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Effect of School-Age Learning Disabled Children on Parent Perception of Family Adaptability and Cohesion

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Effect of School-Age Learning Disabled Children on Parent Perception of Family Adaptability and Cohesion

by

William C. Buhrow, Jr.

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
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Effect of School-Age Learning Disabled Children on Parent Perception of Family Adaptability and Cohesion

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William C. Buhrow, Jr.
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Newberg, Oregon

Abstract

Family systems theorists believe families have predictable, automatic behavior patterns. Families with learning disabled (LD) children have been found to experience a variety of maladaptive relationship patterns. This research investigated the question, "Do school-age children with LD have a significant effect on their parents' perceptions of their family's adaptability and cohesion, as measured by the Family Adaptability and Cohesion Scales II (FACES II)?"

In response to this question, two primary hypotheses were proposed. The first predicted a significant difference on perceptions of family
adaptability and cohesion among fathers and mothers of school-age LD and non-LD children. Parents of non-LD children were expected to score higher on adaptability and cohesion than parents of LD children.

The second hypothesis predicted a significant difference between parents of different marital statuses (single parent, married once, and remarried) on perceptions of family adaptability and cohesion among families with LD and non-LD children. Regardless of marital status, parents of LD children were expected to score significantly lower on adaptability and cohesion than parents of non-LD children.

Families with school-age children attending the elementary schools in the Newberg School District were selected and assigned to one of two groups: families having an LD child ($n = 128$) and those without a LD child ($n = 128$). Data were collected via a mail survey questionnaire using brief demographic questionnaires and the FACES II. Responses were received from 139 families yielding a total of 229 participants.

No significant differences were found between LD and non-LD families regarding the demographic data collected. Statistical analysis (ANOVA) found that LD children do not significantly effect their parents'
perceptions of family adaptability and cohesion, as measured by the FACES II. Parent gender significantly affected adaptability scores on FACES II and marital status significantly affected cohesion scores on FACES II. No other significant results were found.

Results, implications, and limitations of the study were discussed along with suggestions for future research. Additionally, possible explanations for the findings were offered.
First and foremost, I want to express my appreciation and love for Donna, my wife, whose love, support, encouragement, and patience were abundantly available throughout this stage of our lives together (even when her husband turned into an impersonal, academic machine).

I want to thank my dissertation committee: Neal McBride, Ed.D., Ph.D. (my chair), for his timely draft reviews and suggestions along the way; to Dean Longfellow, Psy.D., for his assistance with FACES II and the conceptualization; and to Ross Quackenbush, Psy.D., for his willingness to permit and coordinate this study in the school district.

I want to thank my parents who always let me know that they were behind me 100 percent and often sacrificed to help me pursue my dreams and goals.

I want to acknowledge the various individuals and professors that, throughout my life, in both word and deed, inspired me to pursue excellence in all that I do.

Lastly, I wish to thank the Lord, whose grace was abundant as He wonderfully met our physical, emotional, and spiritual needs during this time.
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Murray Bowen (1978), a leading contributor in the field of family systems theory, contended that people are born into complex family systems and are destined to play certain roles in those systems. Bowen believed that healthy families were comprised of people who responded to their family system by learning to become an individual while remaining in touch with the system. This balance of being an individual, while remaining part of the family, is constantly being affected as families move through various stages of their family life cycle.

As families progress through life, they move through various stages of development that are commonly marked by significant events. These events include such historic markers as the birth of children, settling down, middle adulthood, grandparenthood, retirement, and late adulthood (Combrinck-Graham, 1983). Common stages of the family life cycle include: (a) beginning a family, (b) the infant/preschool
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family, (c) the school-age family, (d) the adolescent family, (e) the launching family, (f) the postparental family (Brown & Christensen, 1986).

Each stage of the family life cycle has certain developmental tasks and unique challenges associated with it. One particularly difficult stage is the school-age family. At this point in the family's life cycle, they becomes more involved with people and institutions outside the immediate family system. The family becomes vulnerable to feedback from outside systems such as schools and neighbors, which can place considerable stress on the family system (Brown & Christensen, 1986).

The school-age stage is even more difficult when the child has a learning disability (Amerikaner & Omizo, 1984; Kaslow & Cooper, 1978; Shapiro & Forbes, 1981; Slater and Wikler, 1986). When these difficulties and their resulting threats to the family system are considered, questions arise as to the type of effects these difficulties have on the family system.

The effects of having learning disabled (LD) children in the family system during the school-age stage of the family life cycle were the focus of the
present study. Primary attention was given to the effects that school-age LD children have on their parent's perceptions of family adaptability and cohesion.

**Statement of the Problem**

The central problem addressed in this study involved the effect that school-age LD children had on their parent's perceptions of their families. The specific question pursued was, "Do school-age children with learning disabilities have a significant effect on their parents' perceptions of their family's adaptability and cohesion, as measured by the Family Adaptability and Cohesion Scales II (FACES II)?" The data from this study contributed to the knowledge of family systems when children with learning disabilities are present.

**Definition of Terms**

Several specialized terms used in this study include learning disabled, family cohesion, and family adaptability. They are defined as follows:
Learning Disabled (LD)

Broadly defined, learning disabled can refer to learning difficulties that are associated with either mental retardation, brain injury, sensory difficulties, or emotional disturbances. More narrowly, it refers to the failure of a child that has sufficient intelligence, maturity, and cultural background to learn scholastic skills (Sattler, 1990).

Family Cohesion

David Olson's Circumplex Model has described family cohesion as the "degree to which family members are separated from or connected to their family." He defines it as "the emotional bonding that family members have toward one another" (Olson, Portner, & Lavee, 1985, p. 4).

Family Adaptability

Family adaptability refers to the family's ability to change or be flexible. Olson et al. (1985, p. 4) defined it as "the ability of a marital or family system to change its power structure, role relationships, and relationship rules in response to situational and developmental stress."
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Literature Review

The basis for this study is reviewed in the following areas of discussion: (a) family systems and stages of development, (b) children with LD and their families, (c) family cohesion and adaptability, and (d) Olson's Circumplex Model of marital and family systems.

Family Systems

Family systems theory generally refers to the work of Murray Bowen. The term "systems" refers to the automatic patterns of predictable behavior among family members. Bowen's theory involved two main variables. One was the degree of anxiety that a family (or individuals in the family) was experiencing and the other was the degree of differentiation of self (Bowen, 1985).

Systems thinking is characterized by an effort to avoid cause-and-effect thinking. In systems theory, the cause and symptom of a problem are not very useful in and of themselves. Understanding the system, its parts, their interrelatedness, the feedback between different parts, and the system's homeostatic functioning are more helpful in understanding the problem and in the search for resolution (Brown & Christensen, 1986). So therapy does not involve
looking for the particular cause of a problem so much as attempting to understand behaviors as the "product of a balance of forces in the family" (Papero, 1983, p. 139).

Bowen believed that two opposite forces are continually present in the family system. The togetherness force drives the family to hold uniform values, feelings, and perspectives ("fusion"). The second force operates in the opposite direction as togetherness and emphasizes the trend toward individuation ("differentiation"). The family system constantly seeks to maintain a sense of balance or homeostasis between these two forces. When something occurs that disrupts the level of homeostasis in the family (i.e., a child going off to college) the system responds in an effort to reestablish homeostasis. If the adaptive mechanisms become overloaded and are unable to establish a new level of homeostasis, then symptoms appear. When one family member experiences anxiety due to a disruption in the homeostasis level, there is "emotional reactivity" that causes other family members to feel anxious also. So, the family system responds to the anxiety felt by one or more
family member(s) in response to the disruption of homeostasis.

Bowen developed several assumptions that helped expand the research efforts of psychiatry. These assumptions include the idea that emotional illness is directly related to human biology, is a multigenerational process, and that a great difference exists between what people say and actually do (Papero, 1983).

Stages of Family Development

American families have a developmental life cycle all their own that commences with the marriage of a couple. Each stage of the family life cycle has particular developmental tasks that are associated with it (Brown & Christenson, 1986). These stages and developmental tasks are outlined in Table 1. For the purpose of this study, particular attention will be given to the stage of school-age children.

Families With School-Age Children

The third stage of the family life cycle is the school-age family. This begins when children of the family enter elementary school. During this stage families often have to renegotiate the work load, deal with feelings regarding the child's difficulties with
### Stages and Tasks of the Family Life Cycle

1. **Beginning family.**
   - differentiating from family of origin
   - negotiating boundaries between friends and relatives
   - resolving conflict between individual and couple's needs

2. **Infant/preschool family.**
   - reorganizing family to deal with new tasks
   - encouraging the child's growth while maintaining safety and parental authority
   - deciding how to execute personal & family goals

3. **School-age family.**
   - renegotiating work load
   - sharing feelings when child can't handle school
   - deciding who helps child with school work

(table continues)
4. Adolescent family.
   - renegotiating autonomy and control between adolescents and parents
   - changing parental rules and roles
   - preparing to leave home

5. Launching family.
   - separating from family
   - leaving home appropriately
   - entering college, military, or career with assistance

6. Postparental family.
   - renegotiating marital relationships
   - renegotiating time and work
   - adjusting to retirement

(Brown & Christensen, 1986, p. 24)

school, and decide who helps the child with school work (Brown & Christensen, 1986). Along with these developmental tasks, there are several problems that are particularly characteristic of this stage.
Although families with small children commonly experience difficulties, if these problems are not resolved by the time the child enters school, crises frequently erupt. One reason for this is that the family system is now more involved with systems outside the family, primarily the school and neighborhood. As a result, the family becomes vulnerable to feedback from outside and needs to learn how to relate to new and competing systems (Haley, 1973).

During this stage, new family rules need to be established. Children have the need to experience relationships for themselves, and parents must determine what boundaries will exist to permit contact with outsiders. This becomes even more stressful because it occurs as the parents are personally undergoing physical and emotional changes as they leave their youth, move into middle adulthood, and experience stress from their career responsibilities (Brown & Christensen, 1986).

Several other problem scenarios are common to this stage. Often, the mother views the father as being "too strict" and the father views the mother as "too soft." A second common difficulty involves one parent consistently siding with the child against the other
parent. Third, parents often make career moves once their children enter school which increases the stress experienced by the parents (Brown & Christensen, 1986).

A final problem associated with the school-age stage occurs when parents focus their attention on the problems of the child in an effort to deny or ignore their own problems. This results in difficulties when the child enters school and frequently these children will develop somatic symptoms, thus sending a message to the parents that the child must be kept home. This results in the parents putting their disagreements on the back burner again, and reduces the amount of tension in the home as the child diverts the parents' attention from their own problems to the problems of the child (McGoldrick, 1980).

As a result, the school-age family stage is characterized by major transitions as the family system begins to interact more fully with systems outside itself. The children are learning to deal with a new world outside the family and the parents are dealing with several major changes in their own lives. These factors make the adjustment to this new phase of life difficult and it can become even more stressful when personal problems of either a child or parent appear.
One such problem that can shake the foundations of the family is when a child is diagnosed with a learning disability.

**Learning Disabilities**

The United States legal definition of learning disability was established in 1975 in Section 5 (b)(4) Public Law 94-142 which states:

Specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, or environmental, cultural, or economic disadvantage. (in Herbert, 1991, p. 202)

This definition of learning disabilities differentiates between learning problems that are due to organic brain pathology and learning difficulties
considered the result of cultural, economic, and environmental causes and physical handicaps. According to this definition, learning problems due to perceptual handicaps, dyslexia, developmental aphasia, brain injury, and minimal brain dysfunction are labeled learning disabilities. However, problems arising from cultural, economic, and environmental causes, mental retardation, and physical handicaps are not.

Over the years, defining what constituted a learning disability has spurred considerable debate (Spacone & Hansen, 1984). Even after the passage of Public Law 94-142, what constituted a learning disability still was disputed. In 1981, six professional organizations sent representatives to a national committee for learning disabilities, and that committee developed the following definition.

Learning disabled is a generic term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual and presumed to be due to central nervous system dysfunction. Even though a learning disability
may occur concomitantly with other handicapping conditions (e.g., sensory impairment, mental retardation, social and emotional disturbances) or environmental influences (e.g., cultural differences, insufficient/inappropriate instruction, psychogenic factors), it is not the direct result of those conditions or influences.

(Hammill, Leigh, McNutt, & Larsen, 1981, p. 336)

Although this definition adds clarity to Public Law 94-142, Kirk and Kirk (1983) found that few practitioners pay attention to the various definitions.

In attempting to develop an operational definition, Schere, Richardson, and Bialer (1980) defined a learning disability as "an academic deficit accompanied by a disorder in one or more of the basic psychological processes involved in understanding or in using language . . . in a child whose intellectual, emotional, and/or physical status allows participation in traditional academic curriculum" (p. 9). This definition emphasizes that the child still has the cognitive and emotional ability to receive academic instruction via the traditional academic curriculum. Although this standard is often followed, individual educational programs (IEP) commonly are written for
these children which may include instruction that is outside the traditional curriculum.

Aman and Singh (1983) suggested several models to explain the etiology of learning disabilities. The difference model suggests that individual differences in cognitive ability are normally distributed throughout the population and learning difficulties result from poorly developed cognitive skills. The deficit model proposes that learning difficulties are associated with organic conditions that interfere with learning. The delay model postulates that learning difficulties are the result of immaturity and that adequate learning skills develop in time. The disruption model theorizes that external emotional forces (i.e., anxiety or depression) impede the learning process. Finally, the personal-historical model suggests that the skills necessary for learning to occur have not been acquired due to environmental factors such as failures in teaching or the learning process.

Families with LD children. The presence of a LD child in a family has been found to have several effects on that family. Slater and Wikler (1986) found that families with LD children are predisposed to
stress, social isolation, and reduced autonomy. Often misplaced blame, negativism, and parental feelings of guilt, anger, exhaustion, anxiety, despair, or helplessness are present in these families which further complicates the treatment of the disorder (Amerikaner & Omizo, 1984; Kaslow & Cooper, 1978; Shapiro & Forbes, 1981). Parents experience concerns regarding their dependence on teachers and other professionals to make special efforts on the child's behalf. They are also concerned about the child's future along with the time and inconvenience that they will personally experience in meeting their child's needs. These inconveniences or sacrifices often include spending less time with other family members and less time in preferred activities (Garis & Green, 1982).

Mothers of LD children tend to be preoccupied with fears of separation and/or illness in the LD child suggesting a degree of enmeshment with the child. This results in the mother's overprotecting and controlling the child (Staver, 1953). In another study, educationally and occupationally successful fathers of LD boys described themselves as being hindered in obtaining their ideal goals (Grunebaum, Hurwitz,
Family Structure

Prentice, & Sperry, 1962). These fathers tended to assume passive roles in the home with occasional outbursts of anger that reinforced their wives' inclinations that they were ineffective parents. This resulted in fathers abandoning their roles as parents and vying with their sons for the love and attention of the mothers.

Family systems theory contends that symptom maintenance serves a function in the family system in which the disability may be promoted or provoked. In a study of reading disabled children (Silverman, Fite, & Mosher, 1959), several family patterns were noticed. Commonly, only one parent was actively concerned or present in these families and the LD child would often be involved in intense sibling rivalry. Serious marital discord was also common.

In summary, families with LD children appear to be characterized by several maladaptive patterns. The mothers tend to be overprotective and controlling while fathers tend to be distant and left out of the family. Finally, these families are often enmeshed and rigid, avoiding conflict by focusing attention on the child (Hansen & Okun, 1984).
Parents and treatment of LD children. When planning treatment for LD children, parent attitudes and family stressors are important considerations (Kaslow & Cooper, 1978). Children whose parents advocate for them with the school system, collaborate with teachers and other professionals for arranging appropriate educational programs, and use effective child behavior management techniques fare better than do children with parents having low expectations and who attribute their successes to luck or the effort of others (Pearl & Bryan, 1982; Smith, 1983).

Since a LD child is best served when all those involved take responsibility for his/her difficulties, parents becoming active participants in the treatment plan is essential. Parents need to be effective in managing their child's behavior and in controlling and resolving those issues which may interfere with their child's academic learning (Taylor, 1989).

Circumplex Model Of Marital And Family Systems

The Circumplex Model focuses on two major dimensions of family system functioning - cohesion and adaptability. Family cohesion refers to the emotional bonding that family members have toward one another. Within Olson's Circumplex Model, cohesion is measured
by such things as emotional bonding, boundaries, coalitions, time, space, friends, decision-making, interests, and recreation. Family adaptability refers to the family's ability to change or be flexible. The specific concepts in the Circumplex Model used to measure family adaptability include "family power (assertiveness, control, and discipline), negotiation style, role relationships, and relationship rules" (Olson et al., 1985, p. 4).

Within the Circumplex Model are four levels of both cohesion and adaptability ranging from extremely low (least healthy) to extremely high (most healthy). The levels of cohesion are labeled (low to high) "disengaged," "separated," "connected," and "very connected." The levels of adaptability are labeled (low to high) "rigid," "structured," "flexible," and "very flexible."

**Family cohesion.** David Olson's Circumplex Model described family cohesion as the "degree to which family members are separated from or connected to their family." He defined it as "the emotional bonding that family members have toward one another" (Olson et al., 1985, p. 4).
Combrinck-Graham (1983) discussed family cohesiveness in terms of centripetal forces where the family members primarily look within the family for gratification. She saw this pattern as being more common in the early years of marriage including those years when the children are first born. As the family progresses through the family life cycle, it then becomes increasingly centrifugal in its interactions with itself and the outside world. Extreme centripetal families are viewed as enmeshed and those that are extremely centrifugal are perceived as disengaged.

Family adaptability. Family adaptability refers to the family's ability to change or be flexible. It is the ability of the marital or family system to change or modify its power structure, role relationships, and relationship rules in response to situational and developmental stress (Herbert, 1991; Olson et al., 1985).

Adaptability is considered by many to be a fundamental quality for healthy families. Combrinck-Graham (1983) believed that family health was a reflection of its ability to adjust to the changing needs of its members. Garmezy (1984) proposed that the family's ability to adapt to inevitable stress was more
related to successful family functioning than freedom from problems. The most desirable circumstances for learning adaptive coping strategies involve exposure to graduated but surmountable life changes. As the family succeeds in managing these stresses, it becomes more resilient and able to resolve future problems.

**Olson's Specific Theoretical Contributions**

Olson and his colleagues (1985) propose that family characteristics such as adaptability, cohesion, communication, and problem solving play an important role in a family's ability to manage situations that can cause distress to the system. The manner in which families and individuals approach and interpret these events is directly related to the effects these stresses may have. As a result, Olson et al. believed that active problem solving strategies associated with redefining the situation to make the problem more manageable, rather than avoiding the problem, are associated with positive outcomes.

**Synthesis of Literature Reviewed**

Family systems theorists believe families have predictable, automatic behavior patterns which are used to maintain a balance between the need for togetherness and differentiation among family members. Along with
these behavior patterns, families also can be characterized by the developmental tasks or stage of the family life cycle in which they are presently functioning.

Each transition into a new stage of the family life cycle upsets the previous balance the family established and the family must seek to find a new level of homeostasis. This is particularly difficult when a child in the family has a learning disability.

Families with LD children experience a variety of maladaptive relationship patterns. Mothers tend to be overprotective and controlling while fathers tend to be distant and left out of the family.

Finally, Olson's Circumplex Model (Olson et al, 1985) discussed family adaptability and cohesion, key dimensions of family system functioning. Family adaptability refers to the family's ability to be flexible, and family cohesion refers to the emotional bonding of the family.

Hypotheses

The research question was, "Do school-age children with learning disabilities have a significant effect on their parents' perceptions of their family's
adaptability and cohesion, as measured by the Family Adaptability and Cohesion Scales II (FACES II)? In response to this research question, two primary hypotheses were proposed and further delineated into sub-hypotheses.

Primary Hypothesis 1 - A significant difference exists on perceptions of family adaptability and cohesion among fathers and mothers of school-age LD and non-LD children. Fathers and mothers of non-LD children are expected to score higher on adaptability and cohesion than fathers and mothers of LD children. This hypothesis can be broken down into the following three hypotheses:

1-1. Main effect for type of child. - Fathers and mothers of school-age LD children score significantly lower on adaptability and cohesion than fathers and mothers of school-age non-LD children.

1-2. Main effect for sex of parent. - Mothers of school-age LD and non-LD children will score significantly higher on adaptability and cohesion than fathers of school-age LD and non-LD children.

1-3. Interaction effect. - No interaction effect exists between sex of the parent (father or
mother) and type of school-age child (LD or non-LD) on perceptions of family adaptability or cohesion.

Primary Hypothesis 2 - A significant difference exists between parents of different marital statuses (single parent, married once, and remarried) on perceptions of family adaptability and cohesion among families with LD and non-LD children. Regardless of marital status, parents of LD children are expected to score significantly lower on adaptability and cohesion than parents of non-LD children. This hypothesis can be broken down into the following three hypotheses:

2-1. Main effect for type of child. - Parents of school-age LD children (regardless of marital status) score significantly lower on adaptability and cohesion than parents of school-age non-LD children.

2-2. Main effect for marital status. - The marital status of parents of school age LD and non-LD children will significantly affect perceptions of family adaptability and cohesion. Parents who are "married once" will score higher on adaptability and cohesion than parents having any other marital status.
2-3. Interaction effect. - No interaction effect exists between marital status of the parent and type of school-age child (LD or non-LD) on perceptions of family adaptability or cohesion.

**Summary**

The purpose of this study was to determine if the presence of LD school-age children in families had an effect on their parent's perception of family adaptation and cohesion. The literature on family systems theory was reviewed, with particular attention given to the school-age children stage of the family life cycle. Discussion of learning disabilities, their effects on family systems, and their treatment with respect to family involvement was presented. Family adaptability and cohesion were introduced and considered in light of Olson's Circumplex model of marital and family systems. The chapter concluded with the various hypotheses tested in this study.
CHAPTER 2

METHOD

This research was designed to determine if school-age children with learning disabilities had an effect on their parent's perceptions of their families. The specific question pursued in this study was, "Do school-age children with learning disabilities have a significant effect on their parents' perceptions of their family's adaptability and cohesion, as measured by the Family Adaptability and Cohesion Scales II (FACES II)?" The methods used to investigate this question are set forth in this chapter.

Participants

Newberg, Oregon, is a town of approximately 11,500 people and lies 23 miles south of Portland. Approximately 4200 children are in the Newberg School District, of which 2000 are elementary school age. Two-hundred and fifty-six families having school-age children attending the elementary schools in the
Newberg School District were selected and assigned to two groups by one of two methods.

The first group (n = 128), families with LD school-age children, was selected based on formal certification of their children by the school district. The official school records were perused to ascertain which children were classified as LD and to see how many hours of special education they received per week. All families having a school-age child that was officially certified as LD and received a minimum of one hour of special education per week were invited to participate in the study. Therefore, random selection was not used.

The second group (n = 128), a randomly chosen comparison group, was selected in the following manner. A complete list of all children in the Newberg School District was obtained. From this list, the grade and gender of each LD child was determined. Then a randomly selected "match" for each LD child's grade/gender combination was identified (i.e., if the first LD child was a third grade male, a third grade male "match" was randomly selected for the comparison group). The families of these "matched" children were also invited to participate in the study. As a result,
there was a one to one correspondence (with regards to a child's gender and grade level) between the families invited to participate in the experimental and comparison groups.

Matching the children in the experimental and comparison groups was performed in an effort to increase the equivalence of the two groups on the characteristics of the children's grade and gender. Kazdin (1992) indicated that this process is appropriate when the investigator suspects the characteristic(s) may be related to the dependent variable. This results in reducing the possibility that differences in the children's grade level and gender will confound the findings or mask an effect (Gravetter & Wallnau, 1988).

Instrument

The Family Adaptability and Cohesion Scales (second version) is a 30 item scale developed by David Olson, Joyce Portner, and Yoav Lavee (1983). It assesses the two major dimensions of the Circumplex Model - family cohesion and family adaptability.

The family cohesion scale "assesses the degree to which family members are separated from or connected to
their family" (Olson et al., 1983, p. 1). Family cohesion is defined as "the emotional bonding that family members have toward one another" (Olson et al., 1983, p. 1). Within Olson's Circumplex Model, family cohesion is measured by such things as emotional bonding, boundaries, coalitions, time, space, friends, decision-making, interests, and recreation (Olson et al., 1983).

Family adaptability refers to the family's ability to change or be flexible. It is defined as "the ability of a marital or family system to change its power structure, role relationships, and relationship rules in response to situational and developmental stress" (Olson et al., 1983, p. 1). The specific concepts in the Circumplex Model used to measure family adaptability include "family power (assertiveness, control, and discipline), negotiation style, role relationships, and relationship rules" (Olson et al., 1983, p. 1).

Within the Circumplex Model are four levels of cohesion ranging from extremely low to extremely high (disengaged, separated, connected, and very connected). The four levels of family adaptability range from
extremely low adaptability to extremely high (rigid, structured, flexible, and very flexible).

Both the cohesion and adaptability scales function on a continuum with individual's scores falling in one of the four levels described above for either adaptability or cohesion. The extreme low scores on these scales reflect the least healthy responses and the highest scores are the most healthy.

FACES II was designed for use with families across their life cycle. The items are easily read and understood by adolescents as young as age 12. In clinical use, it was intended to be administered to all the family members so that the varied reports could be compared and used. The FACES II is able to obtain both a "perceived score" of current family functioning and an "ideal score" indicating where the individual would like to see the family functioning. Scoring the FACES II is done by hand and involves adding the scores of the appropriate items for each scale according to the instructions in the manual.

Both Chronbach alpha and test retest data support the reliability of the FACES II. The Chronbach alphas for FACES II were .87 for the cohesion scale, .78 for the adaptability scale, and .90 overall which indicate
Family Structure

strong internal consistency. Test-retest Pearson's correlations (over a four to five week interval) were $r = .83$ for cohesion and $r = .80$ for adaptability (Olson et al., 1983).

FACES II was found to correlate (Pearson's) with the global measure of family health from the Dallas Self-Report Family Inventory at $r = .93$ for cohesion and $r = .79$ for adaptability (Hampson, Hulgus, & Beavers, 1991) which supports the FACES II concurrent validity. The correlation between the scales has been found to range from Pearson's $r = .25 - .65$ indicating that these scales are relatively independent of each other which also supports the validity of FACES II (Olson et al., 1983).

Procedures

In the course of doing a counseling practicum with the Newberg School District psychologist, the researcher discussed the possibility of doing a study on families having children with different educational needs. After discussing this study with several of the school district officials, permission was obtained to proceed with the study and gather data from families having children in the Newberg School District.
The selection of families to participate in this study was the first procedure conducted. Elementary school records in the Newberg School District were reviewed and all elementary school-age students officially certified as LD were selected. All the families represented by these LD children were invited to participate in the study (n = 128).

Next, a randomly chosen comparison group, was selected in the following manner. A complete listing of all children in the Newberg School District was obtained. From this list, the grade and sex of each LD child was determined. Then a randomly selected "match" for each LD child's grade/sex combination was identified (i.e., if the first LD child was a third grade male, a third grade male "match" was randomly selected for the comparison group). The families of these "matched" children were also invited to participate in the study (n = 128). As a result, there was a one to one correspondence (with regards to a child's sex and grade level) between the families invited to participate in the experimental and comparison groups.

Having completed the selection of families for inclusion in the research, the items for the mail
survey questionnaire were compiled. The guidelines for this mailing were based on those established for survey research by Dillman (1978). On the recommendation of Alreck and Settle (1985), use of standard 8 1/2 x 11 stock (rather than the booklet form recommended by Dillman) was decided upon to both reduce costs and for convenience. Mailings included a cover letter, two copies of the FACES II (one for each parent), two brief demographic questionnaires (one for each parent), along with a stamped, return-addressed envelop (see Appendix A). The mailing packets were reviewed and approved by both the Newberg School District psychologist and the Human Subjects Research Committee at George Fox College before mailing.

The initial mailing was dated and sent on October 15, 1992. However, due to bulk postage regulations, it did not actually get processed in the mail until one week later. According to the guidelines in Dillman (1978), a reminder was sent to everyone in the study one week after the original mailing was actually processed by the postal service. Two weeks later, November 12, 1992, a second letter and replacement questionnaires were sent to non-respondents. After seven weeks had passed, a final (fourth) mailing
similar to the second was sent. Five weeks after the final mailing was determined to be a reasonable response time and data collection was suspended on January 9, 1993.

Two-hundred and fifty-six families were invited to participate in this study (128 families with LD children and 128 families with non-LD children). A total of 139 families (50 LD families and 89 non-LD families) responded for a response rate of 54%.

Of the LD families that responded, four families indicated that they did not wish to participate in the study leaving 46 LD families participating in the study ($n = 80$). These 46 families were comprised of 34 father/mother pairs, 8 single parents, and 4 families with only one parent responding.

Of the non-LD families that responded, five families indicated that they did not wish to participate, leaving 84 non-LD families participating in the study ($n = 149$). These 84 families were comprised of 65 father/mother pairs, 16 single parents, and 3 families with only one parent responding.
Design

Descriptive statistics were generated for all variables used in the study. Two two-way ANOVAs, using SPSS/PC+ for the IBM computer (Norusis, 1988), were performed on the data collected to determine if significant differences existed between the various treatment groups. Main effects and interaction effects were investigated with the alpha level set at .05. The following designs (illustrated in Table 2) were constructed to test the hypotheses.

Although the dimensions of adaptability and cohesion on the FACES II used to be considered as curvilinear, recent research suggests that these dimensions are better interpreted as linear scales (Olson, 1991). Therefore, each individual's scale scores were computed and a corresponding 1-8 score for each dimension was determined using the linear scoring and interpretation procedures from the FACES II manual (Olson & Tiesel, 1991). Statistical analyses were performed using the 1-8 scores for each scale.

The first primary hypothesis tested in this study was "A significant difference exists on perceptions of family adaptability and cohesion among fathers and mothers of school-age LD and non-LD children." This
### Table 2

**ANOVA Designs: With FACES II as the Dependent Variable**

#### Primary Hypothesis 1

<table>
<thead>
<tr>
<th>PARENT GENDER</th>
<th>CHILD TYPE</th>
<th>LD</th>
<th>non-LD</th>
</tr>
</thead>
<tbody>
<tr>
<td>fathers</td>
<td>LD</td>
<td>n = 35</td>
<td>n = 69</td>
</tr>
<tr>
<td>mothers</td>
<td>LD</td>
<td>n = 45</td>
<td>n = 80</td>
</tr>
</tbody>
</table>

#### Primary Hypothesis 2

<table>
<thead>
<tr>
<th>MARITAL STATUS</th>
<th>CHILD TYPE</th>
<th>LD</th>
<th>non-LD</th>
</tr>
</thead>
<tbody>
<tr>
<td>single parent</td>
<td>LD</td>
<td>n = 8</td>
<td>n = 16</td>
</tr>
<tr>
<td>married once</td>
<td>LD</td>
<td>n = 50</td>
<td>n = 104</td>
</tr>
<tr>
<td>remarried</td>
<td>LD</td>
<td>n = 22</td>
<td>n = 29</td>
</tr>
</tbody>
</table>

Hypothesis was tested by utilizing a 2 x 2 ANOVA design with fathers and mothers as the two levels of the first factor (Parent Gender) and LD and non-LD as the two levels of the second factor (Child Type) (see Table 2).
These ANOVAs were run using the regression option to control for unequal cell sizes (Option 9 in SPSS/PC+).

The second primary hypothesis examined was "A significant difference exists between parents of different marital statuses (single parent, married once, and remarried) on perceptions of family adaptability and cohesion in families with LD and non-LD children." A 3 X 2 ANOVA was utilized to test this hypothesis with single parent, married once, and remarried being the three levels of the first factor (Marital Status) and LD and non-LD being the two levels of the second factor (Child Type) (see Table 2).

**Summary**

In conclusion, chapter two has provided information regarding the selection method for obtaining the families used in this study. The participating families were all selected based on their children's official certification by Newberg School District as LD or non-certified. Data on these families were collected from these children's parents via the FACES II and a brief demographic questionnaire. Then, the data were prepared for analysis using two different two-way ANOVA designs.
CHAPTER 3

RESULTS

This study sought to answer the research question, "Do school-age children with learning disabilities have a significant effect on their parents' perceptions of their family's adaptability and cohesion, as measured by the Family Adaptability and Cohesion Scales II (FACES II)?" This chapter presents the results in three major sections. The first section sets forth the descriptive demographic information for both the LD family group and the non-LD comparison group. The second section presents the results of the statistical analyses related to the two primary hypotheses. This is followed by a summary of the results. Results were considered statistically significant at the $p < .05$ level. However, before reviewing the descriptive demographics of the sample, two brief explanations regarding parent gender and marital status are warranted.

Although parents were asked to indicate whether they were a parent or step-parent on the demographic
questionnaire, all parents, step-parents, or guardians were grouped according to gender. As a result, the statistical procedures performed and demographic data presented dealt with "fathers" (all male parents or guardians) and "mothers" (all female parents or guardians). Therefore, from this point forward, these parents/guardians are referred to as "parents," "fathers," and "mothers" with no distinction being made between the subgroups. This was done for two reasons: (a) the focus of the study was on differences between families with LD and non-LD children, not on the differences between various types of parent/guardian figures in the home; and (b) for simplicity of reporting and discussing the results of the study.

With regards to marital status, eight marital status choices were presented on the demographic questionnaire. The original plan intended to recognize the distinctions between all eight groups. However, after compiling the data, eleven of the sixteen cells had four or fewer cases and four of these eleven had zero cases. Therefore, the classifications of marital status were condensed to a 3 X 2 design by combining similar family structures into three levels as follows: (a) "single parent" (n = 24) - comprised of those never
married \( (n = 7) \), married once and live apart \( (n = 2) \), divorced and live apart \( (n = 13) \), remarried and live apart \( (n = 0) \), and widowed \( (n = 2) \); (b) "married once" \( (n = 154) \) - comprised of those who were married once and live together \( (n = 153) \), and those who are divorced and live together \( (n = 1) \); and (c) "remarried" \( (n = 51) \) comprised of those who are remarried and live together \( (n = 51) \).

Descriptive Demographic Data

Demographic data was collected using a four-item demographic questionnaire (see Appendix A). The demographic results are reported in Table 3. Paternal responses accounted for 45.4% of the responses and maternal responses accounted for 54.6%. Families of LD children were represented by 35 fathers and 45 mothers responding for a total of 80 responses from LD families. Responses were received from 69 fathers and 80 mothers for a total of 149 responses from non-LD families. Although the total number of responses of non-LD families was almost two times the total responses of LD families, there was only a nine percent difference in the ratio of paternal to maternal responses (0.86:1 and 0.77:1 respectively). The number
Family Structure

41

Table 3

Demographic Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>LD</th>
<th>%</th>
<th>non-LD</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>35</td>
<td>43.8</td>
<td>69</td>
<td>46.3</td>
<td>104</td>
<td>45.4</td>
</tr>
<tr>
<td>Female</td>
<td>45</td>
<td>56.3</td>
<td>80</td>
<td>53.7</td>
<td>125</td>
<td>54.6</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100.0</td>
<td>149</td>
<td>100.0</td>
<td>229</td>
<td>100.0</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single parent</td>
<td>8</td>
<td>10.0</td>
<td>16</td>
<td>10.7</td>
<td>24</td>
<td>10.5</td>
</tr>
<tr>
<td>Married once</td>
<td>50</td>
<td>62.5</td>
<td>104</td>
<td>69.8</td>
<td>154</td>
<td>67.2</td>
</tr>
<tr>
<td>Remarried</td>
<td>22</td>
<td>27.5</td>
<td>29</td>
<td>19.5</td>
<td>51</td>
<td>22.3</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100.0</td>
<td>149</td>
<td>100.0</td>
<td>229</td>
<td>100.0</td>
</tr>
<tr>
<td>Children in Family</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>9</td>
<td>11.3</td>
<td>15</td>
<td>10.1</td>
<td>24</td>
<td>10.5</td>
</tr>
<tr>
<td>2</td>
<td>25</td>
<td>31.3</td>
<td>54</td>
<td>36.2</td>
<td>79</td>
<td>34.5</td>
</tr>
<tr>
<td>3</td>
<td>28</td>
<td>35.0</td>
<td>51</td>
<td>34.2</td>
<td>79</td>
<td>34.5</td>
</tr>
<tr>
<td>4</td>
<td>14</td>
<td>17.5</td>
<td>13</td>
<td>8.7</td>
<td>27</td>
<td>11.8</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>2.5</td>
<td>13</td>
<td>8.7</td>
<td>15</td>
<td>6.6</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>2.5</td>
<td>3</td>
<td>2.0</td>
<td>5</td>
<td>2.2</td>
</tr>
</tbody>
</table>

(table continues)
of fathers and mothers responding was not found to be significantly different among LD and non-LD families ($X^2[1] = .053, p = .816$).

The average number of children per family in the research population was 2.7 (SD = 1.1). In comparing LD and non-LD families, LD families had slightly more children on average than did non-LD families. Families of LD children averaged 2.8 children (SD = 1.1) and non-LD families averaged 2.7 children (SD = 1.1). T-test analysis found that there was not a significant difference in the average number of children per family between LD and non-LD families ($t[227] = .03, p = .979$).
Marital status was divided into three categories: single parent, married once, and remarried. Two-thirds of the study's population were married once \((n = 154)\), while 24 were single parents and 51 were remarried. For the LD families, 8 (10.0%) were single parents, 50 (62.5%) were married once, and 22 (27.5%) were remarried. For non-LD families, 16 (10.7%) were single parents, 104 (69.8%) were married once, and 29 (19.5%) were remarried. Again the distribution of LD and non-LD families across the three different marital statuses were similar. Chi-square analysis found that there was not a significant difference in marital status between LD and non-LD families \((\chi^2[2] = 1.949, p = .377)\).

The final demographic statistic collected regarded how long the participant had been in their present marital status (regardless of what status that was). The mean length of marital status was 12.7 years \((SD = 7.2\) years). The average length of present marital status for families with LD children was 13.0 years \((SD = 7.7\) years) and for non-LD families was 12.6 years \((SD = 7.0\) years). T-test analysis found that there was not a significant difference in the average length of present marital status between LD and non-LD families \((t[227] = .40, p = .692)\).
In summary, the demographic statistics indicate that the LD and non-LD samples are quite similar. The ratio of paternal to maternal responses, the average number of children per family, and the average length of present marital status were not significantly different. Although a little more discrepancy existed between the percentage of cases falling into each marital status, these too were not significantly different.

Results of the Hypotheses

Primary Hypothesis One: Sex of Parent X Type of Child

The first primary hypothesis stated that, "A significant difference exists on perceptions of family adaptability and cohesion among fathers and mothers of school-age LD and non-LD children." The expected results were that fathers and mothers of non-LD children would score higher on adaptability and cohesion than fathers and mothers of LD children. The results showed that fathers and mothers of non-LD children did not score significantly higher than fathers and mothers of LD children on adaptability and cohesion scores.
To test this hypothesis, two identical 2 X 2 ANOVAs were used, one for the FACES II cohesion scores and one for adaptability scores. Fathers and mothers were the two levels of the first independent variable--parent gender, and LD and non-LD were the two levels of the second independent variable--child type. These ANOVAs were run using the regression option to control for unequal cell sizes (Option 9 in SPSS/PC+).

- **Cohesion scores.** For cohesion, no significant main effects were found for either parent gender, $F(1, 225) = 3.696, p = .056$, or for child type, $F(1, 225) = .014, p = .904$. Also, a significant interaction effect for parent gender and child type was not found, $F(1, 225) = .069, p = .794$ (see Table 4).

  Mean cohesion scores for the entire population were 5.61 with a standard deviation of 1.72 (see Table 5). When taken together, mothers scored a mean of 5.81 with a standard deviation of 1.73. Mothers of LD children scored an average of 5.87 on the cohesion scale ($SD = 1.76$) and mothers of non-LD children scored an average of 5.77 ($SD = 1.71$).

  Fathers scored an average of 5.36 on cohesion with a standard deviation of 1.69. Fathers of LD children
Table 4

ANOVA Results: Parent Gender (Male/Female) X Child Type (LD/non-LD) on Cohesion

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Squared Mean</th>
<th>Signif. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent Gender</td>
<td>10.93</td>
<td>1</td>
<td>10.93</td>
<td>3.70</td>
</tr>
<tr>
<td>Child Type</td>
<td>.04</td>
<td>1</td>
<td>.04</td>
<td>.01</td>
</tr>
</tbody>
</table>

2-way Interactions

- Parent Gender by Child Type
  - .20

Residual

- 665.24
- 225
- 2.96

Total

- 676.63
- 228
- 2.97

scored a mean of 5.34 (SD = 1.55) and fathers of non-LD children scored a mean of 5.38 (SD = 1.77).
Table 5

Descriptive Statistics: Parent Gender X Child Type for Cohesion Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Population</td>
<td>5.61</td>
<td>1.72</td>
<td>229</td>
</tr>
<tr>
<td>All Females</td>
<td>5.81</td>
<td>1.73</td>
<td>125</td>
</tr>
<tr>
<td>with LD child</td>
<td>5.87</td>
<td>1.76</td>
<td>45</td>
</tr>
<tr>
<td>with non-LD child</td>
<td>5.77</td>
<td>1.71</td>
<td>80</td>
</tr>
<tr>
<td>All Males</td>
<td>5.36</td>
<td>1.69</td>
<td>104</td>
</tr>
<tr>
<td>with LD child</td>
<td>5.34</td>
<td>1.55</td>
<td>35</td>
</tr>
<tr>
<td>with non-LD child</td>
<td>5.38</td>
<td>1.77</td>
<td>69</td>
</tr>
</tbody>
</table>

Adaptability scores. For adaptability, a significant main effect was found for parent gender, $F(1, 225) = 4.246, p = .040$. However, a significant main effect was not found for child type, $F(1, 225) = .022, p = .882$, nor for parent gender and child type, $F(1, 225) = .003, p = .953$ (see Table 6).

Mean adaptability scores for the entire population were 4.93 with a standard deviation of 1.50 (see Table 7). When taken together, mothers scored a mean of 5.13 with a standard deviation of 1.51. Mothers of LD
Table 6

ANOVA Results: Parent Gender (Male/Female) X Child Type (LD/non-LD) on Adaptability

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Squared</th>
<th>F</th>
<th>Signif. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent Gender</td>
<td>9.47</td>
<td>1</td>
<td>9.47</td>
<td>4.25</td>
<td>.04*</td>
</tr>
<tr>
<td>Child Type</td>
<td>.05</td>
<td>1</td>
<td>.05</td>
<td>.02</td>
<td>.88</td>
</tr>
</tbody>
</table>

2-way Interactions

Parent Gender by Child Type

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Squared</th>
<th>F</th>
<th>Signif. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residual</td>
<td>501.65</td>
<td>225</td>
<td>2.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>512.02</td>
<td>228</td>
<td>2.25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05

children scored an average of 5.15 on the adaptability scale (SD = 1.61) and mothers of non-LD children scored an average of 5.11 (SD = 1.47).

Fathers scored an average of 4.70 on adaptability with a standard deviation of 1.45. Fathers of LD children scored a mean of 4.71 (SD = 1.52) and fathers of non-LD children scored a mean of 4.69 (SD = 1.43).
Table 7

Descriptive Statistics: Parent Gender X Child Type for Adaptability Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Population</td>
<td>4.93</td>
<td>1.50</td>
<td>229</td>
</tr>
<tr>
<td>All Females</td>
<td>5.13</td>
<td>1.51</td>
<td>125</td>
</tr>
<tr>
<td>with LD child</td>
<td>5.15</td>
<td>1.61</td>
<td>45</td>
</tr>
<tr>
<td>with non-LD child</td>
<td>5.11</td>
<td>1.47</td>
<td>80</td>
</tr>
<tr>
<td>All Males</td>
<td>4.70</td>
<td>1.45</td>
<td>104</td>
</tr>
<tr>
<td>with LD child</td>
<td>4.71</td>
<td>1.52</td>
<td>35</td>
</tr>
<tr>
<td>with non-LD child</td>
<td>4.69</td>
<td>1.43</td>
<td>69</td>
</tr>
</tbody>
</table>

Primary Hypothesis Two: Marital Status X Type of Child

The second primary hypothesis stated, "A significant difference exists between parents of different marital statuses (. . .) on perceptions of family adaptability and cohesion among families with LD and non-LD children." Regardless of marital status, parents of LD children were expected to score significantly lower on adaptability and cohesion than parents of non-LD children. The results showed that parents of LD children did not score significantly
lower than parents of non-LD children on adaptability and cohesion scores.

To test this second hypothesis, two identical 3 X 2 ANOVAs were used, one for FACES II cohesion scores and one for adaptability scores. The first independent variable, marital status, was divided into three different levels: single parent, married once, and remarried. The second independent variable of child type had two levels of LD and non-LD. These ANOVAs were run using the regression option to control for unequal cell sizes (Option 9 in SPSS/PC+).

**Cohesion scores.** Marital status was found to significantly effect cohesion scores, $F(2, 223) = 7.426, p = .001$. However, the main effect for child type was not significant, $F(1, 223) = .011, p = .916$, nor was the interaction effect for marital status and child type significant, $F(2, 223) = .405, p = .668$ (see Table 8).

Table 9 gives the means and standard deviations for the cohesion scores of the different marital statuses, and for each marital status with either LD or non-LD children. Parents of LD children had higher average cohesion scores than did parents of LD children for two of the marital status groups (married once and
Table 8

ANOVA Results: Marital Status (Single Parent/Married Once/Remarried) X Child Type (LD/non-LD) on Cohesion

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Squared</th>
<th>F</th>
<th>Signif. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital Status</td>
<td>42.11</td>
<td>2</td>
<td>21.06</td>
<td>7.43</td>
<td>.00*</td>
</tr>
<tr>
<td>Child Type</td>
<td>.03</td>
<td>1</td>
<td>.03</td>
<td>.01</td>
<td>.92</td>
</tr>
</tbody>
</table>

2-way Interactions

Marital Status

by Child Type | 2.30 | 2 | 1.15 | .40 | .67 |

Residual       | 632.28 | 223 | 2.83 |
Total          | 676.63 | 228 | 2.97 |

* p < .05

remarried). Only the single parent group had higher average cohesion scores for non-LD families.
Table 9

**Descriptive Statistics: Marital Status X Child Type for Cohesion Scores**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Population</td>
<td>5.60</td>
<td>1.72</td>
<td>229</td>
</tr>
<tr>
<td>Single Parent</td>
<td>5.08</td>
<td>1.86</td>
<td>24</td>
</tr>
<tr>
<td>with LD child</td>
<td>4.75</td>
<td>2.31</td>
<td>8</td>
</tr>
<tr>
<td>with non-LD child</td>
<td>5.25</td>
<td>1.65</td>
<td>16</td>
</tr>
<tr>
<td>Married Once</td>
<td>5.90</td>
<td>1.65</td>
<td>154</td>
</tr>
<tr>
<td>with LD child</td>
<td>6.02</td>
<td>1.47</td>
<td>50</td>
</tr>
<tr>
<td>with non-LD child</td>
<td>5.85</td>
<td>1.73</td>
<td>104</td>
</tr>
<tr>
<td>Remarried</td>
<td>4.96</td>
<td>1.66</td>
<td>51</td>
</tr>
<tr>
<td>with LD child</td>
<td>5.09</td>
<td>1.69</td>
<td>22</td>
</tr>
<tr>
<td>with non-LD child</td>
<td>4.86</td>
<td>1.66</td>
<td>29</td>
</tr>
</tbody>
</table>

**Adaptability scores.** Neither marital status ($F[2, 223] = 5.90, p = .074$) nor child type ($F[1, 223] = .141, p = .802$) was found to significantly effect adaptability scores. Also, a significant interaction effect for marital status and child type on adaptability scores was not found, $F(2, 223) = .157, p = .932$ (see Table 10).
Table 10

ANOVA Results: Marital Status (Single Parent/Married Once/Remarried) X Child Type (LD/non-LD) on Adaptability

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Squared</th>
<th>F</th>
<th>Signif. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital Status</td>
<td>11.80</td>
<td>2</td>
<td>5.90</td>
<td>2.63</td>
<td>.07</td>
</tr>
<tr>
<td>Child Type</td>
<td>.14</td>
<td>1</td>
<td>.14</td>
<td>.06</td>
<td>.80</td>
</tr>
</tbody>
</table>

2-way Interactions

Marital Status by Child Type

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Squared</th>
<th>F</th>
<th>Signif. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital Status</td>
<td>500.06</td>
<td>223</td>
<td>2.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>512.01</td>
<td>228</td>
<td>2.25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The means and standard deviations for the adaptability scores of the different marital statuses, and for each marital status with either LD or non-LD children can be found in Table 11. Parents of LD children had higher average adaptability scores than did parents of LD children for two of the marital status groups (single parents and married once). Only
Table 11

**Descriptive Statistics: Marital Status X Child Type for Adaptability Scores**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Population</td>
<td>4.93</td>
<td>1.50</td>
<td>229</td>
</tr>
<tr>
<td>Single Parent</td>
<td>4.92</td>
<td>1.61</td>
<td>24</td>
</tr>
<tr>
<td>with LD child</td>
<td>5.00</td>
<td>1.85</td>
<td>8</td>
</tr>
<tr>
<td>with non-LD child</td>
<td>4.87</td>
<td>1.54</td>
<td>16</td>
</tr>
<tr>
<td>Married Once</td>
<td>5.07</td>
<td>1.45</td>
<td>154</td>
</tr>
<tr>
<td>with LD child</td>
<td>5.16</td>
<td>1.57</td>
<td>50</td>
</tr>
<tr>
<td>with non-LD child</td>
<td>5.03</td>
<td>1.39</td>
<td>104</td>
</tr>
<tr>
<td>Remarried</td>
<td>4.53</td>
<td>1.55</td>
<td>51</td>
</tr>
<tr>
<td>with LD child</td>
<td>4.50</td>
<td>1.47</td>
<td>22</td>
</tr>
<tr>
<td>with non-LD child</td>
<td>4.55</td>
<td>1.64</td>
<td>29</td>
</tr>
</tbody>
</table>

The remarried parent group had higher average adaptability scores for non-LD families.

**Summary**

This chapter described the results of the statistical analyses for the two ANOVA designs used in the study. Descriptive demographic information
including the gender of the parents responding, the number of children in the families, the parents' marital statuses, and the length of time being characterized by that marital status is provided for both families with LD and non-LD children. This is followed by the results of the two primary hypotheses.

The first design investigated the effect parent gender and/or child type would have on cohesion and adaptability scores. The results indicated that parent gender significantly affects adaptability scores on FACES II. No other significant results were found.

The second design examined what effect parental marital status and/or child type would have on cohesion and adaptability scores of FACES II. Results of the ANOVAs indicate that marital status significantly effects cohesion scores. No other significant results were found. The implications of these results will be discussed in the following chapter.
CHAPTER 4

DISCUSSION

This chapter presents a discussion of the results set forth in chapter three. The discussion is divided into the following sections: (a) an overview of the study, (b) a discussion of the results, (c) implications of the research, (d) limitations of the research, (e) recommendations for future research, and (f) a summary.

Overview of the Study

The central problem addressed in this study involved the effect that learning disabled (LD) children had on their parent's perceptions of their families. The specific question pursued was, "Do school-age children with learning disabilities have a significant effect on their parents' perceptions of their family's adaptability and cohesion, as measured by the Family Adaptability and Cohesion Scale II (FACES II)"
Two primary hypotheses were set forth to investigate this research question. The first primary hypothesis stated, "A significant difference exists on perceptions of family adaptability and cohesion among fathers and mothers of school-age LD and non-LD children." Fathers and mothers of non-LD children were expected to score higher on adaptability and cohesion than fathers and mothers of LD children.

The second primary hypothesis stated, "A significant difference exists between parents of different marital statuses (single parent, married once, and remarried) on perceptions of family adaptability and cohesion among families with LD and non-LD children." Parents of LD children were expected to score significantly lower on adaptability and cohesion than parents of non-LD children, regardless of marital status. In order to investigate these hypotheses, the following procedures were completed.

Two-hundred and fifty-six families with school-age children attending the elementary schools in the Newberg School District were selected and assigned to two groups. The first group, families with LD school-age children, was selected based on formal certification of their children by the school district.
All families having a school-age child that was officially certified as LD and received a minimum of one hour of special education per week were invited to participate in the study. The comparison group was chosen by randomly selecting a "match" for each LD child's grade/sex combination from a list of all children in the Newberg School District (i.e., if the first LD child was a third grade male, a third grade male "match" was randomly selected for the comparison group). As a result, a one to one correspondence was achieved (with regards to a child's sex and grade level) between the families invited to participate in the experimental and comparison groups.

Next a mail survey questionnaire was compiled and sent to these families according to the guidelines established for survey research by Dillman (1978). This mailing included a cover letter, two copies of the FACES II (one for each parent), two brief demographic questionnaires (one for each parent), along with a stamped, return-addressed envelop. A total of 130 \((n = 229)\) families responded by completing the survey questionnaires.

Once the data were compiled, descriptive statistics were generated for all variables used in the
Family Structure

study. Based on the findings of the demographic statistics, the experimental and comparison groups were concluded to be comparable in the following areas: (a) the ratio of paternal to maternal responses, (b) the average number of children in the family, (c) the distribution of participants across various marital statuses, and (d) the average length of time each participant was in their present marital status.

Two different two-way ANOVAs, using SPSS/PC+ for the IBM computer (Norusis, 1988), were used to determine if significant differences existed between the various treatment groups. Main effects and interaction effects were investigated with the alpha level being set at .05 and the results were presented in Chapter Three.

Discussion of the Results

This section provides a summary and discussion of the results of the four ANOVA designs. This is done by reviewing the two primary hypotheses and the related ANOVA results for each.

Primary Hypothesis One: Sex of Parent X Type of Child

The first primary hypothesis stated that, "A significant difference exists on perceptions of family
adaptability and cohesion among fathers and mothers of school-age LD and non-LD children." Fathers and mothers of non-LD children were expected to score higher on cohesion and adaptability than fathers and mothers of LD children.

To test this hypothesis, two identical 2 X 2 ANOVAs (using the regression option to control for unequal cell sizes) were designed, one for cohesion scores and one for adaptability scores. Fathers and mothers were the two levels of the first independent variable--parent gender, and LD and non-LD were the two levels of the second independent variable--child type.

Cohesion. The results of the ANOVA for cohesion scores failed to support the hypothesis. This analysis found that neither parent gender (male/female) nor child type (LD/non-LD) had a significant effect (or interaction effect) on the cohesion scores of FACES II.

Previous research on families with LD children indicates that they are predisposed to stress, social isolation, reduced autonomy, negativism, parental feelings of guilt, exhaustion, anxiety, and despair (Amerikaner & Omizo, 1984; Kaslow & Cooper, 1978; Shapiro & Forbes, 1981; Slater & Wikler, 1986). These families also tend toward marital discord, enmeshment,
and rigidity (Hansen & Okun, 1984; Silverman, Fite, & Mosher, 1959). As a result, cohesion scores on FACES II (which measures emotional bonding and connectedness) were expected to be adversely affected by the presence of an LD child in the family. However, this was not found to be the case. In fact, child type had little effect on parents' cohesion scores ($F[1, 225] = .01, p = .90$). Therefore, the hypothesis that child type would affect cohesion scores was not supported.

Research also has indicated that mothers and fathers respond differently to the presence of an LD child in the home. Mothers tend to become enmeshed with the LD child and fathers tend to distance themselves from the family (Grunebaum, Hurwitz, Prentice, & Sperry, 1962; Staver, 1953). Based on this information, mothers were expected to score significantly higher on the cohesion scale (indicating they perceive a greater degree of being connected in their family) and fathers would score significantly lower, indicating that they perceived their family as less connected and more separated.

The findings of this ANOVA indicated that the average cohesion score for fathers (mean = 5.36) was lower ($F[1, 225] = 3.696, p = .056$) than the average
cohesion score for mothers (mean = 5.81). However, despite the fact that fathers did score lower on the cohesion scale as expected, they failed to do so at an alpha level of $p < .05$.

Finally, no significant interaction effect was expected between parent gender and child type on cohesion scores. This hypothesis was supported by the ANOVA results since no significant interaction effects were found, $F(1, 225) = .069, p = .794$.

**Adaptability.** The results of the ANOVA for adaptability scores partially supported the hypothesis. This analysis found that while child type (LD/non-LD) again did not have a significant effect on adaptability scores of FACES II, parent gender (male/female) did.

Hansen and Okun (1984) and Silverman, Fite, and Mosher, (1959) found that families with LD children tend toward marital discord, enmeshment, and rigidity. As a result, adaptability scores on FACES II (which measures ability to change and be flexible) were expected to be adversely affected by the presence of an LD child in the family. However, this was not found to be the case. Child type had little effect on parents' adaptability scores ($F[1, 225] = .02, p = .88$).
Therefore, the hypothesis that child type would affect adaptability scores was not supported.

However, the results of the ANOVA for adaptability did find a significant effect, $F(1, 225) = 4.246, p = .040$, for parent gender (male/female). Fathers had a mean score of 4.70 and mothers had a mean adaptability score of 5.13. This indicates that in comparison to fathers, mothers perceive their families as more flexible, and more able to change or modify their power structure, roles, and relationship rules in response to situational and developmental stress. Therefore, the hypothesis that mothers would score higher than fathers on adaptability was supported.

Lastly, no significant interaction effect was expected on adaptability scores between parent gender and child type. This hypothesis was supported by the ANOVA results since no significant interaction effects were found, $F(1, 225) = .003, p = .953$.

**Primary Hypothesis Two: Marital Status X Type of Child**

The second primary hypothesis stated, "A significant difference exists between parents of different marital statuses (single parent, married once, and remarried) on perceptions of family adaptability and cohesion among families with LD and
non-LD children." Regardless of marital status, parents of LD children were expected to score significantly lower on adaptability and cohesion than parents of non-LD children.

To test this hypothesis, two identical 3 X 2 ANOVAs were designed, one for cohesion scores and one for adaptability scores. The first independent variable, marital status, was divided into three different levels: single parent, married once, and remarried. The second independent variable, child type, had two levels of LD and non-LD. These ANOVAs were run using the regression option to control for unequal cell sizes (Option 9 in SPSS/PC+).

Cohesion. The results of the 3 X 2 ANOVA for cohesion partially supported the hypothesis. Child type (LD/non-LD) did not significantly affect cohesion scores on FACES II, $F(1, 223) = .011, p = .916$. As discussed above, families with LD children were expected to score significantly lower on cohesion than families of non-LD children. However, this hypothesis was not supported by the ANOVA results.

Marital status, on the other hand, was found to significantly affect the cohesion scores on FACES II, $F(2, 223) = 7.426, p = .001$. As hypothesized, those
participants who were married once (mean = 5.90) had significantly higher cohesion scores than did those who were single parents (mean = 5.08) or those who were remarried (mean = 4.96). This indicates that a significant difference exists in how parents of different marital statuses perceive their family's degree of cohesion or connectedness. The cohesion scale on FACES II measures the degree of emotional bonding family members have toward one another, as characterized by common friends, spending time together, having mutual interests, and making decisions together. These characteristics are perceived to be more present in families by parents who have been married once as opposed to those who are single parents or are remarried.

Third, no significant interaction effect was expected on cohesion scores between marital status and child type. This hypothesis was supported by the ANOVA results since no significant interaction effects were found, $F(2, 223) = .405, p = .668$.

Adaptability. The results of the ANOVA for adaptability scores failed to support the hypothesis. This analysis found that neither child type (LD/non-LD) nor marital status (single parent/married once/
remarried) had a significant effect (or interaction effect) on the adaptability scores of FACES II.

As discussed above, the presence of LD children in the family was expected to adversely affect parent perception of family adaptability. However, this was not found to be the case. Child type had little effect on parents' adaptability scores ($F[1, 223] = .141, p = .802$). Therefore, the hypothesis that child type would affect adaptability scores was not supported.

Marital status also was expected to have a significant effect on adaptability scores on FACES II. Because the adaptability scale measures family flexibility along with its ability to change or modify its power structure, roles, and relationship rules in response to situational and developmental stress, parents who were married once were expected to score higher on adaptability than single parents or remarried parents.

As expected, the ANOVA results found that parents who were married once (mean = 5.07) did perceive their families as more adaptable ($F[2, 223] = 5.90, p = .074$) than parents who were either single (mean = 4.92) or remarried (mean = 4.53). However, despite the fact that parents who were married once scored higher on the
adaptability scale as expected, they failed to do so at
the a priori level of statistical significance, \( p < .05 \). Therefore, this hypothesis was not supported by
the ANOVA results.

Finally, no significant interaction effect was
expected on adaptability scores between marital status
and child type. This hypothesis was supported by the
ANOVA results since no significant interaction effects
were found, \( F(2, 223) = .157, p = .932 \).

Summary. The presence of LD children in the
family did not significantly affect parent perception
of either cohesion or adaptability. Given the findings
of the research reviewed above regarding families with
LD children, significant results were expected. In
attempting to reconcile the present findings with those
of other researchers, two explanations are offered.

First, the criteria for establishing a child as LD
may not have been stringent enough. The official
certification of LD in the Newberg School District
encompasses a wide variety of learning problems and
with a broad range of severity. The additional
criteria of receiving at least one hour per week of
special education may have not been discriminating
enough. If the minimum hour requirement of special
education per week had been set a five or ten hours, this would have identified LD children with more severe learning disabilities and may have altered the results.

Another possible explanation for the present findings focuses on the return rate for LD families. Whereas 66% of non-LD families responded by completing the survey questionnaires, only 36% of the LD families responded. A possible explanation is the "more healthy" of the LD families were the ones that responded, and those families characterized by the difficulties suggested in other studies did not complete the questionnaires. If that was the case, the families that were "less healthy" did not respond and the results of the LD families were skewed in a "more healthy" direction. Therefore, the results might have been altered if a higher percentage of LD family questionnaires had been received. As a result, the effects of LD children on families may have been mitigated because: (a) the criteria for inclusion in the LD group were not stringent enough, and/or (b) those families that were "less healthy" did not respond.

When investigating the effects of parent gender, fathers scored significantly lower than mothers on
family adaptability ($p = .040$). Fathers also scored lower than mothers on family cohesion, but not significantly so ($p = .056$). Further consideration was given to the effects of marital status on cohesion and adaptability scores. Parents who were married once scored significantly higher on cohesion ($p = .001$) than did single parents or remarried parents. Parents who were married once also scored higher on adaptability than did single parents or remarried parents, but not significantly ($p = .07$). And lastly, no significant interaction effects were found. The following section will provide a discussion of the implications of the research findings.

**Implications of the Research**

The implications of the research results will be explored by discussing the three independent variables' effects on parent perception of family adaptability and cohesion. The variables discussed include: (a) the presence of LD children in the family, (b) the effect of parent gender, and (c) the effect of marital status.

**Learning Disabled Children**

The primary focus of this study was to investigate the effects LD children would have on their parents'
perceptions of family adaptability and cohesion. The results of the four ANOVAs indicate that the presence of LD children in the family has little affect on parent perception of family adaptability and cohesion.

Kaslow and Cooper (1978) contend that when planning treatment for LD children, one must give careful consideration to parental attitudes and family stressors. The results discussed above suggest that the mere presence of an LD child is not a good criteria for assuming a lesser degree of connectedness in the family, nor less flexibility.

**Parent Gender**

On the other hand, the gender of the parent does appear to affect perceptions of family adaptability and cohesion. ANOVA results indicate that regardless of what type of children are present in the family (LD/non-LD), mothers perceive their families as more flexible and able to change than do fathers. Also, although the results were not statistically significant for cohesion, mothers clearly tend to perceive their families as more connected than do fathers.

This information should receive careful consideration when planning treatment for LD children.
(as well as when working with families in general). Studies show that LD children are best served when parents are active advocates for them with the schools, use effective behavioral management techniques, and are active participants in the treatment plan (Pearl & Bryan, 1982; Smith, 1983; Taylor, 1989). Since fathers tend to be more distant from the family and view the family as less flexible, special effort should be made to draw them into actively participating in the treatment program.

These findings may also help explain one of the conflicts that frequently characterizes families in the school-age stage. Brown and Christensen (1986) comment that mothers often view fathers as being "too strict" and fathers often view mothers as "too soft." A possible reconceptualization of this dilemma is that mothers view fathers as "not connected enough to and not flexible enough with the family" while fathers view the mothers as "too connected to and too flexible with the family." As a result, helping parents recognize some of the different characteristics that contribute to this "too strict" - "too soft" dilemma, and working with them to move towards mutual level of perceived connectedness and flexibility, may prove useful.
Marital Status

Marital status of the participants also affected family cohesion and adaptability scores. Again, the results indicate that regardless of what type of children are present in the family (LD/non-LD), those parents who are married once perceive their families as more emotionally connected than do single parents or parents who have remarried. Also, although the results were not statistically significant for adaptability, a clear tendency exists for parents who are married once to perceive their families as more flexible and able to change than do single parents or remarried parents.

This, too, has important implications when treating families with school-age children. The stage of family development involving school-age children is characterized by three primary developmental tasks: renegotiating the work load, dealing with feelings regarding the child's difficulties with school, and deciding who helps the child with school work (Brown & Christensen, 1986). The results pertaining to marital status help one to be aware of the emotional resources (and general climate in the home) available to assist in meeting these developmental tasks. Parents who have been married once perceive their families as more
connected and tend to be more flexible than single or remarried parents. As a result, parents who have been married once may have stronger emotional resources for dealing with the developmental tasks associated with having school-age children; and single parents and remarried parents may be more susceptible to problems associated with the developmental tasks of this stage.

Limitations of the Research

In assessing the generalizability of the results, three limitations of this study must be considered. First, consideration must be given to the fact that all the participating families came from the Newberg School District. Although Newberg is considered a bedroom community of Portland, Oregon, its population is predominantly Caucasian with few Hispanic Americans and even fewer African Americans. This limits the generalizability of the results because while these results may be representative of predominantly Caucasian, semi-rural bedroom communities, they may not be (and probably are not) representative of more multiculturally diverse urban settings.

The second consideration involves the criteria used for determining LD children. Children were
considered to be LD if they were officially certified as such by the Newberg School District and received at least one hour per week of special education. When generalizing these results, one must realize that the results discussed may not apply equally to all children who have a learning disability. No attempt was made to determine the specific type of learning disability nor to assess its severity. Therefore, these results may not be equally generalizable to families who have children with a specific type and severity of learning disability. Rather, these results are better viewed as descriptive of families with LD children in general.

Third, consideration must be given to the fact that approximately two-thirds of the LD families failed to respond by completing the questionnaire. Had more of these families returned their questionnaires, the results may have been different, particularly those results involving the differences between LD and non-LD families.

Suggestions for Future Research

Suggestions for future research are as follows:

1. This study could be replicated in school districts with different demographic configurations in
an attempt to reaffirm or modify the present findings. Such school districts might include: (a) an urban school district, (b) a school district with greater multicultural diversity, and/or (c) using a private school or consortium of private schools.

2. Further research may focus on obtaining a better response rate from families with LD children by using a different means of data collection (i.e., having the survey questionnaire materials sent home with students, or distributed personally to parents during parent-teacher conferences). Those results could then be compared with the present results to see if in fact, LD children do not affect parents' perceptions of family adaptability and cohesion.

3. A study could be constructed using more stringent criteria for assessing if children have learning disabilities. One could also investigate the effects of specific types of learning disabilities and different levels of severity.

4. This research could be replicated using a different measure of cohesion and adaptability such as the Dallas Self-Report Family Inventory (Hampson, Hulgus, & Beavers, 1991) to see if similar findings occur.
Summary

The purpose of this study was to determine if the presence of LD school-age children in families had an affect on their parent's perception of family adaptability and cohesion. After reviewing the literature on family systems theory, learning disabilities, their effects on family systems, and their treatment with respect to family involvement was discussed. Olson's Circumplex model of marital and family systems provided the backdrop for considering the two dependent variables, adaptability and cohesion.

Chapter two provided information regarding the selection method for obtaining the families used in this study. The participating families were all selected based on their children's official certification by Newberg School District as LD or non-certified. Data on these families were collected from the parents via the FACES II and a brief demographic questionnaire. This data was then prepared for analysis using two different two-way ANOVA designs.

Descriptive demographic information including the gender of the parents responding, the number of children in the families, the parents' marital statuses, and the length of time being characterized by
that marital status was provided for both families with LD and non-LD children. Based on these four demographic criteria, LD and non-LD families in this study were concluded to be similar on these points of comparison.

The results of the statistical analyses for the two ANOVA designs used in the study were reviewed within the context of the two primary hypotheses. The first ANOVA design investigated the effect parent gender and/or child type had on cohesion and adaptability. The results indicated that parent gender significantly affected adaptability scores on FACES II. No other significant results were found.

The second design examined what effect parental marital status and/or child type would have on cohesion and adaptability scores. Results indicated that marital status significantly effects cohesion scores. No other significant results were found.

The results failed to support the hypothesis that the LD children significantly affect parent perception of cohesion and adaptability. In attempting to reconcile those findings with past research, two explanations were offered.
The first suggested that the criteria for considering a child as LD might not have been stringent enough. Increasing the minimum amount of special education received per week was hypothesized to identify LD children with more severe learning disabilities and alter the results. Second, the return rate for LD families was only 36% as compared with 66% for non-LD families. The possibility that "more healthy" LD families were the ones that responded was suggested, and that the "less healthy" families did not. If true, the results of the LD families were skewed in a "more healthy" direction. As a result, the effects of LD children on families may have been mitigated by: (a) the inclusion criteria for the LD group (not stringent enough), and/or (b) the return rate for LD families (those that were "less healthy" did not respond).

In considering parent gender, fathers scored significantly lower than mothers on family adaptability ($p = .040$). Fathers also scored lower than mothers on family cohesion, but not significantly ($p = .056$). This suggests that regardless of what type of children are present in the family (LD/non-LD), mothers perceive their families as more flexible and able to change than
do fathers. Also, although the results were not statistically significant for cohesion, mothers clearly tend to perceive their families as more connected than do fathers.

Additional consideration was given to the effects of marital status. Results indicated that parents who were married once scored significantly higher on cohesion (p = .001) than did single parents or remarried parents. Parents who were married once also scored higher on adaptability than did single parents or remarried parents, but not significantly (p = .07). Again, the results indicate that regardless of what type of children are present in the family (LD/non-LD), parents who are married once perceive their families as more emotionally connected than do single parents or parents who have remarried. Also, although the results were not statistically significant for adaptability, parents who are married once clearly have a tendency to perceive their families as more flexible and able to change than do single parents or remarried parents.

In assessing the generalizability of the results, three limitations of this study must be considered. The first limitation regards the lack of broad multicultural diversity on the population being sampled
which limits the generalizability to families and communities that are likewise, homogeneous. The second consideration states that because no attempt was made to identify the specific type or severity of learning disability of the child, the results are best viewed as descriptive of families with LD children in general. Lastly, the low return rate of LD families suggests that a higher return rate might have resulted in different results, particularly those involving differences between LD and non-LD families.

In conclusion, this study found that the presence of LD children in families did not significantly affect parents' perceptions of family adaptability and cohesion. However, the gender and marital status of the parent did significantly affect perceptions of family adaptability and cohesion. Further research needs to be done on the differences between families with LD and non-LD children in an effort to either affirm these findings or modify them.
References


Family Structure

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Appendix A

Complete Questionnaire Packet
Dear Parent(s)/Guardian(s):

Your participation in a research study of families with school-age children is requested. You were selected at random from a complete list of families having children in Newberg elementary schools. The results of this research will enable educators to better meet the needs of children.

Your response to this survey is of critical importance, and this study’s accuracy depends on your participation! To participate, simply follow the instructions found below.

Instructions

1. Each parent/guardian should complete one of the two identical enclosed surveys. These surveys are brief and usually can be completed in five minutes or less.

2. Place both completed surveys in the self-addressed, stamped envelope and deposit in the mail.

Confidentiality of your answers will be maintained at all times. All data is identified by code numbers, and the master list will be destroyed once data is collected.

If you have questions about this study, please contact us by mail. And, if you would like a copy of the study’s findings, include a self-addressed, stamped envelope when you return your survey(s).

Thank you for your help and cooperation,

William C. Buhrow, Jr., M.A.
Student, GFC Graduate School of Clinical Psychology

Neal F. McBride, Ed.D., Ph.D.
Professor of Psychology at George Fox College

Ross Quackenbush, Psy.D.
Newberg School District Psychologist

GEORGE FOX COLLEGE/NEWBERG, OREGON 97132/(503) 538-8383
TO BE COMPLETED BY
MOTHER/FEMALE GUARDIAN

Family Information Survey

Q-1 Parent Completing Survey (Circle Number)
1 MOTHER
2 FATHER
3 STEP-MOTHER
4 STEP-FATHER
5 OTHER _______________________________ (WRITE IN)

Q-2 How many children live in your home? (Circle Number)
1 ONE CHILD
2 TWO CHILDREN
3 THREE CHILDREN
4 FOUR CHILDREN
5 FIVE CHILDREN
6 MORE THAN FIVE CHILDREN

Q-3 Which of the following best describes your present living situation? (Circle One)
1 NEVER MARRIED
2 MARRIED ONCE AND LIVING TOGETHER
3 MARRIED ONCE BUT SEPARATED
4 DIVORCED BUT LIVING TOGETHER
5 DIVORCED AND LIVING APART
6 REMARRIED AND LIVING TOGETHER
7 REMARRIED BUT LIVING APART
8 WIDOWED
9 OTHER _______________________________ (WRITE IN)

Q-4 How long have you lived in the situation you indicated above in Q-3?

_______ YEARS _________ MONTHS
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<td>Family members avoid each other at home.</td>
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<td>Family members pair up rather than do things as a total family.</td>
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<td>Family members share interests and hobbies with each other.</td>
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TO BE COMPLETED BY
FATHER/MALE GUARDIAN

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8 WIDOWED
9 OTHER ____________________________ (WRITE IN)

Q-4 How long have you lived in the situation you indicated above in Q-3?

__________ YEARS ___________ MONTHS
Family Structure

92

TO BE COMPLETED BY
FATHER/MALE GUARDIAN

FACES II: Family Version
David H. Olson, Joyce Portner & Richard Bell

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<td>Describe Your Family:</td>
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28. Family members are afraid to say what is on their minds.
29. Family members pair up rather than do things as a total family.
30. Family members share interests and hobbies with each other.
Appendix B

Letter Requesting Permission of the Newberg School District to Conduct the Study
August 17, 1992

Dear Sirs:

I am currently a doctoral student in the clinical psychology program at George Fox College. During this past school year I was involved in a practicum experience in the Newberg School District. I provided counseling and assessment services under the supervision of Dr. Ross Quackenbush, District Psychologist. In conversations with Dr. Quackenbush, it appeared there might be a possibility of doing my dissertation research with families in the Newberg School District.

Dr. Quackenbush has graciously agreed to serve on my dissertation committee. Subsequently, we talked with Mr. Gary Fendall about a potential research project. He indicated that I should proceed by submitting a letter to the Newberg School District outlining my request to conduct the research.

Therefore, please accept this letter as my formal request for permission to pursue a research project using selected elementary school families (as of the 1991-92 school year) in the Newberg School District. I am interested in knowing what effect, if any, the various types of elementary school children (learning disabled or those not learning disabled) have on their parents' perceptions of their families. A mailed survey will be used to collect the desired data. Included in the mailing will be a cover letter explaining the request to participate, a 20-item questionnaire (FACES III), a demographic questionnaire, and a stamped return-addressed envelope.

In specific, the cover letter will invite selected families to participate in the study. It instructs them that by completing and returning the questionnaires they are indicating their willingness to participate in the study. The information is collected anonymously. All mailing lists will be destroyed once the data is collected. Families will be given instruction on how they may obtain a copy of the study's results, if they are interested.

The proposed research is beneficial for both the school district and me. It would enhance our understanding of the home environment in which LD children live, enable us to predict with greater accuracy the effect that environment has on aspects of the children's learning process. Of course, the school district will receive a complete copy of the research results.

Thank you for considering this request. If you have further questions regarding this proposal, please feel free to contact me.

Respectfully requested,

William C. Buhrow, Jr., M.A., M.A.
414 N. Meridian
Newberg, OR 97132
(503) 537-3841

Neal F. McBride, Ed.D., Ph.D.
Dissertation Chair
Professor of Psychology
George Fox College
(503) 538-8383 ext. 343
Appendix C

Letter of Permission to use FACES II
PERMISSION TO USE FACES II

I am pleased to give you permission to use FACES II in your research project, teaching or clinical work with couples or families. You may either duplicate the materials directly or have them retyped for use in a new format. If they are retyped, acknowledgement should be given regarding the name of the instrument, the developer's name and the University of Minnesota.

In exchange for providing this permission, we would appreciate a copy of any papers, theses or reports that you complete using FACES II. This will help us to stay abreast of the most recent developments and research regarding this scale. We thank you for your cooperation in this effort.

In closing, I hope you find FACES II of value in your work with couples and families. I would appreciate hearing from you as you make use of this inventory.

Sincerely,

David H. Olson
Professor

FAMILY INVENTORIES PROJECT (FIP)
Director: David H. Olson, Ph.D.
Appendix D

Raw Data Tables
### Explanation of Raw Data Table

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<td>Subject Identification Number</td>
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<td>Gender of Child</td>
<td>1 = Female, 2 = Male</td>
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<td>Relationship of Parent</td>
<td>1 = &quot;Mother&quot;, 2 = &quot;Father&quot;</td>
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<td>Number of children living in the home</td>
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<td>Marital Status</td>
<td>1 = &quot;Single Parent&quot;, 2 = &quot;Married once&quot;, 3 = Remarried</td>
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<td>Length of present marital status</td>
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<td>Raw Adaptability Score</td>
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<td>28</td>
<td>Type of Child</td>
<td>1 = Learning Disabled, 2 = non-Learning Disabled</td>
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## Family Structure

### Raw Data Table

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Appendix E

Vita
WILLIAM C. BUHROW, JR.
Curriculum Vitae

420 N. Meridian #5911
Newberg, Oregon 97132
Telephone/Message (503) 537-3841

EDUCATION

Psy.D. Student, Clinical Psychology
(expected 7/94).
George Fox College Graduate School of Clinical Psychology, Newberg, OR.
Graduate Fellow: For Dr. Rodger Bufford, Director of the Graduate School of Clinical Psychology
Chair/Treasurer: Psy.D. Graduate Student Council
Dissertation: Effect of School-age Learning Disabled Children on Parent Perception of Family Cohesion and Adaptability

George Fox College Graduate School of Clinical Psychology, Newberg, OR.
Deans List: (GPA 4.0)

Dallas Theological Seminary, Dallas, TX.

Cedarville College, Cedarville, OH.
Minors: Sociology and Bible
Honors: National Register of Outstanding College Graduates (1982)

A.A., General Education/Bible (1980).
Baptist Bible College, Clarks Summit, PA.
INTERNSHIP

Clackamas County Mental Health Center
(7/93 - present).
Will complete two rotations working with the following programs: Alcohol and Drug, Adult Outpatient, Child and Family, and Transitional Services (chronically and severely mentally ill). Performed psychological evaluations, conducted intakes and A & D evaluations, constructed and implemented treatment plans, and provided individual and group psychotherapy.
   Supervisor: Byron Fujita, Ph.D.

PRACTICA

Clackamas County Mental Health Center
(9/92-2/93).
Conducted intakes, constructed and implemented treatment plans, and provided individual psychotherapy for individuals in the Adult Outpatient Treatment Program.
   Supervisor: H. F. Shellman, Ph.D.

George Fox College Center for Counseling and Personal Development (1991-1993). Activities included psychological testing and evaluation, and individual counseling. Provided similar services for various individuals at the request of the college Student Life Office.
   Supervisor: David Arnold, M.Ed., M.A., Director.

Pacific Gateway Hospital (9/92-12/92). Participated in adolescent and adult treatment groups on locked hospital units. Interviewed adult patients, and evaluated and reviewed MMPI profiles with them.
   Supervisor: George Howard, M.A., Adolescent Program Director
Counseled with children, adolescents, and parents for emotional, academic, behavioral, and family difficulties. Performed intellectual, emotional, and achievement assessments. Worked with LRC staff and teachers on behavior plans, IEP's, and other issues related to students' needs.
Supervisor: Ross Quackenbush, Psy.D., District Psychologist.

Hospital Practicum (1984). Richardson Medical Center, Richardson, TX.
Served as a counselor with the Minirth, Gutierrez and Meier Clinic at the psychiatric ward of the Richardson Medical Center. Participated in individual and group counseling, and occupational therapy with clients.
Supervisors: Paul Meier, M.D., & Mike Moore, M.A.

RELATED EXPERIENCES

Pastoral Counseling (1985-90). First Baptist Church, Waterford, CT.
Counseled adolescents and adults in areas of spiritual, emotional, and physical need. Performed individual, family, pre-marital, and marital counseling.

Board of Directors (1987-89)
Executive Committee and Treasurer (1989-90).
Christian Counseling Center of Southeastern Connecticut. Updated bookkeeping and financial procedures and policies, acted as comptroller and treasurer for the organization, and produced monthly and annual financial reports. Initiated the computerization of accounts, records, and insurance claims, established a corporate account with Visa and Mastercard privileges, and secured a line of credit for expansion.

Cross Cultural Experiences
Co-led a group of George Fox College students on a spring break missions trip to Haiti (1993).
Led a week-long marriage seminar and spoke at evangelistic crusades during an adult work/teaching trip in Haiti (1989).
Taught three week-long seminars on Christian counseling to national church leaders in Haiti (1985).
Travelled in Europe for two months (1984).
Spent five weeks on a musical tour in Australia (1981).

EMPLOYMENT HISTORY

Internship, Clackamas County Mental Health Center (1993-present).

Graduate Fellow, George Fox College (1991-1993).

Associate Pastor, First Baptist Church, Waterford, CT (1988-90).

Director of Youth Ministries, First Baptist Church, Waterford, CT (1985-88).
ASSESSMENT EXPERIENCE

Beck Depression Inventory
Bender
Child Behavior Checklist
Developmental Test of Visual-Motor Integration (VMI)
Family Adaptability and Cohesion Scale (FACES)
Firo-B
Jesness Inventory
Measures of Psychosocial Development (MPD)
Minnesota Multiphasic Personality Inventory - 2 (MMPI-2)
Piers-Harris Children's Self-concept Scale
Rorschach (Exner System)
Sentence Completion Test
Shipley Institute Of Living Scale
Stanford-Binet IV
Thematic Apperception Test
Trail Making
Weschler Adult Intelligence Scale - Rev. (WAIS-R)
Weschler Intelligence Scale for Children - Rev. (WISC-R)
Weschler Memory Scale - Revised (WMS-R)
Wide Range Achievement Test - Revised (WRAT-R)
Wisconsin Card Sort
Woodcock Johnson - Revised (Achievement)

ADDITIONAL TRAINING

Special Issues in Treating Abused Children and Adults (1993). E. Gil, Ph.D. & J. Briere, Ph.D.
Diagnosis and Treatment of MPD (1993). B. Kehler
Child Therapy (1993). T. Mischler, Ph.D.