parent CBCL and teacher CBCL-TRF obtained at the time of initial referral). Participants were assigned an alphabetic code to insure confidentiality and ease of reference.

Once participants were identified from the clinic files and included in the study population, parents of the children were sent a letter informing and asking for their involvement in the study. If they agreed, they filled out a demographic questionnaire of nine items and returned it in a postage paid addressed envelope. If they failed to respond within two weeks,

administered in the clinic or obtained from records provided by schools or other personnel qualified to administer such measures. Participant IQs were measured using the Wechsler Intelligence Scale for Children - Revised (WISC-R) or Stanford Binet Intelligence Scale: Fourth Edition (SB:FE).

An intelligence measure score for the child below an IQ score of 80, no academic achievement area scores one standard deviation or more below the intelligence test score, or no score on the academic achievement test at or below a percentile score of 25, if the 1 standard deviation difference between the intelligence measure score and achievement score was not met, rendered the child ineligible for the study (see Table 1). Exclusion from the study occurred since the child failed to meet the operational definition of learning disorder adopted for the study. Other exclusionary factors used in this study included primary emotional disturbance, visual or hearing impairments, or motor impairments.

The scores obtained on the intelligence measures and achievement measures were converted to z scores so that they might be appropriately compared. This allowed for comparison of scores when the standard



score distributions for the measures were not the same.

When the demographic questionnaires were returned to the researcher, the demographic data items, T scores of the three broad-band behavior scales of the CBCL and CBCL-TRF (Internalizing T, and Externalizing T, and Sum T) were calculated from the forms in the file, entered into a computer and analyzed using the Statistical Package for the Social Sciences, Personal Computer (SPSS-PC+) software (Norusis, 1988a).

#### Research Design and Statistics

The design used in this study was a 2 x 2 factorial design. Analysis of Variance (ANOVA) was utilized as the statistical procedure for hypothesis testing and was preceded by descriptive statistics. Since the CBCL and CBCL-TRF are not exactly comparable, one-way ANOVA was utilized to examine the effect of distinct CBCL and CBCL-TRF broad-band scores (dependent variables). Achenbach et al. (1987), found the correlations between the CBCL and CBCL-TRF broad-band scores to be statistically significant and thus in this study, the CBCL and CBCL-TRF scores were

Table 2

Analysis of Variance Design


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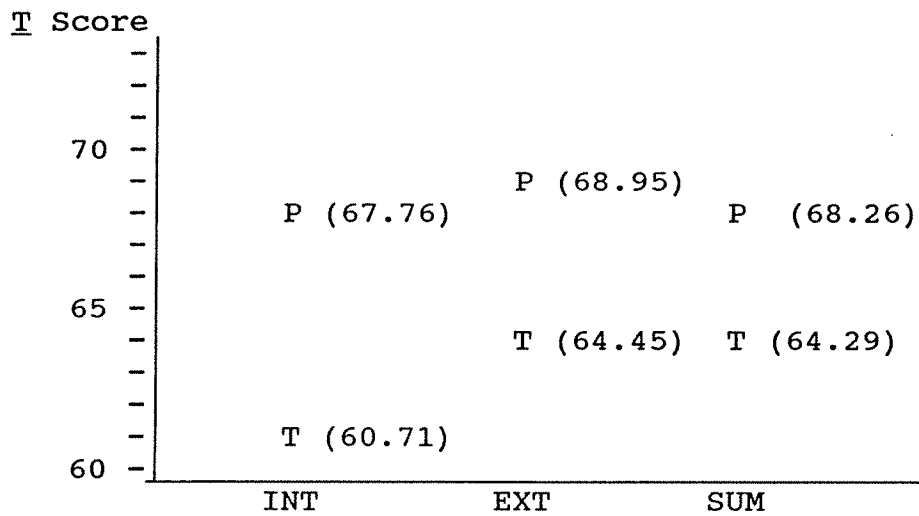
		Reporter	
		1 Parent	2 Teacher
Parental	1 Active Christian	<u>n</u> =20	<u>n</u> =20
Identity	2 Other (In-active Christian or Non-Christian)	<u>n</u> =18	<u>n</u> =18

Covariates: combined family income; mother's and  
father's educational level

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Figure 1

Total Group Means of CBCL Broad-Band Scales



Note. N = 38, (P) = Parent CBCL score, (T) = Teacher CBCL-TRF score, INT = internalizing broad-band scale score, EXT = externalizing broad-band scale score, SUM = total broad-band scale score

### Summary

This study consisted of analysis of parent and teacher reports of problem behavior in children with learning disorders who were referred to two private outpatient psychological clinics. The instruments used in this study were the CBCL and CBCL-TRF and a brief (9 item) demographic questionnaire constructed by the researcher. The pool of possible children was screened for age (age 6 through 11), identified learning disorder, parent CBCL and teacher CBCL-TRF obtained at the time of initial referral, and mother and father in the home at the time of referral to the clinic. Parents of the children were then sent a letter informing and asking for their involvement in the study and response to a nine item demographic questionnaire. Telephone contact was made with those parents who did not respond to the mailed demographic questionnaire within two weeks.

The data gathered from the various measures was entered into a computer and analyzed using the Statistical Package for the Social Sciences, Personal Computer (SPSS-PC+) software (Norusis, 1988a). The research design was a 2 X 2 factorial design.

## CHAPTER 3

### RESULTS

This chapter presents the results of the study. The first section considers the sample. Descriptive statistics are included for children, parents, teachers, learning disorder, Christian life identity, and CBCL behavior rating variables. The data analysis according to the central research question is then presented and the effects of parent Christian life identity and problem behavior reporter variables are examined using the statistical technique of analysis of variance (ANOVA). The effect of the severity of learning disorder on problem behavior rating is presented next. Results of correlations (Pearson  $r$  formula) between selected demographic and behavior rating variables are listed, and finally, the results of analysis of variance while controlling for covariates (ANCOVA) indicating socioeconomic status are presented.

Table 3

Research Study Sample

---

Number of Children

Available: 45

## Removed due to:

## Adoption

n 3

(%) 6.7%

## Divorce

n 3

(%) 6.7%

## Not Able to Contact

n 1

(%) 2.2%

## Final Sample:

n 38(%) 84.4

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ranged from 1 to 7 (mean 2.47, median 2, mode 2). Eighty-seven percent of the parents had two or more children. Eighty-nine percent of the parents were Protestants and 11 percent of the parents were Catholics.

#### Teacher Variables

There were 6 male and 32 female teacher respondents to the CBCL-TRF. Their hours per week of instruction time with the child ranged from 5 hours to 30 hours (mean 21.3).

#### Learning Disorder Variables

Mixed learning disorders (more than one achievement area) were experienced by 58 percent of the children. Twenty-nine percent had learning disorders in written language, 10 percent had a math learning disorder, and 3 percent had only a reading disorder. Mild learning disorders (average or higher intelligence and academic achievement  $\leq$  25 percentile in one or more achievement area) were noted in 26 percent of the children. Forty-five percent had moderate learning disorders (average or higher intelligence and  $\geq$  1 standard deviation discrepancy

Descriptive results of the broad-band problem behavior scores of these measures are reported.

The parent CBCL Internalizing behavior problem score ranged from a T-score of 48 to 80 (mean 67.76), while the parent CBCL Externalizing behavior problem score ranged from a T-score of 51 to 90 (mean 68.95) and the parent CBCL Sum behavior problem score ranged from a T-score of 47 to 87 (mean 68.26). The teacher CBCL-TRF Internalizing behavior problem score ranged from a T-score of 42 to 86 (mean 60.71), while the teacher CBCL-TRF Externalizing behavior problem score ranged from a T-score of 19 to 87 (mean 64.45) and the teacher CBCL-TRF Sum behavior problem score ranged from a T-score of 45 to 85 (mean 64.29). Figure 1 (p. 65) demonstrates that the behavioral adjustment of the study sample as a whole is elevated above that of the normative sample. When compared to the CBCL general population norms, parent scores on the Internalizing, Externalizing, and Sum broad band scales were significantly higher ( $t = 2.54$ ,  $p < .05$ ;  $t = 2.71$ ,  $p < .05$ ; and  $t = 2.61$ ,  $p < .05$ , respectively). Comparison of the teacher scores to the CBCL-TRF general population norms resulted in significantly elevated scores on Externalizing and Sum broad-band scales ( $t =$



Following these analyses, 2 X 2 ANOVA was used to test for the influence of parent Christian Life identity and problem behavior reporter (parent or teacher) on the three broad-band problem behavior scale scores of the CBCL and CBCL-TRF. In addition the interaction between parent Christian life identity and problem behavior reporter variables was analyzed.

ONE-WAY ANOVA--CBCL Problem Behavior Scores (Parent and Teacher) by Parent Christian Life Identity

Parent CBCL Internalizing Score

No statistically significant differences ( $F = 1.3$ ,  $p = .26$ ) were found between groups of parents when the broad-band Internalizing score was analyzed (see Table 4). This indicates that there was no essential difference in the ratings of the two parent groups for internalizing problem behavior.

parent groups were essentially the same for externalizing problem behavior.

Table 5

ONE-WAY ANOVA: Parent CBCL Externalizing Behavior Problem Score (PE) by Christian Life Identity (GP)

		<u>Sum Of</u>	<u>Mean</u>	<u>F</u>	
<u>Source</u>	<u>D.F.</u>	<u>Squares</u>	<u>Squares</u>	<u>Ratio</u>	<u>p</u>
Between Groups	1	5.25	5.25	.05	.8084
Within Groups	36	3166.64	87.96		
Total	37	3171.89			

		<u>Standard</u>	<u>Standard</u>	<u>95 Pct Conf</u>	
<u>Group</u>	<u>Count</u>	<u>Mean</u>	<u>Deviation</u>	<u>Error</u>	<u>Int For Mean</u>
1	20	69.30	8.99	2.01	65.09 to 73.51
2	18	68.56	9.80	2.31	63.68 to 73.42

Note. 1 = Parent Active Christian Life Identity, 2 = Parent In-Active Christian or Non-Christian Life Identity

Parent CBCL Sum Score

No statistically significant differences ( $F = .19$ ,  $p = .66$ ) were found between parent groups when

Teacher CBCL-TRF Internalizing Score

No statistically significant differences ( $F = .01$ ,  $p = .93$ ) were found between groups for the teacher broad-band Internalizing score (see Table 7). This indicates that there was essentially no difference in the ratings of the teachers of the participants for internalizing problem behavior.

Table 7

ONE-WAY ANOVA: Teacher CBCL-TRF Internalizing Behavior Problem Score (TI) by Parent Christian Life Identity (GP)

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		<u>Sum Of</u>	<u>Mean</u>	<u>F</u>	
<u>Source</u>	<u>D.F.</u>	<u>Squares</u>	<u>Squares</u>	<u>Ratio</u>	<u>p</u>
Between Groups	1	.82	.82	.008	.9309
Within Groups	36	3882.99	107.86		
Total	37	3171.89			

		<u>Standard</u>	<u>Standard</u>	<u>95 Pct Conf</u>	
<u>Group</u>	<u>Count</u>	<u>Mean</u>	<u>Deviation</u>	<u>Error</u>	<u>Int For Mean</u>
1	20	60.85	11.51	2.57	55.46 to 66.24
2	18	60.56	8.97	2.11	56.10 to 65.01

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(table continues)

Table 8

ONE-WAY ANOVA: Teacher CBCL-TRF Externalizing Behavior Problem Score (TE) by Parent Christian Life Identity (GP)

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		<u>Sum Of</u>	<u>Mean</u>	<u>F</u>	
<u>Source</u>	<u>D.F.</u>	<u>Squares</u>	<u>Squares</u>	<u>Ratio</u>	<u>p</u>
Between Groups	1	2.69	2.69	.015	.9036
Within Groups	36	6526.70	181.30		
Total	37	6529.39			

<u>Group</u>	<u>Count</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>	<u>95 Pct Conf Int For Mean</u>
1	20	64.70	15.15	3.39	57.61 to 71.79
2	18	64.17	11.30	2.66	58.55 to 69.79

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Note. 1 = Parent Active Christian Life Identity, 2 = Parent In-Active Christian or Non-Christian Life Identity

Teacher CBCL-TRF Sum Score

No statistically significant differences ( $F = .25$ ,  $p = .62$ ) were found between groups for the teacher broad-band Sum problem behavior score (see Table 9). This indicates that participant problem

ANOVA--CBCL Problem Behavior Scores (Parent and Teacher) by Christian Life Identity and Reporter (Parent or Teacher)

CBCL Internalizing Score--By GP and REPORTER

The main effect of problem behavior reporter (parent or teacher) was found to be statistically significant for the broad-band Internalizing score ( $F = 10.37$ ,  $p = .002$ , see Table 10). Specifically, teacher ratings of internalizing problem behaviors were significantly lower (with a mean score of 60.71) than parent ratings (with a mean score of 67.76). Also, no interaction was found.

Table 11

ANOVA: CBCL Externalizing Behavior Problem Score by  
Parent Christian Life Identity (GP) and Behavior  
Problem Reporter (Parent and Teacher)

<u>Source</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>p</u>
GP	7.734	1	7.734	.057	.811
REPORTER	384.750	1	384.750	2.858	.095
GP X REPORTER	.211	1	.211	.002	.969
Residual	9693.344	72	134.630		

CBCL Sum Score--By GP and REPORTER

No significance was found in the main effects of parent Christian life identity or for child problem behavior reporter (parent or teacher) for the broad-band Sum score (refer to Table 12). The main effect of reporter (parent or teacher) was found to approach statistical significance ( $F = 3.71$ ,  $p = .058$ , see Table 11). No interaction was found.

analyses of the CBCL-TRF (teacher) broad-band Internalizing scale scores.

The levels of severity of a learning disorder were established as follows: (a) Mild learning disorder = average or higher intelligence and academic achievement  $\leq$  25 percentile in one or more achievement area, (b) Moderate learning disorder = average or higher intelligence and  $\geq$  1 standard deviation discrepancy between intelligence measure score and academic achievement in one or more achievement area, (c) Severe learning disorder = average or higher intelligence and  $\geq$  2 standard deviation discrepancy between intelligence measure score and academic achievement in one or more achievement area.

ONE-WAY ANOVA--CBCL Problem Behavior Scores (Parent and Teacher) by Severity of Learning Disorder  
Parent CBCL Internalizing Score

No statistically significant differences ( $F = .03$ ,  $p = .97$ ) were found between groups for the parent broad-band Internalizing score (see Table 13). This indicates parent rating of internalizing problem behavior is essentially the same for all levels of participant learning disorder severity.

Table 14

ONE-WAY ANOVA: Parent CBCL Externalizing Behavior  
Problem Score by Learning Disorder Severity (LDSEV)

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		<u>Sum Of</u>	<u>Mean</u>	<u>F</u>	
<u>Source</u>	<u>D.F.</u>	<u>Squares</u>	<u>Squares</u>	<u>Ratio</u>	<u>p</u>
Between Groups	2	118.66	59.33	.68	.5131
Within Groups	35	3053.24	87.24		
Total	37	3171.89			

		<u>Standard</u>	<u>Standard</u>	<u>95 Pct Conf</u>	
<u>Group</u>	<u>Count</u>	<u>Mean</u>	<u>Deviation</u>	<u>Error</u>	<u>Int For Mean</u>
MILD	10	70.20	7.98	2.52	64.49 to 75.91
MODERATE	17	70.00	10.28	2.49	64.72 to 75.28
SEVERE	11	66.18	8.89	2.68	60.21 to 72.15

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Parent CBCL Sum Score

No statistically significant differences ( $F = .29$ ,  $p = .75$ ) were found between groups for the parent broad-band Sum score (see Table 15). This indicates that ratings of parents were essentially the same for participants with various levels of severity of learning disorder when problem behavior scales were summed together.



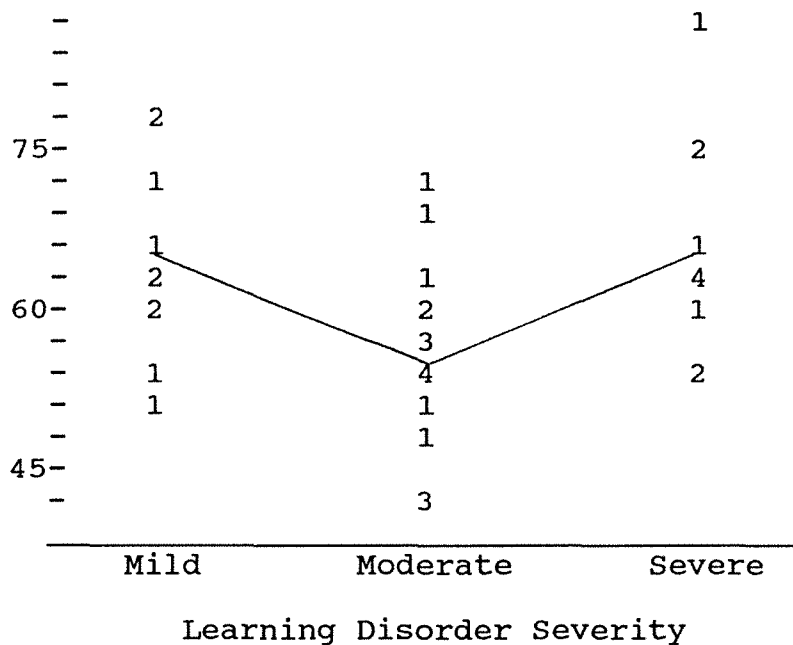
rating scores on the broad-band Internalizing scale of the CBCL-TRF for participants in the Moderate Learning Disorder group (with a mean score of 55.00), than the Mild LD group (with a mean score of 65.30), and the Severe LD group (with a mean score of 65.36) (see Table 16). Figure 2 is a plot of the relationship between severity of learning disorder and teacher Internalizing score. Regression analysis indicates that the teacher Internalizing score and severity of learning disorder are not linear in their relationship, instead they appear to be curvilinear.

Figure 2

Plot of Teacher Internalizing Scores by  
Learning Disorder Severity

Internalizing

T Score



Regression Statistics of Teacher Internalizing Score  
on Severity of Learning Disability:

Correlation	.0185	R Squared	.0003
S.E. of Est	10.3849	Signif	.9121
Intercept(S.E.)	60.1995	Slope(S.E.)	.2522

Note. N = 38; S.E. = standard error

Teacher CBCL-TRF Sum Score

No statistically significant differences ( $F = 1.62$ ,  $p = .21$ ) were found between groups for the broad-band Sum teacher rating score (see Table 18). This indicates that the broad-band Sum score from teacher rating of participants were essentially the same although levels of participant learning disorder differed.

Table 18

ONE-WAY ANOVA: Teacher CBCL-TRF Sum Behavior Problem Score by Learning Disorder Severity (LDSEV)

		<u>Sum Of</u>	<u>Mean</u>	<u>F</u>	
<u>Source</u>	<u>D.F.</u>	<u>Squares</u>	<u>Squares</u>	<u>Ratio</u>	<u>p</u>
Between Groups	2	243.07	121.54	1.62	.2118
Within Groups	35	2620.74	74.88		
Total	37	2863.81			
		<u>Standard</u>	<u>Standard</u>	<u>95 Pct Conf</u>	
<u>Group</u>	<u>Count</u>	<u>Mean</u>	<u>Deviation</u>	<u>Error</u>	<u>Int For Mean</u>
MILD	10	67.20	8.05	2.55	61.44 to 72.96
MODERATE	17	61.53	8.12	1.97	57.36 to 65.70
SEVERE	11	65.29	9.91	3.00	59.25 to 72.57

The association between frequency of church attendance and importance of religious faith was significant ( $r = .68$ ,  $p = .000$ ). This would strongly suggest that the higher the perceived importance of religious faith, the higher the frequency of church attendance.

Although there were few unexpected or meaningful statistically significant associations found between variables in this study, there was still a question whether family socioeconomic variables might have some influence on CBCL and CBCL-TRF broad-band scores since research by Mishler (1987) suggested an influence on child social adaptation by family socioeconomic factors. CBCL and CBCL-TRF broad-band scores were analyzed controlling for the influence of socioeconomic status, as indicated by family income and parental education.

ANCOVA'S were performed separately on the Internalizing, Externalizing, and Sum behavior problem scores of the CBCL and CBCL-TRF by parental Christian life identity group, controlling for family income, mother's level of education and father's level of education. No significant covariate effects were found for family income or for mother's education or

Table 19

ANCOVA: CBCL Internalizing Behavior Problem Score  
(Parent and Teacher) by Parent Christian Life Identity  
and Reporter, with Family Income, Mother's Education,  
and Father's Education

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<u>Source</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>p</u>
INC	239.572	1	239.572	2.719	.104
MED	2.106	1	2.106	.024	.878
FED	49.102	1	49.102	.557	.458
GP	4.416	1	4.416	.050	.824
REPORTER	945.053	1	945.053	10.724	.002
GP X REPORTER	57.658	1	57.658	.654	.421
Residual	6080.469	69	88.123		

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Note. INC = Family Income, MED = Mother's Education,  
 FED = Father's Education, GP = Parent Christian Life  
 Identity, REPORTER = Parent or Teacher

CBCL Externalizing Score--By GP and REPORTER

None of the covariates were found to be statistically significant when analyzing the Externalizing score. After controlling for the effects of the three covariates on the broad-band

Table 20--Continued

Note. INC = Family Income, MED = Mother's Education, FED = Father's Education, GP = Parent Christian Life Identity, REPORTER = Parent or Teacher

CBCL Sum Score--By GP and REPORTER

None of the covariates were found to be statistically significant. After controlling for the effects of the three covariates on the broad-band Sum score, no significance was found in the main effects of parent Christian life identity or for child problem behavior reporter (parent or teacher) (see Table 21). The main effect of child problem behavior reporter was found to approach statistical significance ( $F = 3.92$ ,  $p = .052$ , see Table 21).

These analyses did not result in any significant findings. Following these analyses, three 2 X 2 ANOVA's were performed on CBCL and CBCL-TRF broad-band problem behavior scale variables by parent Christian life identity grouping (active Christian and in-active or non-Christian) and child problem behavior reporter (parent or teacher). The main effect of problem behavior reporter (parent or teacher) was found to be statistically significant (see Table 16) for the Internalizing problem behavior variable.

The effect of the severity of learning disorder on the CBCL broad-band behavior problem scale scores was examined through one-way analysis of variance (ANOVA). The CBCL-TRF (teacher report form) broad-band Internalizing scale score was found to be significantly lower for children in the moderate learning disorder category.

Three further analyses (ANCOVA's) were performed on CBCL and CBCL-TRF broad-band problem behavior scale variables by parent Christian life identity grouping and child problem behavior reporter while controlling for the covariates of family income and parent education. None of the covariates were found to be statistically significant. The main effect of problem

## CHAPTER 4

### DISCUSSION

This chapter is divided into three sections and discusses the results reported in Chapter 3. The first section is a discussion of the results as they address the central hypothesis. Secondary research questions are discussed separately. The second section discusses the limitations of the present study and introduces recommendations for future investigation. The chapter closes with a summary and conclusion.

The subscale problem behavior scores of the Child Behavior Checklist (CBCL) form two broad-based groupings of behavior, "internalizing" behavior (fearful, inhibited, and overcontrolled or withdrawn) and "externalizing" behavior (aggressive, antisocial, acting-out, and undercontrolled). These broad-based groupings are then summed together into one summary score for problem behavior. The scores from the CBCL used in this study, Internalizing T, Externalizing T and Sum T are more strongly related to child clinical



teacher reports in level of reported problem behaviors?

In order to test the central hypothesis, a series of one-way ANOVA's were performed to examine the mean differences of parent and teacher reported child problem behavior scores of two groups based on parent Christian life identity. The results of the one-way ANOVA's did not suggest the presence of any significant differences in problem behavior scale scores between children whose parents had an active Christian life identity and children whose parents did not. Three 2 X 2 ANOVA's were performed using three dependent variables (broad-band problem behavior scores) from the CBCL and CBCL-TRF, and two independent variables (Group--parent Christian life identity, and Reporter--parent or teacher). In the analysis of the CBCL broad-band Internalizing score, the main effect of the child problem behavior reporter (parent or teacher) was found to be statistically significant ( $F = 10.37, p = .002$ ). Teachers were found to report a significantly lower level of Internalizing problem behavior than parents. However, in the analysis of the CBCL broad-band Sum problem behavior scores, the main effect of child problem

Active Christian parents may nonetheless be more or less effective in coping with the effects of learning disorders in their children. This could influence the rate for clinic referral without affecting symptom severity on any referred children. Children referred to the clinics used in this study appear to have comparable levels of severity of learning disorder and problem behavior.

One possible explanation for study findings is that parents who seek services beyond the interventions offered by the schools reveal a level of care and concern for their child which may exceed the level noted in parents in general. The factors which lead parents to bring their child to a private outpatient psychological clinic may be a result of parental values and beliefs which are not exclusive products of active parental Christian life identity. Parental concern and support may give a learning disordered child, who is at an age where religious and spiritual faith is not fully apprehended or appreciated, a sense of meaning and purpose.

Several possible explanations for the finding of lower teacher reported internalizing problem behaviors for learning disordered children are considered, since

behavior and in turn might be more sensitive to internalizing problem behavior in their children, or they may attribute their internalizing problems to their children (Johnston & Pelham, 1990; Schaughency & Lahey, 1985; Wahler & Sansbury, 1990).

6. Still another possible explanation may be that long term exposure of children to parents in home settings and more diverse interactions with parents may result in children being less inhibited at home than in the classroom setting and more likely to exhibit symptoms of internalizing problem behavior in the presence of their parents (Achenbach et al., 1987).

The secondary research question about learning disorder severity influence on reported levels of child problem behavior, was addressed with a series of one-way ANOVA's. Parent reported child problem behavior did not appear to be related to the severity of learning disorder. However, teacher reported levels of child internalizing problem behavior appear to be lower for children who demonstrate a moderate level of learning disorder (refer to Table 15). The literature indicates lower teacher reported Internalizing problem behavior scores for learning

environments, curriculum, and teaching approaches, severely learning disordered students often experience significant ongoing difficulties in learning. This finding of lower levels of teacher reported internalizing problem behavior for moderately learning disordered children will require further study to determine whether such a pattern is found in other samples of learning disordered children.

The interaction between the parent Christian life identity group and child problem behavior reporter (parent or teacher) was not statistically significant, suggesting that these two variables were not related for this study sample. In addition, when the variance accounted for by measures of socioeconomic status (parent education and family income) were controlled (i.e., the ANCOVA analyses), no statistically significant differences due to socioeconomic variables were noted. In this sample no significant relationship was found between parent education or income and severity of behavior problems in learning disordered children.

versus visual-perceptual deficits, left versus right hemisphere deficits, etc.), or achievement area weakness, may result in better differentiation of the influence of learning disorder and child problem behavior. This would require an increase in sample size to provide a reliable analysis.

Christian life identity variables may not be appropriately discriminating in a population sample where parents demonstrate belief in the worth of their child and a strong desire for their child's well-being by seeking private outpatient psychological services. There may be factors which cause other parents to not experience the same level of problem behavior severity with their learning disordered children and therefore not feel the need to refer them to a private psychological clinic for further evaluation and treatment.

The limitations of the CBCL and CBCL-TRF, like all of the currently available child behavior rating scales, require that the results of this and any study utilizing child behavior rating scales, be cautiously interpreted. Some of these limitations include respondent biases and misperceptions, cross-

outpatient psychological clinics may reveal significant differences.

It may also be beneficial to examine the moral development of children with learning disorders and to utilize this variable in analyzing their problem behavior. Their cognitive and moral development level may influence their awareness of parental beliefs and values and the influence of these factors on their adjustment.

#### Research Summary

The central purpose of this study was to test the following hypothesis: Children with identified learning disorders whose parents have an active Christian life identity have lower levels of social-emotional and behavioral problems (as measured by the Child Behavior Checklist -- CBCL and CBCL-TRF) than learning disordered children whose parents do not claim an active Christian life identity. Three additional questions were then asked: Do parent and teacher reported levels of child problem behavior in students with learning disorders increase as the severity of the learning disorder increases? Is there

broad-band scores: Internalizing T, Externalizing T, and Sum T.

In the first part of the statistical analysis, groupings by parent Christian life identity (independent variable) were analyzed using a series of one-way ANOVA's. Analyses with these variables failed to reveal any statistically different levels of parent or teacher reported problem behavior between the parent Christian life identity groups.

The second part of the statistical analysis was performed (2 X 2 ANOVA's) to examine the influence of two independent variables, parent Christian life identity and child problem behavior reporter, on three dependent variables (Internalizing T, Externalizing T, and Sum T of the CBCL and CBCL-TRF) for learning disordered children. Teachers were found to report a significantly lower level of internalizing problem behavior. This is consistent with previous findings with the CBCL and CBCL-TRF noted by Rosenberg et al. (1988).

The third part of the statistical analysis involved analyses using one-way ANOVA to examine the effect of the severity of the learning disorder (independent variable) on the Child Behavior Checklist

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(Letterhead)

July, 1991

Dear Mr. & Mrs. \_\_\_\_\_:

You and your spouse are being asked to participate in a research study which will examine how family variables, including socio-economic factors, church affiliation and attendance, and importance of religious values and beliefs influence the behavioral adjustment of your child. Your child was seen in this clinic in the past two years and was identified as having learning difficulties.

We feel a survey of former clients will provide invaluable information and will enable us to better evaluate the needs of children with learning problems.

Confidentiality will be maintained at all times by the investigators. All records will be identified by a code number and the master list will be destroyed when the data is collected.

The attached short survey will take you approximately five minutes to complete. Please fill out the survey completely and return it in the enclosed self-addressed, stamped envelope today.

Your response to this survey is critical. The more responses we receive, the better our investigation will represent our former clients. Returning the survey indicates your agreement to participate.

Appendix B  
Survey Questionnaire

- Q-5 How Frequently Did You Attend Religious Services In A Place Of Worship During The Past Year?  
(Circle Number)
- 1 REGULARLY (once a week or more)
  - 2 OCCASIONALLY (once every two weeks or once a month)
  - 3 ONLY ON SPECIAL DAYS (Christmas, etc.)
  - 4 NOT AT ALL
- Q-6 How Frequently Did You Attend Religious Services At The Time Your Child Was First Seen In The Clinic? (Circle Number)
- 1 REGULARLY (once a week or more)
  - 2 OCCASIONALLY (once every two weeks or once a month)
  - 3 ONLY ON SPECIAL DAYS (Christmas, etc.)
  - 4 NOT AT ALL
- Q-7 Religion is Important to Me (Circle Number)
- 1 STRONGLY AGREE (religious faith is the center of my life)
  - 2 MODERATELY AGREE
  - 3 AGREE
  - 4 DISAGREE
  - 5 MODERATELY DISAGREE
  - 6 STRONGLY DISAGREE (I have no religious faith)
- Q-8 Which Is The Highest Level of Education You Have Completed? (Circle Number)
- 1 COMPLETED GRADE SCHOOL
  - 2 SOME HIGH SCHOOL
  - 3 COMPLETED HIGH SCHOOL
  - 4 SOME COLLEGE
  - 5 COMPLETED COLLEGE
  - 6 SOME GRADUATE WORK
  - 7 A GRADUATE DEGREE

Appendix C

Child Behavior Checklist - Parent Form

Child Behavior Checklist - Teacher Report Form



# Child Behavior Problems - 157

- V. 1. About how many close friends does your child have? ☐ None ☐ 1 ☐ 2 or 3 ☐ 4 or more  
(Do not include brothers & sisters)
2. About how many times a week does your child do things with friends outside of regular school hours?  
(Do not include brothers & sisters) ☐ Less than 1 ☐ 1 or 2 ☐ 3 or more

VI. Compared to other children of his/her age, how well does your child:

- |   | Worse                    | About Average            | Better                   |   |
|---|--------------------------|--------------------------|--------------------------|---|
| a. Get along with his/her brothers & sisters? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> Has no brothers or sisters |
| b. Get along with other children?             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |   |
| c. Behave with his/her parents?               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |   |
| d. Play and work by himself/herself?          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |   |

VII. 1. For ages 6 and older—performance in academic subjects: (If child is not being taught, please give reason)

- |                                       | Failing                  | Below average            | Average                  | Above average            |
|---------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a. Reading, English, or Language Arts | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. History or Social Studies          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Arithmetic or Math                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Science                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. _____                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. _____                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. _____                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Other academic subjects—for example: computer courses, foreign language, business. Do not include gym, shop, driver's ed., etc.

2. Is your child in a special class or special school? ☐ No ☐ Yes—what kind of class or school?

3. Has your child repeated a grade? ☐ No ☐ Yes—grade and reason

4. Has your child had any academic or other problems in school? ☐ No ☐ Yes—please describe

When did these problems start?

Have these problems ended? ☐ No ☐ Yes—when?

Does your child have any illness, physical disability, or mental handicap? ☐ No ☐ Yes—please describe

What concerns you most about your child?

Please describe the best things about your child:

# Child Behavior Problems - 159

0 = Not True (as far as you know)			1 = Somewhat or Sometimes True			2 = Very True or Often True			
0	1	2	57.	Physically attacks people	0	1	2	84.	Strange behavior (describe): _____
0	1	2	58.	Picks nose, skin, or other parts of body (describe): _____	0	1	2	85.	Strange ideas (describe): _____
0	1	2	59.	Plays with own sex parts in public	0	1	2	86.	Stubborn, sullen, or irritable
0	1	2	60.	Plays with own sex parts too much	0	1	2	87.	Sudden changes in mood or feelings
0	1	2	61.	Poor school work	0	1	2	88.	Sulks a lot
0	1	2	62.	Poorly coordinated or clumsy	0	1	2	89.	Suspicious
0	1	2	63.	Prefers playing with older children	0	1	2	90.	Swearing or obscene language
0	1	2	64.	Prefers playing with younger children	0	1	2	91.	Talks about killing self
0	1	2	65.	Refuses to talk	0	1	2	92.	Talks or walks in sleep (describe): _____
0	1	2	66.	Repeats certain acts over and over; compulsions (describe): _____	0	1	2	93.	Talks too much
0	1	2	67.	Runs away from home	0	1	2	94.	Teases a lot
0	1	2	68.	Screams a lot	0	1	2	95.	Temper tantrums or hot temper
0	1	2	69.	Secretive, keeps things to self	0	1	2	96.	Thinks about sex too much
0	1	2	70.	Sees things that aren't there (describe): _____	0	1	2	97.	Threatens people
0	1	2	71.	Self-conscious or easily embarrassed	0	1	2	98.	Thumb-sucking
0	1	2	72.	Sets fires	0	1	2	99.	Too concerned with neatness or cleanliness
0	1	2	73.	Sexual problems (describe): _____	0	1	2	100.	Trouble sleeping (describe): _____
0	1	2	74.	Showing off or clowning	0	1	2	101.	Truancy, skips school
0	1	2	75.	Shy or timid	0	1	2	102.	Underactive, slow moving, or lacks energy
0	1	2	76.	Sleeps less than most children	0	1	2	103.	Unhappy, sad, or depressed
0	1	2	77.	Sleeps more than most children during day and/or night (describe): _____	0	1	2	104.	Unusually loud
0	1	2	78.	Smears or plays with bowel movements	0	1	2	105.	Uses alcohol or drugs for nonmedical purposes (describe): _____
0	1	2	79.	Speech problem (describe): _____	0	1	2	106.	Vandalism
0	1	2	80.	Stares blankly	0	1	2	107.	Wets self during the day
0	1	2	81.	Steals at home	0	1	2	108.	Wets the bed
0	1	2	82.	Steals outside the home	0	1	2	109.	Whining
0	1	2	83.	Stores up things he/she doesn't need (describe): _____	0	1	2	110.	Wishes to be of opposite sex
					0	1	2	111.	Withdrawn, doesn't get involved with others
					0	1	2	112.	Worrying
								113.	Please write in any problems your child has that were not listed above: _____
					0	1	2		_____
					0	1	2		_____
					0	1	2		_____

PLEASE BE SURE YOU HAVE ANSWERED ALL ITEMS.

PAGE 4

UNDERLINE ANY YOU ARE CONCERNED ABOUT.

# Child Behavior Problems - 161

VIII. Compared to typical pupils of the same age:	1. Much less	2. Somewhat less	3. Slightly less	4. About average	5. Slightly more	6. Somewhat more	7. Much more
1. How hard is he/she working?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. How appropriately is he/she behaving?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. How much is he/she learning?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. How happy is he/she?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## IX. Most recent achievement test scores (if available):

Name of test	Subject	Date	Percentile or grade level obtained

## X. IQ, readiness, or aptitude tests (if available):

Name of test	Date	IQ or equivalent scores

Does this pupil have any illness, physical disability, or mental handicap? ☐ No ☐ Yes—please describe

What concerns you most about this pupil?

Please describe the best things about this pupil:

Please feel free to write any comments about this pupil's work, behavior, or potential, using extra pages if necessary.

# Child Behavior Problems - 163

0 = Not True (as far as you know)			1 = Somewhat or Sometimes True	2 = Very True or Often True			
0	1	2	57. Physically attacks people	0	1	2	84. Strange behavior (describe): _____
0	1	2	58. Picks nose, skin, or other parts of body (describe): _____	0	1	2	85. Strange ideas (describe): _____
0	1	2	59. Sleeps in class	0	1	2	86. Stubborn, sullen, or irritable
0	1	2	60. Apathetic or unmotivated	0	1	2	87. Sudden changes in mood or feelings
0	1	2	61. Poor school work	0	1	2	88. Sulks a lot
0	1	2	62. Poorly coordinated or clumsy	0	1	2	89. Suspicious
0	1	2	63. Prefers being with older children or youths	0	1	2	90. Swearing or obscene language
0	1	2	64. Prefers being with younger children	0	1	2	91. Talks about killing self
0	1	2	65. Refuses to talk	0	1	2	92. Underachieving, not working up to potential
0	1	2	66. Repeats certain acts over and over; compulsions (describe): _____	0	1	2	93. Talks too much
0	1	2	67. Disrupts class discipline	0	1	2	94. Teases a lot
0	1	2	68. Screams a lot	0	1	2	95. Temper tantrums or hot temper
0	1	2	69. Secretive, keeps things to self	0	1	2	96. Seems preoccupied with sex
0	1	2	70. Sees things that aren't there (describe): _____	0	1	2	97. Threatens people
0	1	2	71. Self-conscious or easily embarrassed	0	1	2	98. Tardy to school or class
0	1	2	72. Messy work	0	1	2	99. Too concerned with neatness or cleanliness
0	1	2	73. Behaves irresponsibly (describe): _____	0	1	2	100. Fails to carry out assigned tasks
0	1	2	74. Showing off or clowning	0	1	2	101. Truancy or unexplained absence
0	1	2	75. Shy or timid	0	1	2	102. Underactive, slow moving, or lacks energy
0	1	2	76. Explosive and unpredictable behavior	0	1	2	103. Unhappy, sad, or depressed
0	1	2	77. Demands must be met immediately, easily frustrated	0	1	2	104. Unusually loud
0	1	2	78. Inattentive, easily distracted	0	1	2	105. Uses alcohol or drugs for nonmedical purposes (describe): _____
0	1	2	79. Speech problem (describe): _____	0	1	2	106. Overly anxious to please
0	1	2	80. Stares blankly	0	1	2	107. Dislikes school
0	1	2	81. Feels hurt when criticized	0	1	2	108. Is afraid of making mistakes
0	1	2	82. Steals	0	1	2	109. Whining
0	1	2	83. Stores up things he/she doesn't need (describe): _____	0	1	2	110. Unclean personal appearance
				0	1	2	111. Withdrawn, doesn't get involved with others
				0	1	2	112. Worries
							113. Please write in any problems the pupil has that were not listed above: _____
				0	1	2	_____
				0	1	2	_____
				0	1	2	_____

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Correlations:	Mother's Educ.	Father's Educ.	Income	NCD
Mother's Educ	1.0000	.5567***	.4674**	-.1031
Father's Educ	.5567***	1.0000	.2889	.1543
Income	.4674**	.2889	1.0000	-.3393*
NCD	-.1031	.1543	-.3393*	1.0000
Attend Church	-.4468**	-.4090*	-.1147	-.0809
Import-Faith	-.4753**	-.3439*	-.0363	-.1699
PI	-.2726	-.2488	-.2700	.1528
PE	-.1384	-.2676	-.1390	.2342
PS	-.2457	-.2988	-.2255	.2281
TI	-.1050	-.1201	-.2448	-.0495
TE	.1524	-.0031	-.0181	.0054
TS	-.1806	-.2818	-.1712	.0465
Teacher Hours	.2539	.2470	-.0827	.0066

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N= 38 2-tailed Signif: \* - .05 \*\* - .01 \*\*\* - .001

Note. NCD = Number of Children in Family, PI = Parent Internalizing Score, PE = Parent Externalizing Score, PS = Parent Sum Score, TI = Teacher Internalizing Score, TE = Teacher Externalizing Score, TS = Teacher Sum Score

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Correlations:	TI	TE	TS	THRS
Mother's Educ	.0230	-.0330	.0798	.2539
Father's Educ	-.1201	-.0031	-.2818	.2470
Income	-.2448	-.0181	-.1712	-.0827
NCD	-.0495	.0054	.0465	.0066
Attend Church	.0230	-.0330	.0798	-.2362
Import-Faith	.0854	-.0105	.1308	-.3776*
PI	.2901	.2159	.3386*	-.0855
PE	.0232	.4170**	.3993	.0110
PS	.0181	.3462	.4114**	-.0077
TI	1.0000	.3030	.5014***	.1051
TE	.3030	1.0000	.7444***	-.1051
TS	.5014**	.7444***	1.0000	-.1746
Teacher Hours	.1051	-.0539	-.1746	1.0000

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N = 38 2-tailed Signif: \* - .05 \*\* - .01 \*\*\* - .001

Note. TI = Teacher Internalizing Score, TE = Teacher Externalizing Score, TS = Teacher Sum Score, THRS = Teacher Hours With Child, NCD = Number of Children in Family, PI = Parent Internalizing Score, PE = Parent Externalizing Score, PS = Parent Sum Score

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Correlations:	Severity	Teacher
	of LD	Hours
Age Child	-.0548	.3361*
Gender Child	.2045	.1589
Grade Child	-.1145	.3040
Type of LD	.2073	-.0074
Severity-LD	1.0000	-.0386
PI	.0383	-.0855
PE	-.1665	.0110
PS	-.0369	-.0077
TI	.0185	.1051
TE	-.0796	-.0539
TS	-.0461	-.1746
Teacher Hours	-.0386	1.0000

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N= 38 2-tailed Signif: \* - .05 \*\* - .01 \*\*\* - .001

Note. PI = Parent Internalizing Score, PE = Parent Externalizing Score, PS = Parent Sum Score, TI = Teacher Internalizing Score, TE = Teacher Externalizing Score, TS = Teacher Sum Score

Variables Legend

<u>Column</u>	<u>Variable</u>	<u>Definition</u>
1-2	AGECD	Age of child
3	GCD	Gender of Child (1 = male; 2 = female)
4	RCD	Race of Child (1 = white; 2 = black; 3 = Hispanic; 4 = Other)
5	GD	Grade in school
6	ADOPT	Adoption (1 = no; 2 = yes)
7	RCBCL	Parent rating CBCL (1 = mother; 3 = father)
8	PDEMO	Parent rating demographic survey (1 = mother; 2 = father)
9	MAR	Marital status of parents at intake (1 = married; 2 = separated; 3 = Divorced)
10	RMO	Race of Mother (1 = white; 2 = black; 3 = Hispanic; 4 = Other)
11	RFA	Race of Father (1 = white; 2 = black; 3 = Hispanic; 4 = Other)



21	FREQ	Frequency of church attendance during the past year (1 = ≥ once a week; 2 = twice a month or less; 3 = on special days; 4 = not at all)
22	FREQR	Frequency of church attendance at the time of initial intake (1 = ≥ once a week; 2 = twice a month or less; 3 = on special days; 4 = not at all)
23	IMPR	Importance of religious faith (1 = strongly agree; 2 = moderately agree; 3 = agree; 4 = disagree; 5 = moderately disagree; 6 = strongly disagree)
24	LD	Type of learning disorder (1 = reading; 2 = math; 3 = spelling/written language; 4 = mixed)
25	LDSEV	Severity of learning disorder (1 = mild; 2 = moderate; 3 = severe)
26-27	PI	Parent CBCL Internalizing score

Raw Data

10113111111136382333111143645861605756225101  
 09113111111135362224111142809087578171220102  
 09113111111138413382111142657671558268125103  
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 07111111111129292261244411757369787575225233  
 1121611111113333224222222745972566062130234  
 10115111111132342351122131715863616260212235  
 09114111111126261132122331798487678785125236  
 06111111111124371142133442706968708581205237  
 08113111111131442252122331767772646765225238

CURRICULUM VITAE

PERSONAL:

Name: Philip Alvin House  
Birth: 9/11/50, Glasgow, Montana  
Marital Status: Married to Judy J. House (19 yrs),  
Children: Kristin - 14 yrs;  
David - 11 yrs; Jonathan - 5 yrs  
Home Address: 13540 S.E. 120th Way, Clackamas,  
Oregon 97015  
Home Phone: (503) 698-2100  
Office Address: Sundstrom & Associates, P.C.  
Clinical Professions Center  
8800 S.E. Sunnyside Road, Suite 315  
Clackamas, Oregon 97015  
Office Phone: (503) 653-0631

EDUCATION AND QUALIFICATIONS:

1990-Present Licensed Professional Counselor (LPC)  
#C0020, State of Oregon  
1988-Present Nationally Certified School  
Psychologist (NCSP) #11621  
1987-Present Licensed Professional Counselor (LPC)  
#57, State of Montana  
1986-Present Nationally Certified Counselor (NCC)  
#170090  
1979-Present Certified School Psychologist, State  
of Montana  
  
1988-Present Doctoral Candidate in Clinical  
Psychology, George Fox College,  
Graduate School of Psychology,  
Newberg, Oregon  
1990 M.A. Clinical Psychology, with  
honors, Western Seminary, Portland,  
Oregon  
1981-1987 Graduate coursework in Psychology,  
University of Montana, 21 qtr hrs  
1980-1982 Graduate coursework in  
Counseling/Education, Montana State  
University, 29 qtr hrs  
1978-1981 Graduate coursework in Education,  
Eastern Montana College, 16 qtr hrs

- 9/84-6/88 SCHOOL PSYCHOLOGIST Part-time school psychology services for rural Gallatin and Madison County schools under the Gallatin-Madison Special Education Coop., Belgrade, Montana
- 8/87-12/87 INSTRUCTOR Montana Bible College, Bozeman, Montana. Family Relationships course (2 sem hrs)
- 1/81-7/88 PROFESSIONAL COUNSELOR Part-time private practice counseling, individual and family
- 84,85,86 INSTRUCTOR (part-time) Department of Health and Human Development, Counseling Program, Montana State University, Bozeman, Montana. Taught summer school graduate counseling courses
- 4/77-9/79 MENTAL HEALTH POSITIONS - RESIDENTIAL TREATMENT FACILITY  
Yellowstone Treatment Centers, Billings, Montana. JCAH accredited residential psychiatric treatment facility for 100 children/youth.
- 6/79-9/79 DIRECTOR OF INTERMEDIATE TREATMENT  
Responsible for supervision of the intermediate portion of program
- 3/79-6/79 DIRECTOR OF STAFF DEVELOPMENT  
Responsible for staff development plan; clinical staff recruitment and screening
- 12/77-3/79 CLINICAL SUPERVISOR - Youth Assessment Center. Tri-part role as Child Care Staff Supervisor, Psychodiagnostician, and Counselor of seven bed assessment unit.
- 4/77-12/77 ASSESSMENT SPECIALIST  
Personal and group counseling, psychometric duties, contingency management and behavioral assessment.

