A COMPARISON OF PARENTS' ATTITUDES AND LOCUS OF CONTROL BETWEEN NORMAL AND SPECIFIC LANGUAGE DISABLED CHILDREN

by

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A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN NURSING in THE FACULTY OF GRADUATE STUDIES School of Nursing

We accept this thesis as conforming to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

August 1981

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Date October 14, 1981
ABSTRACT

The purpose of this study was to compare locus of control of specific language disabled children and normal school-aged children, and relate this to parents' attitudes toward the achievement behavior of their children.

Two questionnaires were administered to forty families in the lower mainland of British Columbia. The two main groups contained twenty ten and eleven year old girls and boys with specific language disabilities and twenty ten and eleven year old girls and boys without language disabilities. Analysis of the Intellectual Achievement Responsibility questionnaire found that children with a specific language disability have a significantly lower internal locus of control for both positive and negative events than do children without a language disability. The analysis of the Parent Reaction Questionnaire revealed that parents' attitudes toward the achievement behavior of children with a specific language disability did not differ significantly from the attitudes of parents who have a normally achieving child. By comparing both questionnaires it was found that mothers' attitudes do not seem to influence their children's locus of control but that the fathers' positive reinforcement was an important influence on their children's locus of control.

The need for public health nurses working with preschool and school-aged language disabled children was identified to promote the
prevention of behavioral problems. The implications of early identification of emotional and social problems with specific language disabled children were discussed. Uses of the Intellectual Achievement Responsibility questionnaire were discussed for screening programs and giving direction to parents for child management strategies.
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ACKNOWLEDGEMENTS

I would like to express my sincere thanks to the members of my thesis committee for their continuous support and guidance: Mrs. Helen Elfert, chairman, for her knowledge, encouragement, guidance and patience; Margaret Ann Smith for her inspiration, advice and enthusiasm. I would also like to thank Dr. Mark Starr for his statistical advice and patience with a beginner on the computer.

The cooperation and encouragement offered by the community agencies was greatly appreciated. A special thank you is given to Mrs. Margaret Follis of The Kennedy Gordon School; to Mrs. Ann Moir and Mrs. Dola Gilmour of Shaughnessy Heights United Church; and to the many special teachers of language disabled children who assisted me. This study could not have been conducted without the children and their parents who willingly shared their time and concerns with me.

My heartfelt thanks is given to my family: my parents; my husband, Jim; my three children, Jeff, Michele and Heather for their enduring love, patience and support.
CHAPTER I

INTRODUCTION

Introduction to the Study

Chronic disabilities in a child create stress within a family and present a challenge to parents. The diagnosis of a developmental disability and the need to find appropriate remediation add emotional, social and financial pressures to parents. The parents' need to care for and protect their children throughout their development is threatened by the diagnosis of a chronic disability (Burton, 1975, p. 33). Learning disorders are a chronic disability and are among the most common problems seen in school-age children (Rutter, 1975, p. 268).

Recently, there has been an increased rate of identification of children with learning disabilities and increasing concern about the large number of illiterates or poor readers in North America. As a subgroup of learning disabilities, specific language disabilities represent the largest proportion. A child with a language disorder who is deprived of appropriate treatment and support has very limited possibilities of developing his real potential, resulting in profound social and economic effects on the individual and society (Černý, 1976, p. 114). Both children and parents need understanding and support to cope with a language disability and it is important for health professionals to extend support to the child and his parents to help prevent secondary emotional and behavioral problems.
Academic achievement is the primary developmental task of the elementary school-aged child (Duvall, 1977, p. 275; Erikson, 1950, p. 258; Havighurst, 1972, pp. 25 & 33). Important factors affecting a child's achievement are family life and a child's perception of his control over events (Bridge, Judd, & Moock, 1979). Parents are the most significant adults in any child's life and they provide the greatest influence on the development and social learning of their child (Abrams, 1970, p. 755; Buscaglia, 1975, p. 69; Rotter, 1954, p. 416). Added to the parent's influence, the affective variables of internal control and a positive self-concept contribute to positive achievement behavior for the child (Bridge et al., 1979, p. 205).

Most studies of learning disabilities seem to focus on assessment and remediation of the learning disability (Huessey, 1976) or on assessing the parents of learning disabled children (Abrams, 1970; Braird, 1976; Dembinski & Mauser, 1977; Farnham-Diggory, 1978; Sloman & Webster, 1978). The important factors of locus of control and how well the language disabled children are coping with their disability have been overlooked.

Parents' attitudes toward the achievement behavior of their language disabled children are also very important (McLoughlin, Edge, & Streenecky, 1978). The question remains, do parents' attitudes affect their child's locus of control? This question will be studied by assessing the language disabled children's locus of control, assessing the parents' attitudes toward the achievement behavior of their specific language disabled children and relating the parents' attitudes to their language disabled children's locus of control.
Purpose of the Study

This study will compare locus of control of specific language disabled children and normal school-aged children, and relate this to parents' attitudes toward the achievement behavior of their children.

The specific objectives of this study are to answer the following questions:

1. Is there a difference in locus of control between specific language disabled children compared to normal children?

2. Does a difference exist in parents' attitudes toward the achievement behavior of language disabled children and normal children?

3. Is there a relationship between parents' positive and negative attitudes and their children's internal and external locus of control?

These objectives will be investigated by the administration of the intellectual subscale of the Parent Reaction Questionnaire and the Intellectual Achievement Responsibility Questionnaire to two groups of ten and eleven year old children and both their parents. One group of children will have a diagnosed specific language disability and a comparison group of normal children will not have a language disability.

Definition of Terms

Attitude is the predisposition or tendency to react specifically towards an object, situation or value; usually accompanied by feelings and emotions; attitudes cannot be directly observed but must be inferred from overt behavior, both verbal and non-verbal (Good, 1973, p. 49).
Achievement behavior is taking pride in academic or intellectual accomplishments when success at an academic activity is achieved.

Elementary school-age child includes those children aged ten and eleven years inclusive, male and female, with both parents living at home.

Specific language disability is a chronic learning disability manifested by a difficulty in learning to read (decoding), with erratic spelling (encoding) and a lack of facility in manipulating written as opposed to spoken words. The condition is essentially cognitive and usually genetically determined (modified from Critchley, 1978, p. 140). The children have average or above average intelligence; have no severe brain damage or other debilitating physical problems; have not been hampered by serious emotional and social disorders or by cultural disadvantage and have had adequate opportunity to learn (Benton, 1978, p. 64). For the purpose of this study the child will have a verbal IQ of 80 or above, have no peripheral sensory deficits, and be reading two grades or more below grade level for his* age.

Locus of control or expectancy for internal versus external control of reinforcement refers to the way the child typically views the laws of causality of events in his environment (Rotter, Chance, & Phares, 1972, pp. 13 & 17). In this study the perceived control is related specifically to academic achievement situations.

*Due to the unavailability of a neuter gender pronoun, he and his will refer to the child. This should not be taken to mean that language disorders of females do not exist.
Internal locus of control refers to the extent that the child believes he can control what happens to him and that a perceived event is contingent on his own behavior (Rotter, 1971, p. 61).

External locus of control refers to the extent that the child believes that he is controlled by luck, fate or powerful others and that a perceived event is not contingent on his own behavior (Rotter, 1971, p. 61).

Normal child for the purpose of this study means there are no indications of a language disability or of serious symptoms of stress or emotional disorder.

Assumptions

The study was based on the following assumptions:

1. That parents know what their attitudes toward the achievement behavior of their specific language disabled and normal child are, and are able to identify them in a questionnaire.

2. That reading difficulties are the most critical component of any learning disability syndrome (Farnham-Diggory, 1978, p. 16; Keir, 1977, p. 129).

Limitations

1. The sample will be a nonprobability, purposive sample selected by convenience from private sources and by the Tutor Coordinator for the public school system. Due to the voluntary nature of their participation, generalizations will not be made to the larger society.

2. Due to time and energy constraints of this study, numerous extraneous variables of sibling and peer group influences and assessments of teacher and school influence will not be included.
3. Attitudes have both a state and trait component and therefore, the parents' attitudes will vary depending on numerous extraneous, situational variables.

4. Relating parental attitudes to a measure of child adjustment indicates a descriptive correlational study and does not prove causation (Ross, 1964, p. 31).

Significance of the Problem

There are varying reports of the incidence of language and learning disabilities due to differences in classification, diagnosis by exclusion and lack of identification. The Celdic Report published in 1970 stated "the most frequently quoted figure suggests that ten percent of the school age population have a specific learning disorder, but some estimates run as high as twenty-five percent" (Shannon, 1970, p. 58). Most recent figures (V.A.C.L.D., 1977) state that there are more than one million school-age children in Canada of average to superior intelligence with a learning disorder; there are 100,000 school-age children in British Columbia with a learning disability; and that there are 13,000 school-age children in Vancouver with a learning disability. Local university educators and physicians have given a range of ten percent to twenty-five percent of the school-age population with learning disabilities of which one to three percent are relatively severe (Crichton, Catterson, Kendall, & Dunn, 1972, p. 12).

Barnard states that the prevalence of language disabilities in the population would appear to justify inclusion of language evaluation in an assessment of the child's total developmental status (Barnard & Douglas, 1974, p. 173). Persistence of reading disabilities into late
childhood and adolescence is likely to result in serious emotional and behavioral problems. Many children seen in mental health centers due to disturbed behavior and in juvenile courts have reading problems and these problems are the greatest cause for school drop-outs (Benton, 1978, p. 316). Over seventy-five percent of juvenile delinquents have a prior history of reading failures (Benton, 1978, p.v.).

With the increasing emphasis on prevention as the focus of primary health care, it seems that early identification, remediation and prevention of secondary mental health problems are important. Prevention of secondary emotional problems in a school-age child involves the parents. Frequently patterns of defence and guilt develop especially when an apparently normal child is diagnosed at an older age and when the familial nature of the disability is realized. When a chronic disability is diagnosed, parents are forced to change their hopes and expectations (Burton, 1975, p. 280). Hymovich (Vol. 1, 1979, p. 280) states that chronically disabled children and their families can be considered at risk for psychosocial and/or management problems. Achievement behavior is important because early patterns of achievement are significant for future independent functioning and achievement seems to be a source of behavioral difference between disabled and normal children (Holaday, 1974, p. 25). Therefore, it seems important to assess how the child is coping with his developmental disability in relation to his achievement behavior and what the parents' attitudes are toward their child and his language disability. If a child is not supported by the family, attempts at remediation will likely be unsuccessful (Hymovich, Vol. 2, 1979, p. 302).
During the past ten years, the investigator has worked with language disabled children and their parents. She has been aware of the different coping behaviors of these children and questioned what the reasons were for the differences. Parents have expressed concerns for: (1) the social adjustment of their language disabled children especially with their peers; (2) the poor achievement behavior and discipline problems that frequently occur; (3) the future adjustment to schooling when the tutoring or special schooling is completed; and (4) their ability to achieve independence and a satisfying vocation. These requests for help have stimulated the investigator's interest in the coping behaviors of language disabled children and the attitudes of parents.

The nurse as a health professional has a major role to play in the assessment of language disabled children and their parents and in intervention to minimize potential emotional problems. Language disabled children are frequently referred to the interdisciplinary school-based screening committee. Although the school nurse does not specifically diagnose the child, she can identify those children at risk and make the appropriate referral. She may be invaluable to the family as a resource person, a counsellor and/or an advocate for the child and family (Hymovich, Vol. 2, 1979, p. 302).

Overview of the Study

This study is described in five chapters. Selected literature is reviewed in Chapter II to include: an introduction to social learning theory, a discussion of locus of control and parents' attitudes, and an investigation of sociological and psychological studies related to
parents and children coping with learning disabilities. Chapter III describes the research methodology including: the sample selection, the descriptions of the instruments, and the description of the statistical analysis. Chapter IV is an analysis of the data and a discussion of the findings. Chapter V includes: the summary and conclusions, the implications for nursing practice and recommendations for further research.
CHAPTER II

REVIEW OF THE LITERATURE

Overview

The review of the literature is presented in three sections to explore parents' attitudes and children's locus of control as they relate to a specific language disability. The first section discusses social learning theory which is the general theoretical framework for this study. The main focus will be on the importance of the parent-child interaction; its effect on the parents' attitudes and the effect on the child's ability to cope with a specific language disability (SLD).

Secondly, two of the factors which may influence social learning, locus of control and parents' attitudes, are explored with specific reference to achievement behavior.

The third section investigates the sociological and psychological studies related to parents and children coping with learning disabilities.

Social Learning Theory

One of the critical family developmental tasks of parents in socializing their school-age children involves promoting school achievement (Friedman, 1981, p. 57). The primary developmental task that faces a school-age child is learning basic academic and problem-solving
skills (Hymovich, 1979, Vol. 2). Social learning theory addresses both sides of this issue by stating that "the major or basic modes of behavior are learned in social situations and are inextricably fused with needs required for their satisfaction and mediation of other persons" (Rotter, Chance, & Phares, 1972, p. 84).

Social learning theory is a molar theory of personality which uses an expectancy construct and an empirical law of effect (Rotter et al., 1972, p. 1). It combines the influences of Adler, Kantor and Lewin with those of Thorndike to blend the important trends in psychology of stimulus-response or reinforcement theories and the cognitive or field theories plus learning theory to account for the development and change in psychological needs. Social learning theory is based on man's learned behavior which is always directional and is regulated by his goals and the effect of reinforcing conditions. Therefore, human behavior is motivated with the individual attempting to increase his positive reinforcements and his anticipation or expectancy that these goals or reinforcements will happen. The underlying principles of social learning theory focus on the interaction of the individual and his meaningful environment. These interactions influence each other producing unity of personality in terms of stability and interdependence (Rotter et al., 1972, pp. 4-11).

The four basic concepts used in social learning theory to predict behavior are: behavioral potential, expectancy, reinforcement value and the psychological situation (Rotter et al., 1972, pp. 11-13). Relating these concepts to the present study, the behavioral potential is the cognitive activity of the SLD child with the expectancy being
the probability that a particular reinforcement will happen as a result of a certain behavior on his part in specific academic situations. The reinforcement value is the degree of preference for certain reinforcements to occur, that is, the parents' positive or negative response, if the possibilities of occurrence are equal. Because behavior is a result of the child selectively reacting to parts of his external and internal environment, the psychological situation can be a specific situation, that is, a school or home situation.

Generalized expectancy in social learning theory (Rotter et al., 1972, pp. 11-13) then includes needs, social attitudes, emotional behavior and interpersonal trust. There are differences in the degree to which people trust others and these differences can influence social interactions such as responses to school.

Locus of control is a construct derived from social learning theory (Rotter, 1954) and it describes an individual's belief in the source of his reinforcements. Reinforcement can result from a belief in self-determination (internal control) or a belief that a person is controlled by luck, fate or powerful others (external control). Rotter developed a measure of the degree to which people believe in internal versus external control of rewards and he suggests that consistent individual differences appear on this dimension. The ways people typically view causality of events in their environment are on the one extreme, internals, who perceive themselves and their behavior as the major determinant of their reinforcement and the other extreme, externals, who fail to perceive any relationship between their actions and the following reinforcements (Holaday, 1974, p. 26). Such generalized
expectancies of a belief in internal control or external control of reinforcement may have important consequences for how people respond to chronic periods of stress, different kinds of therapy and social interactions.

Needs and goals are the important basis for Rotter's social learning theory. According to Rotter et al. (1972, p. 10), needs are determined by the person and are learned or acquired. Initial psychological needs are inborn and are primarily satisfied by parents. As the child enters the school years, needs may be met by teachers and peers but the main responsibility for meeting the school-age child's needs still remain with the parents.

Rotter (1971, p. 60) speaks of six very broad needs in his attempt to explain most learned psychological behavior. They are categorized as: recognition-status, protection-dependency, dominance, independence, love and affection, and physical comfort. These needs are broad and therefore, allow only limited prediction unless they are reduced to more specific concepts. For example, the recognition-status need can be viewed at the specific level of intellectual activities: the need to excell, be competent, be good or better than others in school and the need to obtain high position in a socially valued competitive scale (Rotter, 1971, p. 60).

In social learning theory, goals are satisfactions that a person values and therefore involve the need value attached to that goal and the expectancy that certain behaviors will lead to satisfaction. Goals involve reinforcements and acquired goals in humans appear as the result of satisfactions and frustrations which are mostly controlled by other
people, initially the family (Rotter et al., 1972, p. 10). The result-
ing behavior is based on previous reinforcement and previous learning
experiences. Thus, behavior, needs and goals exist within functionally
related systems.

In summary, social learning theory provides a basis for conceptual-
izing the parent-child interaction and some of the forces influencing
the SLD child's coping behaviors.

**Factors Which May Influence Social Learning**

**Locus of Control**

An important concept in social learning is locus of control which
is conceptualized as the degree to which a person perceives that rewards
are a function of his or her own actions, efforts or characteristics as
opposed to external forces" (Polit & Hungler, 1978, p. 119). Locus of
control describes the belief an individual holds as to the source of
his reinforcements. In viewing internal-external control expectancies
it is helpful to categorize individuals according to their relative
tendencies to attribute their outcomes to internal or external causes.
Bridge et al. (1979, p. 60) describes internals as tending to attribute
most of their outcomes to their own actions, while externals tend to
attribute most of their outcomes to fate, luck, chance or powerful other
people. No one is entirely internal or entirely external, thus, locus
of control can be viewed as a continuum with the individual placed on
the continuum according to the degree to which the person accepts per-
sonal responsibility for his own reinforcement.
Many variables influence a child's locus of control. Some of the variables to consider include parental socialization, social class, age, sex and achievement behavior.

Early studies of parental socialization (Katkovsky, Crandall, & Good, 1967, p. 774) suggested that the child's beliefs in internal control of reinforcements were related to the degree that the parents were protective, nurturant, approving and nonrejecting, thus providing a supportive, positive relationship between parent and child. But more recent longitudinal studies conducted by Crandall (1973) found that the mother's "coolness" and "criticality" was often positively associated with internal locus of control in young adulthood. Another relationship was found between maternal teaching of internality and independence with a child's subsequent internal locus of control beliefs (Phares, 1976, p. 155). Independence training proved to be reliably correlated to locus of control, with mothers of children with high internal control encouraging independence. Therefore, the child needs some degree of security but also freedom to explore his world, encouraged by some distance and criticism by his parents (Lefcourt, 1976, p. 103).

The relationship between locus of control and social class reported in studies (Crandall, Katkovsky, & Crandall, 1965, p. 104; Liebert, Poulous & Strauss, 1974, p. 432; Phares, 1976, p. 152) indicates that lower social class is associated with external beliefs. Phares concluded that groups who cannot compete effectively for social status or power and who have little access to material wealth will be more likely to have an external belief system. Bridge et al. (1979) makes a distinction
between personal control beliefs and control ideology. With inner city groups he found that this population could have high internal beliefs about control over their personal lives but have high external beliefs about what determines their outcomes, with the feeling that "one must work hard to get ahead but it won't work for me" (Ibid., p. 62).

Age is another variable that influences locus of control. Evidence suggests that as children become older their locus of control becomes more internal (Crandall, 1978, p. 4; Phares, 1976, p. 154; Rotter, 1975, p. 65). Normative data indicates that self-responsibility is already established by third grade. The prediction of achievement test data from internal-external control perceptions increased with age within the grades three to five and were consistently significant at grade five (McGhee & Crandall, 1968). With the refinements of the locus of control questionnaires, distinctions have been made between control over positive outcomes (I+) and negative outcomes (I-) (Crandall et al., 1965). This is particularly noticeable in relation to age with some children taking responsibility for successes but not their failures. This seems most characteristic of children under the age of twelve. As children mature, their cognitive compatibility progresses toward a single congruent set of control beliefs (Bridge et al., 1979, p. 62). Lawrence and Winschell (1975) suggests that internality seems to be a more mature belief state and she discusses five stages of development from externality to the highest levels of internality and self-reliance with equal responsibility for successes and failures. Her study with retarded children showed them with a predominantly external belief system.

There seem to be sex differences relative to expectancies and locus
of control, though studies do not show consistent relationships. An early study found that girls lead boys in social learning and in exercising social controls (Wolff, 1969, p. 36). Liebert et al. (1974) found that girls' expectancy estimates are consistently lower than boys and they tend to estimate their own intellectual and academic capabilities lower than do boys. Perhaps girls receive less positive reward for achievement than boys, with girls being more sensitive to censure and boys being able to focus more on positive feedback (Liebert et al., 1974, p. 430). Crandall (1978) cited research to support significant sex differences, with girls scoring higher than boys, particularly at older age levels. In the study by Katkovsky et al. (1967) there were also sex differences, with parental rejection by both mothers and fathers associated with external locus of control scores for girls only.

Though locus of control does not show a strong relationship with motivation, a number of studies have linked locus of control and achievement behavior. Kifer (1975) reported that successful students in grades two, four, six and eight tended to indicate more internal control perceptions than unsuccessful students. Studies cited by Liebert et al. (1974) showed that children who set their own standards and had self-administered rewards were internally controlled. There seems to be a predisposition for internality with a high need for achievement though the opposite is not true (Phares, 1976, p. 110). Crandall and her associates at Fels Research Institute (Crandall, 1965) have conducted many studies linking achievement-related behavior and the role of expectancies. They have found that children who expect to succeed actually do better and will spend more time studying than those who expect to fail.
The effects of locus of control expectancies on educational and social outcomes are many. Twenty years of research studies have shown that internally controlled and externally controlled individuals differ in predictable ways which promotes the validity of the internal-external control construct (Bridge et al., 1979). Research indicates that those with greater internal control are more likely to: delay gratification in order to gain long term benefits, take longer on skill tasks and shorter on chance tasks, are more effective at cognitive processing and problem solving, have better study habits and attitudes, demonstrate achievement-striving behavior and superior academic achievement, and have a higher self-concept (Ames, 1978; Bridge et al., 1979; Keller, Goldman, & Sutterer, 1978; Phares, 1976; Windwer, 1977). Socially, internals are more independent, more reliant on their own judgements, less easily influenced and more prone to initiate efforts for social change. Many of these qualities relate to self-control as discussed by Liebert et al. (1974, p. 393). With self-control the child is able to monitor his own actions, delay immediate rewards for long range goals and impose standards of achievement upon himself. Crandall et al. (1965) found that high self-esteem and positive self-concept are closely related to achievement behavior. Lawrence and Winschel (1975, p. 483) conclude that the development of internality appears fundamental to education in a free society and that internality involves responsibility and self-reliance.

It can be concluded that locus of control as a specific, situational expectancy is a very useful concept with high explanatory power (Bridge et al., 1979, p. 63; Liebert et al., 1974, p. 432; Phares, 1976, p. 172).
Most of the research supports locus of control as a specific situational expectancy in structured situations particularly relevant to intellectual, academic achievement and attitudes rather than motivation (Phares, 1976, pp. 55 & 111). Therefore, locus of control is an important concept to consider when assessing and remediating children with SLD.

Parents' Attitudes

Parental factors that are the most conducive to promoting children's school achievement are: goal-commitment and belief in long-range success potential, verbal communication, high achievement needs in parents, high value placed on academic success, democratic child-rearing attitudes and collaborative attitudes toward the school system (Duvall, 1977, p. 286). A study of third to sixth grade boys found that parents who were both coercive and autonomy-granting had children who were successfully assertive in the academic setting (Hoffman, Rosen, & Lippitt, 1960). Another study found that the mothers of high achievement-oriented boys fostered early independence of thought and action and rewarded successful performance with affection and attention (Liebert et al., 1974). Such results suggest that school-age children need firm parental controls, positive reinforcement and opportunity to become autonomous.

Studies conducted at the Fels Research Institute on parents' achievement attitudes and grade school children's academic achievements reported a number of significant findings (Crandall, Dewey, Katkovsky, & Preston, 1964; Katkovsky et al., 1964; Rotter et al., 1972). Some of the major findings include: both parents held values for the intellectual achievement of their children similar to those which they held for themselves; more significant relations occurred between parents'
attitudes and their daughters' academic proficiency than with boys' performances; boys' achievement behaviors appeared to be more independent and autonomous of adult reactions than those of girls; and generally there was a trend for parents of the sex opposite to the child to translate their own achievement attitudes into their behavior with their offspring in a manner consistent with cultural stereotypes of sex roles.

A specific study on parental antecedents of children's beliefs in internal-external control of reinforcements in intellectual achievement situations was reported by Katkovsky et al. (1967). The results revealed a strong relation between girls' self-responsibility for their intellectual successes and the amount of positive reinforcement given them by their fathers. There were positive relations between parental praise and reward of their sons' achievement behaviors and their sons' belief in internal control. Differences between the sexes in the parent-child relationship influence the development of internal and external orientations. Boys respond to maternal love and support with internal orientation while girls are more likely to develop an external orientation with parental rejection and authoritarian control. It was found that fathers' positive reactions promoted children's beliefs in internal control but the mothers' reactions did not relate significantly to children's locus of control scores. This suggests that fathers' relationships with their children may influence their children's internal orientation more than the mothers' influence.

The majority of writers who have studied exceptional children with physical, sensory and emotional handicaps consider the parents' attitudes toward their child and the disability of great importance to the
child's personality development (Norqvist, 1972, p. 12; Ross, 1964, p. 18). They have found that the reciprocal parent-child interaction is disturbed when a disability is present resulting in a failure to satisfy parents' expectations. Parents' attitudes influence the kinds of rewards, reinforcements and punishments that they make in response to their child's behaviors (Barnard et al., 1974). Two behavioral extremes of parents' reactions that can be harmful to a disabled child are an over-protective attitude or one of non-acceptance. Parental behavior may become inconsistent if the parents' attitudes swing from one extreme to the other.

Managing child behavior in the home environment is a very important aspect of coping with a chronic disability. Creer and Christian (1976, p. 126) discuss successful behavior management in the home which involves consistency from both parents, positive reinforcement to avoid the "criticism trap" and an environment with sufficient control. Parents feel the need to accommodate to the child's problem and if effective coping behaviors are used, mastery and family competency are the positive results (Freidman, 1981, p. 245). Coping helps to maintain self-esteem and interpersonal relationships and helps keep stress tolerable within the family.

A framework of phases that were applied to the family who were in the process of coping with a developmentally disabled member was developed by Farber:

first, the family tries to handle the disability within the existing arrangement, then distortions in the family relationships force the family to define the child as disabled, new extra-family coalitions that provide help and support in handling the problem must be formed, family members must
develop strategies to cope with deviancy in the family organization and finally, if the strategies used to minimize the disorganization to a tolerable level do not work, the fifth phase of "freezing out" occurs in which the disabled child is ostracized from the family. (Hymovich, 1979, p. 223)

The United States National Institute of Mental Health discusses the stages that parents go through with their normal looking, intelligent child, who does not learn or behave as other children his age do (Fried, 1979). The stages are described as: denial, flight, isolation, guilt, anger, blame, fear, envy, bargaining, depression, sadness, acceptance and hope (Abrams, 1976; Adamson, 1972; Fried, 1979). When SLD has not been diagnosed, parents often think their child is lazy or unmotivated. If within the family there is a marked investment in the value of achievement, the child's failure to learn the very basic process of reading sets off conflicts (Abrams, 1970, p. 754).

Parents still face many problems after diagnosis, though there is an initial feeling of relief from confirmation of their suspicions. In a study by Dembinski et al. (1977) the results indicated that parents want an honest evaluation of their child's problem and capabilities with clear communication and collaboration with the professionals about their learning disabled child's development. Parents often feel guilty that they have not provided enough attention for their child, frustrated that there is no help readily available and resentment which leads to impatience and rejection.

Parents' positive attitudes toward their child and his learning process are very important in influencing his receptivity to learning and remediation (Abrams, 1976; Osman, 1979; Ross, 1976; Valett, 1980). Many authors discuss the importance of parents' understanding, acceptance
and support of their child with a learning disability (Adamson, 1972; Braird, 1976; Dembinski et al., 1977; Peters & Stephenson, 1978; Sloman et al., 1978). Parental involvement is important for children with language problems particularly in understanding the complex interaction between language-learning problems and the child's self-esteem. It has been found that the child can develop a damaged self-concept from negative feelings about school learning, the failure syndrome and guilt (Abrams, 1970; Friedman, 1978; McLoughlin et al., 1978).

Critchley includes the parents' attitudes when he outlines the five favorable factors for progress of the language disabled child. The prognostic factors are: the intellectual level, early diagnosis, sympathetic and understanding attitude of the parents and teachers, availability and institution of intensive, skilled tuition and a powerful drive toward attainment (ego-strength) (Critchley, 1978, pp. 115-116).

Peters and Stephenson (1979) address the need for parents to learn modes of child management that emphasize consistent, positive patterns of interaction, sensitive listening and social reinforcement. Adamson (1972) discusses the need for counselling which should include routine, regularity and repetition with positive reinforcement. Therefore, counselling the parents becomes as important as remediating the language disability and giving therapy for the secondary emotional problems (Braird, 1976).
Sociological Studies of Parents' Attitudes

A number of studies have investigated parents' attitudes toward learning disabled children (Chapman & Boersma, 1979; Humphries & Bauman, 1980; Wetter, 1972). Wetter found a significant difference in mothers' attitudes of overindulgence and rejection toward their learning disabled children compared to mothers of a control group without a learning disorder. There were no differences between fathers' and mothers' attitudes of their learning disabled children. He also found that the parents of children having a learning disorder demonstrated greater disagreement in assessing their child's overall adjustment than in the control group.

Family attitudes of seventy-six educationally handicapped children were studied by Owen (Farnham-Diggory, 1978). The results showed that the mothers tended to put more pressure on them and expressed less affection toward them than with their normal siblings. Parents of learning disabled children seemed to have more negative interactions with them and became disappointed with their low achievement. The conclusions were that a learning disability is a disorganizing, emotionally upsetting factor and that the family is affected by the stress, particularly if a number of members of the same family have similar difficulties.

Maternal child-rearing attitudes as studied by Humphries et al. (1980) showed that mothers of learning disabled children exhibited a pattern of more controlling and authoritarian behaviors in child-rearing, were lower on the democratic attitudes factor but were less hostile and rejecting than mothers of normal achievers. This suggested a need for
the mothers to provide structure for their children's typically disorganized functioning. The study also suggests a strong degree of acceptance by the mothers of their children and of the maternal role in rearing them. This more adaptive, authoritative attitude of child-rearing may help these children cope with their disability.

Mothers of learning disabled children communicated more negative reactions to achievement events than control subjects in Chapman's study (1979). This less positive pattern of reactivity was established by grade three and continued through to grade six resulting in a less encouraging and more critical pattern of parent-child interactions.

What approach is needed to assess parents' attitudes? In Czechoslovakia, many special classes and counselling centers have been developed for the re-education of children with dyslexia. In these centers, great stress is placed on changing family's attitudes toward the child's problem and in determining the changes in their attitudes after the child has been through a program of therapy and re-education (Černý, 1976).

Sloman (1978) developed a semi-structured interview procedure to assess parents of learning disabled children using five main dimensions - evaluation, permissiveness of autonomy, mutual affection, hostility and pressuring. Resulting profiles could assess the parent's areas of strengths and weaknesses, thus giving specific guidelines for counselling. Spache (1976) and Hetrick (1979) emphasized the value of counselling in communication skills and in child management for parents of reading disabled children.
Psychological Studies of Learning Disabled Children

A recent study by Satyan (1980) describes the methods of assessment used for children with reading difficulties. The assessment included an analysis of social and emotional factors. They found that there were social and emotional problems observed in twenty-seven percent of the cases (Satyan, 1980, p. 439).

Rutter (1975) reported from epidemiological studies that extreme degrees of underachievement in reading are common and follow-up studies with these children have shown that the prognosis is poor. The children with severe reading retardation at age ten years are unlikely to "catch up" by the time they leave school. He found that reading failure is strongly associated with conduct disorders. Twenty-five percent showed antisocial behavior because of the constant discouragement, loss of self-esteem and antagonism (Rutter, 1975, p. 279).

Several studies have discussed the possible relationship between learning disabilities and juvenile delinquency (Lane, 1980; Little, 1978). Although research has not established a causal relationship between them, there are correlations and similarities between attitudes, self-concepts and educational needs of learning disabled and delinquent youths. Implications for delinquency prevention were discussed by Lane (1980) as the need; for guidance, counselling and supervision related to behavior control, for provision of academic success and for specific training in self-direction.

The locus of control construct has been used in several studies associated with delinquency, retardation and adolescent learning disabilities. Little's study (1978) related to delinquency concluded that
the locus of control scale showed a state and trait variable. In the rigidly controlled setting of a correctional institution the relationship between locus of control and academic achievement resulted in a negative correlation while the IQ and academic achievement relationship resulted in a positive correlation.

Another approach was examined by Gardner, Warren, and Gardner (1977) relating locus of control and law knowledge. Results indicated that learning disabled students tend to have more external locus of control and less knowledge about the basic facts of law than normal high school students.

The possible role of locus of control in learning was also addressed by Bendell, Tollefson, and Fine (1980). Their results showed that learning disabled adolescents with internal locus of control performed significantly better in a low-structure reinforcement condition, while those with external locus of control performed significantly better in a high-structure reinforcement condition. These findings indicate the need to consider affective factors and a determination of the locus of control orientation to implement an effective remediation and counselling program.

In Lawrence's study (1975) relating locus of control to special education, she maintained that internality in locus of control must become a conscious goal in the education of handicapped children and be necessary for successful, long-term mainstreaming of recently segregated children. She found in her study on mainstreaming of the mildly retarded child, that placement in a regular class should be dependent on the child's ability to demonstrate a level of internality for success and failure.
Two recent studies have found opposite results when studying perceived control in learning disabled children. Hisama (1976) compared achievement motivation and locus of control of learning disabled and behavior disordered children with normal children. He found no significant difference in locus of control scores between learning disabled and normally achieving students in grades three and four using a broad range of behaviors. Chapman and Boersma (1979) specifically studied perceived control in achievement situations with learning disabled children. They found that the learning disabled children had more external perceptions of control for successful academic experiences and that there was no difference between learning disabled and control children for failure outcomes.

Summary

In this chapter, the literature summarizes parents' attitudes toward learning disabled children. The literature discusses parents' reactions as: denial, guilt, blame, criticism, negativism, over-protectiveness, non-acceptance and authoritarianism.

Achievement is an important part of a school-age child's mental health. The emotional consequences of a learning disability show the development of antisocial behavior, loss of self-esteem and behavioral disorders with a high risk of juvenile delinquency. The literature documents the importance of the child's locus of control in achievement situations particularly in special education.

Recent studies suggest that parents' attitudes may be a social antecedent to the child's locus of control. There are two studies about
locus of control with learning disabled children but no research is available on parents' attitudes and locus of control with specific language disabled children.
CHAPTER III

METHODOLOGY

Overview of Design

The problems that were addressed in this study were: do children with SLD differ in their locus of control from normal children, do the parents' attitudes differ between the two groups and is there a relationship between the children's locus of control and the parents' attitudes toward the achievement behavior of their children?

In order to answer these questions, two questionnaires were used, one for the children and the other for the parents. Results were obtained from two groups of SLD children and normal children matched by age and sex. The parents and children were simultaneously tested in their own homes.

These test results were then analyzed in order to determine whether there were statistically significant differences in the children's locus of control and the parents' attitudes among the groups.

Sample Selection

The study sample consisted of forty children, aged ten and eleven years old and their parents. There were two main groups: twenty children with a specific language disability and twenty children without a language disability. Of the twenty children in each group, ten were boys and ten were girls. Within the sex subgroups, there were five ten year olds and five eleven year olds.
Sample Plan

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<tr>
<th></th>
<th>Group A (SLD)</th>
<th>Group B (Normal)</th>
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<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>10 years</td>
<td>5</td>
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<tr>
<td>11 years</td>
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Due to the unavailability of information about the total population of SLD children residing in the Greater Vancouver district, no random selection of participants could be made. The sample was one of convenience.

The sample was selected to meet the following criteria: (1) English speaking; (2) children of age ten and eleven years old; (3) children with a verbal IQ of 80 or above; (4) children without physical or sensory handicaps; (5) SLD children reading two grades or more below grade level for his age; and (6) consent of the agency and the parents.

The Protocol Form that was accepted by the University of British Columbia's Committee of Human Rights along with the questionnaires was submitted to two private agencies with a request for permission to approach their eligible families. Subsequently, the investigator appeared before both boards to answer any questions. Permission was granted from both agencies, a treatment school for children with Specific Learning Disabilities and a Church Sunday School.

The data collection was carried out in the homes of the SLD and normal children between October 1980 and March 1981. As the referring agencies were in New Westminster and Vancouver, the families were located in the Greater Vancouver School Districts. Additional volunteer
families were obtained from tutor coordinators and learning assistance teachers.

Demographic data collected for each child are: age, sex, ordinal position in the family, length of time aware of language disability, and type and amount of remediation. Demographic data relevant for both parents are: age, sex, level of education and socioeconomic status (Appendix E).

**Instruments**

Two questionnaires were used in this study to obtain information on parents' attitudes and the children's locus of control. The parents' attitudes toward the achievement behavior of their children were assessed using the intellectual subscale of the Parent Reaction Questionnaire (PRQ). The children's locus of control was assessed using the Intellectual Achievement Responsibility questionnaire (IAR). These tests were selected because they were specifically related to achievement behavior and they offered a means of collecting data in a standardized way so valid comparisons could be made among groups.

**Parent Reaction Questionnaire**

The self-report, multiple-choice questionnaire used to assess the parents' attitudes to their children's achievement behaviors was the PRQ (Appendix C) developed by Katkovsky, Preston, and Crandall in 1964. It was developed as part of a larger investigation on the role of parents as identification models and reinforcers of their children's achievement development. The PRQ consists of forty-eight items in four achievement areas: intellectual, physical skills, mechanical, and
artistic. For this study, only responses to the twelve items in the intellectual subscale were used.

Each item of the PRQ is followed by five or six alternatives from which the parents select and rank their two most typical reactions to their child in similar situations. The alternatives to each item include reactions of a positive nature (praise, affection, recognition, encouragement and reassurance); negative reactions (criticism, disappointment, annoyance and correction); and a neutral reaction (no response). The items describe both successful and unsuccessful achievement behaviors by the child and situations where the parents' attention is directed to the child's performance (Johnson, 1976, pp. 825-826).

For this study weighted scores were used by taking into consideration the parents' rankings. The first ranked score was given two marks and the second ranked score was given one mark. The sum of the weighted scores was divided by three times the number of the twelve items that the parents answered. Three scores were obtained: (1) positive reactivity, referring to the ranking the parent gave to the positive response alternatives; (2) negative reactivity, referring to the ranking the parent gave to the negative response alternatives; and (3) total reactivity, referring to the sum of the positive and negative reactivity scores in this subscale indicating the general parental responsiveness to the child's intellectual achievement behavior.

Test-retest reliability was conducted by the researcher with eight mothers. The resulting correlations were .63 for mothers' positive reactions and .64 for mothers' negative reactions.

Although the questionnaire has not been used often, Johnson (1976, p. 827) reports that the instrument relates positively to the development
of locus of control, with internality being associated with approving and nonrejecting parental reactions. A significant correlation was found between fathers' positive reactivity scores and their daughters' beliefs in their control of their intellectual successes. Consistently positive relations were shown between parental praise and their sons' beliefs in internal control. Correlation between scores on the PRQ and the IAR showed a significant correlation of .59 \( p < .01 \) (two tailed) between girls' self-responsibility for their intellectual successes and positive reinforcement by their fathers (Katkovsky et al., 1967, p. 773).

**Intellectual Achievement Responsibility Questionnaire**

The test administered to the children was the Intellectual Achievement Responsibility questionnaire (Appendix E). It consisted of thirty-two forced-choice items, one half relating to successful, positive experiences (I+), and the other half relating to negative events and failures (I-). The child responded to each item by selecting a statement that related to internal or external control. This questionnaire was constructed in the early sixties by Crandall, Katkovsky, and Crandall (1965) to assess the school-age children's perceptions of causality for events that occur in academic and intellectual situations (Crandall, 1978). The scale has separate subscores for success and failure outcomes. It limits the factor of internal control to the child himself and confines the factors of external control to the significant people that the child has daily contacts with (parents, teachers and peers) rather than questions about luck, fate and chance. The IAR has come to be used extensively in basic research with developmental, educational, social,
personality and clinical child psychology as is evidenced by a fifteen page bibliography of studies using the IAR. Crandall (1978, p. 2) reports many studies proving its usefulness in predicting task persistence and effort, performance on visual perception, academic achievement test performance, academic grades, behavioral maladjustment, classroom conduct and creativity. These predicted behaviors are highly valued in our culture. For this reason, internality on the IAR is now being used frequently as a criterion for evaluating a change in children's behavior before and after therapeutic interventions. Phares (1976) comments that this instrument's usefulness has been well established and that it is the most suitable measure of perceived control, especially with school achievement.

Concurrent validity showed that IAR scores were significantly related to report card grades for all grades with higher IAR scores having higher report card averages (Crandall et al., 1965). Internality was associated with the amount of time during free play that boys chose to spend in intellectual activities \( r = .70 \) and the intensity with which they were striving in these activities \( r = .66 \) (Crandall et al., 1962). Discriminant validity showed that correlations with intelligence test scores were found to be moderate. For 233 children from grades three to five the correlations were \( .26 \) for the total I scale \( (.22 \text{ for } I^+ \text{ and } .14 \text{ for } I^-) \).

Test-retest reliabilities were established for grades three through five with the following correlations: \( r = .69 \) for total I \( (.66 \text{ for } I^+, \text{ and } .74 \text{ for } I^-) \), with significance at the .001 level (Crandall et al., 1965, p. 100). Split-half reliabilities were cited as \(.54 \text{ for } I^+ \text{ and } .57 \text{ for } I^- \text{ in the third to fifth graders (Crandall, 1965 and as } .65 \).
36

for I+ and .60 for I- for children with a chronic illness (Holaday, 1974).

**Administration of the Instruments**

The settings that were chosen for the study were the homes of the families. Homes were chosen rather than a school setting because the questionnaire for the children was administered individually and orally, by use of a tape recorder. The parents were requested to complete their questionnaires simultaneously and individually to avoid comparisons.

The participants were informed about the study by letter from the private agencies (Appendix A). One week later, a letter was sent from the investigator requesting their participation. A consent form was also included with the instructions to be signed by both parents and returned to the investigator (Appendix B). The consent form assured the participants that: participation was voluntary, they could discontinue at any time, identification numbers would insure confidentiality and the results of the study would be shared with the participants. Upon receipt of the consent form, the investigator contacted the families to arrange a convenient time for the investigator to visit their home for the administration of the questionnaires.

Three families, two SLD and one normal group, were selected to be tested on a pilot basis. A consistent approach in introducing the questionnaires to the parents and child was developed and two additional questions were added to the demographic data.

The parents were given the instructions for completion of the questionnaire, the PRQ (Appendix C) and the demographic information
form (Appendix E). They were requested to complete the questionnaires simultaneously without discussing them and add the same identification number to their forms upon completion.

At the same time the investigator administered the IAR questionnaire to the child (Appendix D). The investigator reassured the child that there were no right or wrong answers to the questions, that the investigator was gathering information about what he would do in a certain situation and that his answers would not be shown to his parents, teachers or anyone else. First, the directions and two sample questions were given orally by the investigator. Then, the questions were given from a tape recording with the child giving the answer orally to the investigator. This oral presentation was chosen to assure that the items were understandable for the SLD child (Chapman, 1979, p. 253; Holaday, 1974, p. 27). Upon completion of the IAR questionnaire, the parents added the same identification number to their child's test sheet and put it in an envelope with their questionnaires. Completion of both tests usually took approximately half an hour. At the end of the administration of the questionnaires, opportunity was available for the SLD parents to discuss achievement difficulties and how the parents help their children cope with the disability.

Analysis of the Data

Descriptive statistical analysis was used to compare the SLD children and their parents' attitudes with the normal children and their parents' attitudes. Analysis of variance was used to compare the groups utilizing a computer program from the Statistical Package for
the Social Sciences (SPSS) (Nie et al., 1975). In addition, sex and age were analyzed in relation to the SLD and normal groups. This analysis was used to determine if sex and age made a difference with this disability. This resulted in a two by two (sex by age by group) factorial design.

Separate analysis of variance, ANOVA (Ibid., p. 410), were performed for each of the dependent variables relating them to the independent variables of age, sex and SLD or normal groups. The dependent variables were: the IAR positive score, IAR negative score, IAR total score, the mothers' PRQ positive score, mothers' PRQ negative score, mothers' PRQ total score, the fathers' PRQ positive score, fathers' PRQ negative score and fathers' total score. The investigator sought to determine if there was a difference with IAR scores between SLD and normal children and if sex and age influenced the scores. T-tests were used to compare mothers' attitudes with fathers' attitudes for both the SLD and normal groups. This further investigation was done to ascertain if there were differences between parents' attitudes toward SLD and normal children. The 0.05 level of significance was accepted as statistically significant for all the analyses.

The Pearson product moment coefficient of correlation was used to judge the relationship between the parents' positive, negative and total PRQ scores with the children's positive, negative and total IAR scores.

Following the administration of the questionnaires with the SLD parents, a discussion ensued with eighteen parents and some significant themes emerged. The discussion, prompted by the questionnaires, was based on the achievement behavior of the SLD child and the parents'
attitudes toward helping the SLD child cope with his disability. They are included in the discussion following the analysis of the questionnaires.

Summary

This chapter has presented the methodology of the study. The sample selection and questionnaires were discussed in relation to locus of control and parents' attitudes toward the achievement behavior of SLD and normal children. A brief discussion of the method of data analysis was also included and the findings will be presented in the following chapter.
CHAPTER IV

DATA ANALYSIS AND DISCUSSION

Description of the Sample

During a four month period the investigator visited forty families in the greater Vancouver area. The instruments were administered and collected as described in Chapter III. Of the forty families visited, three families were single-parent families and therefore, three PRQs were not completed.

The three families were all in the eleven year old female group; this was also the group in which the investigator had the most difficulty obtaining the required sample size. There were a dozen refusals for this group with no refusals in the other three groups.

The two main groups were twenty SLD children and twenty normal children with subgroups of ten boys and ten girls; five ten year olds and five eleven year olds within the two main groups. The normal group all lived in Vancouver while the SLD group lived in Delta, Surrey, Richmond, Pitt Meadows, Whonnock, North Vancouver, West Vancouver and Vancouver.

The demographic information collected was related to the parents' age, education level, economic level, number of children in the family and ordinal position of the tested child. The normal group is represented by Group A and the SLD group is represented by Group B.

A comparison of parents' age and education are presented for both
groups in Table 1. Income, number of children in the family and ordinal position of the tested child are presented in Table 2.

All of the mothers from Group A were over thirty-five years of age (100 percent) while 21 percent of Group B mothers were thirty to thirty-four years of age. All the fathers from both groups were over thirty-five years old with the highest percentage in the forty to forty-five age group; 40 percent of Group A and 66.7 percent of Group B. Twenty percent of Group A fathers were over fifty years old while there were none in this age group for Group B fathers. The parents of Group A showed a higher educational level with 100 percent of the mothers and 95 percent of the fathers having community college or higher. In contrast, the parents of Group B showed 73.7 percent of the mothers and 50 percent of the fathers with a community college education or higher. Of interest is the high proportion of Group A who have a post baccalaureate degree; 20 percent of the mothers and 60 percent of the fathers in Group A in contrast to 5.3 percent of the mothers and 4 percent of the fathers in Group B.

Table 2 showed that 100 percent of the Group A families were in the income bracket of over $30,000 while the Group B families showed 70 percent in the same income bracket. It should be noted that 30 percent of the Group B families in the lower income brackets were also the families who had to bear the extra expense of educating their children through private schools and tuition for tutoring.

The number of children in the family was higher for the Group A families with 35 percent having four children compared to 15 percent in the Group B families. The highest proportion of SLD children came
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<tr>
<td>35-39 years</td>
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<td>9</td>
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<tr>
<td>40-44 years</td>
<td>8</td>
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<td>45-49 years</td>
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<td></td>
<td>20</td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 8 years</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>8-10 years</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>11-12 years</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>community college</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>university degree</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>post baccalaureate degree</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>19</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 8 years</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>8-10 years</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>11-12 years</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>community college</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>university degree</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>post baccalaureate degree</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>18</td>
</tr>
</tbody>
</table>

\(^{a}N=40.\)

\(^{b}N=37.\)
<table>
<thead>
<tr>
<th>Combined Annual Income (Mother and Father)</th>
<th>Number of Subjects Group A</th>
<th>Number of Subjects Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10,000-$14,999</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>$15,000-$19,999</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>$20,000-$24,999</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>$25,000-$29,999</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>$30,000-$34,999</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>$35,000 and up</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Children in Family</th>
<th>Number of Subjects Group A</th>
<th>Number of Subjects Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>one</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>two</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>three</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>four</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ordinal Position of Tested Child</th>
<th>Number of Subjects Group A</th>
<th>Number of Subjects Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>first</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>second</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>third</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>fourth</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

\(^a\)N = 20.
from a family of two (55 percent) while 35 percent of the Group A families had two children. The ordinal position of the tested child showed a high proportion of SLD children (40 percent) in the first position as compared to 15 percent in the families of Group A. The highest number of tested children for both groups was in the second position; 45 percent of Group A and 35 percent of Group B. There were large differences in the fourth position with 25 percent of Group A having their tested child in this position and none of Group B with a tested child in the fourth position.

The demographic data described certain differences between the two groups which may influence the data. Both mothers and fathers of SLD children were younger than the parents of Group A. They also had attained a lower level of education than the Group A parents. For the Group B mothers almost half (47.4 percent) had attended university while 85 percent of the Group A mothers had attended university. The discrepancy was even greater for the fathers with 33.3 percent of the Group B fathers having attended university compared to 95 percent of the Group A fathers. The income levels were higher for the Group A families. The Group B families in this study had fewer children on the average and the ordinal position of the tested child was proportionately much higher for the SLD children in the first position than for the Group A families.

Therefore, the groups were not demographically the same. The children were matched for age and sex but not for other demographic data. The groups were different and it is not known in what way this influences the data.

Table 3 describes the SLD population in relation to the length of time the parents have been aware of the disability, the amount and type of remediation and the level of satisfaction with the remediation.
### TABLE 3
RESPONSE OF GROUP B SUBJECTS REGARDING DIAGNOSIS
TIME, REMEDIATION TIME, TYPE OF REMEDIATION, AND
SATISFACTION WITH REMEDIATION (N = 20)

<table>
<thead>
<tr>
<th>Length of Time Known Diagnosis</th>
<th>Number of Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>three months</td>
<td>0</td>
</tr>
<tr>
<td>six months</td>
<td>0</td>
</tr>
<tr>
<td>one year</td>
<td>1</td>
</tr>
<tr>
<td>one and half year</td>
<td>2</td>
</tr>
<tr>
<td>two years</td>
<td>0</td>
</tr>
<tr>
<td>over two years</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length of Remediation Time</th>
<th>Number of Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>0</td>
</tr>
<tr>
<td>one to three months</td>
<td>3</td>
</tr>
<tr>
<td>three to six months</td>
<td>1</td>
</tr>
<tr>
<td>six months to one year</td>
<td>1</td>
</tr>
<tr>
<td>one to one and a half years</td>
<td>3</td>
</tr>
<tr>
<td>one and half to two years</td>
<td>1</td>
</tr>
<tr>
<td>over two years</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Remediation</th>
<th>Number of Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>one to one tutoring</td>
<td>15</td>
</tr>
<tr>
<td>special school for SLD</td>
<td>14</td>
</tr>
<tr>
<td>learning assistance centre</td>
<td>6</td>
</tr>
<tr>
<td>no extra help</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Satisfaction with Remediation</th>
<th>Mother</th>
<th>Father</th>
</tr>
</thead>
<tbody>
<tr>
<td>extremely satisfied</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>very satisfied</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>rather satisfied</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>neither satisfied nor dissatisfied</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>somewhat dissatisfied</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>very dissatisfied</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>extremely dissatisfied</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>no response</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>18</td>
</tr>
</tbody>
</table>
The results in Table 3 indicated that the largest proportion of parents (85 percent) had known that their child had SLD for over two years. The length of remediation varied between one month to over two years, with 55 percent of the children receiving remediation over two years. The discrepancy indicated delays in the instigation of programs of remediation. There were duplications with remediation because some students were receiving tutoring plus a special school or learning assistance. In fact, 75 percent of the SLD children were receiving more than one service.

There were differing responses from the SLD parents as to the degree of satisfaction with their child's remediation. The SLD mothers seemed more satisfied with 78.3 percent being very and extremely satisfied while 50 percent of the SLD fathers felt the same. Two fathers were neutral but no parents showed any dissatisfaction. One family felt it was too early in the remediation to evaluate it.

Data in Relation to the Questionnaires

The data obtained from the questionnaires was subjected to statistical analysis in order to compare the results between the normal and SLD groups. Analysis of variance was used to answer the questions posed in Objectives 1 and 2. T-tests were also used to compare parents' attitudes in Objective 2. The Pearson product moment coefficient of correlation was used to relate parents' attitudes and IAR scores to answer Objective 3.

Intellectual Achievement Responsibility Questionnaire Analysis

The IAR questionnaire is composed of three subscales. The I+ subscale refers to the extent that the child has control over successful,
positive events. The I- subscale refers to the extent that the child has control over negative events and failures. The total I subscale includes the combined I+ and I- subscales to indicate the general degree of internality to both positive and negative events.

The group mean scores for the IAR questionnaire are reported in Tables 4, 5 and 6. The I+, I-, and Total I subscale scores for the normal and SLD groups are given in Table 4. The group mean scores of the IAR questionnaire for the subscales as differentiated by age and sex are recorded in Tables 5 and 6.

TABLE 4

SUMMARY OF THE COMPARISON OF IAR GROUP MEAN SCORES, STANDARD DEVIATIONS, AND F VALUES FOR GROUP A AND GROUP B (N = 40)

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Group A</th>
<th>Group B</th>
<th>Total</th>
<th>Standard Deviation</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>I+</td>
<td>13.85</td>
<td>11.53</td>
<td>12.70</td>
<td>2.49</td>
<td>15.54*</td>
</tr>
<tr>
<td>I-</td>
<td>12.20</td>
<td>9.05</td>
<td>10.65</td>
<td>2.64</td>
<td>18.95*</td>
</tr>
<tr>
<td>Total I</td>
<td>26.05</td>
<td>20.58</td>
<td>23.35</td>
<td>4.50</td>
<td>26.96*</td>
</tr>
</tbody>
</table>

Note. Maximum Scores I+ = 16.00, I- = 16.00, Total I = 32.00.

a df = 1,38.

b N = 20.

* p<0.001.
TABLE 5

SUMMARY OF THE COMPARISON OF IAR GROUP MEAN SCORES AND F VALUES FOR GROUP A AND GROUP B BY AGE (N = 40)\(^a\)

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Age (years)</th>
<th>Group A (^b)</th>
<th>Group B (^b)</th>
<th>Total</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>I+</td>
<td>10</td>
<td>14.20</td>
<td>12.00</td>
<td>13.10</td>
<td>1.90</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>13.50</td>
<td>11.00</td>
<td>12.32</td>
<td></td>
</tr>
<tr>
<td>I-</td>
<td>10</td>
<td>12.00</td>
<td>8.80</td>
<td>10.40</td>
<td>0.47</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>12.40</td>
<td>9.33</td>
<td>10.95</td>
<td></td>
</tr>
<tr>
<td>Total I</td>
<td>10</td>
<td>26.20</td>
<td>20.80</td>
<td>23.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>25.90</td>
<td>20.33</td>
<td>23.26</td>
<td></td>
</tr>
</tbody>
</table>

Note. Maximum Scores I+ = 16.00, I- = 16.00, Total I = 32.00.
\(^a\)df = 1, 38.
\(^b\)N = 20.

TABLE 6

SUMMARY OF THE COMPARISON OF IAR GROUP MEAN SCORES AND F VALUES FOR GROUP A AND GROUP B BY SEX (N = 40)\(^a\)

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Sex</th>
<th>Group A (^b)</th>
<th>Group B (^b)</th>
<th>Total</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>I+</td>
<td>Boys</td>
<td>13.00</td>
<td>10.90</td>
<td>11.95</td>
<td>6.53*</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>14.70</td>
<td>12.22</td>
<td>13.53</td>
<td></td>
</tr>
<tr>
<td>I-</td>
<td>Boys</td>
<td>11.60</td>
<td>8.70</td>
<td>10.15</td>
<td>1.93</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>12.80</td>
<td>9.44</td>
<td>11.21</td>
<td></td>
</tr>
<tr>
<td>Total I</td>
<td>Boys</td>
<td>24.60</td>
<td>19.60</td>
<td>22.10</td>
<td>5.69*</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>27.50</td>
<td>21.67</td>
<td>24.74</td>
<td></td>
</tr>
</tbody>
</table>

Note. Maximum Scores I+ = 16.00, I- = 16.00, Total I = 32.00.
\(^a\)df = 1, 38.
\(^b\)N = 20.
\(^*\)p<0.05.
As can be seen in Table 4, Group B achieved lower scores on the I+ (11.53) than Group A (13.85), showing a significant difference between Group B and Group A for the I+ subscale. The I- subscale also shows lower scores for Group B (9.05) than Group A (12.20) with a significant difference for the I- subscale between the two main groups. The Total I scores show significant differences between Group B (20.58) and Group A (26.05).

Table 5 shows no significant differences between the two age groups within the SLD and normal groups. The analysis of variance substantiates this with no significant results for the three subscales.

Table 6 shows significant sex differences between boys and girls for the I+ and Total I subscales but not for the I- subscale. The girls show a higher degree of internality than the boys for both the groups.

The analysis of variance shows a significant two-way interaction for the I+ subscale between age and sex \( (F = 8.79 \ [1,38], p<0.006) \) but no significant results for the two main groups and age \( (F = 0.01 \ [1,38], \text{n.s.}) \) or for the groups and sex \( (F = 0.08 \ [1,38], \text{n.s.}) \).

There were no significant results in the ANOVA for the I- subscale with the two-way interactions. The I- subscale had a F value of 0.03 \([1,38], \text{n.s.}\) for group and age, a F value of 0.07 \([1,38], \text{n.s.}\) for group and sex and a F value of 1.29 \([1,38], \text{n.s.}\) for age and sex.

The analysis of variance shows a significant two-way interaction for the Total I subscale between age and sex \( (F = 5.96 \ [1,38], p<0.02) \) but no significant results for the other two-way interactions. The interaction between the groups and age shows a F value of 0.002 \([1,38], \text{n.s.}\) and the interaction between the groups and sex shows a F value of 0.11 \([1,38], \text{n.s.}\).
Table 7 shows the IAR group mean scores for sex, age and group to determine if sex and age make a difference with SLD.

TABLE 7
TWO BY TWO BY TWO TABLE OF IAR GROUP MEAN SCORES
FOR SEX BY AGE BY GROUP A AND GROUP B (N = 40)

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Age (years)</th>
<th>Sex</th>
<th>Group A&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Group B&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>I+</td>
<td>10</td>
<td>Boys</td>
<td>13.40</td>
<td>13.00</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Boys</td>
<td>12.60</td>
<td>8.80</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Girls</td>
<td>15.00</td>
<td>11.00</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Girls</td>
<td>14.40</td>
<td>13.75</td>
</tr>
<tr>
<td>I-</td>
<td>10</td>
<td>Boys</td>
<td>11.60</td>
<td>9.00</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Boys</td>
<td>11.60</td>
<td>8.40</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Girls</td>
<td>12.40</td>
<td>8.60</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Girls</td>
<td>13.20</td>
<td>10.50</td>
</tr>
<tr>
<td>Total I</td>
<td>10</td>
<td>Boys</td>
<td>25.00</td>
<td>22.00</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Boys</td>
<td>24.20</td>
<td>17.20</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Girls</td>
<td>27.40</td>
<td>19.60</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Girls</td>
<td>27.60</td>
<td>24.25</td>
</tr>
</tbody>
</table>

Note. Maximum Scores I+ = 16.00, I- = 16.00, Total I = 32.00.

<sup>a</sup>N = 20.

The three-way analysis shows that the SLD children have lower scores than the normal children on each of the three IAR subscales. The analysis of variance substantiates that there is a significant difference for the I+ subscale for the group, age and sex variables (F = 8.30 [1,38], p<0.007). The differences with the three-way interactions are not significant for the I- and Total I. The F value for the I- is 0.35 [1,38], n.s. and the F value for the Total I is 4.09 [1,38], n.s.
In summary, the analysis of the IAR questionnaires indicated significant differences between Groups A and B for the three subscales of the IAR. When the independent variable, age, was considered there were no significant differences. The sex variable influenced the I+ and Total I subscales but not the I- subscale. The I+ subscale showed significant differences for the group, age and sex interactions. The greatest influence came from the eleven year old SLD male group who had lower I+ scores than the normal eleven year old males. The I- subscale did not show significant differences but the Total I subscale was significantly different for the age and sex variables between the groups. The three-way analysis showed that there were significant differences for the I+ variable but not for the I- and Total I variables. The eleven year old SLD males would have influenced these results.

Parent Reaction Questionnaire Analysis

The MPRQ Pos. and FPRQ Pos. variables indicate a positive attitude of praise and encouragement toward their children in intellectual achievement situations. The MPRQ Neg. and FPRQ Neg. variables show negative reactions of criticism and correction toward their children in similar situations. And the MPRQ Tot. and FPRQ Tot. variables indicate a total reactivity toward their children rather than a neutral reaction.

The mothers' PRQ scores were compared between Group A and Group B followed by the fathers' PRQ scores. T-tests were used to compare mothers' attitudes with fathers' attitudes for both groups.
The mothers' PRQ group mean scores are recorded for the PRQ positive, PRQ negative and PRQ total subscales followed by the group mean scores by age and by sex in Tables 8, 9 and 10.

**TABLE 8**

**SUMMARY OF THE COMPARISON OF MPRQ GROUP MEAN SCORES, STANDARD DEVIATIONS, AND F VALUES FOR GROUP A AND GROUP B (N = 39)**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Group A</th>
<th>Group B</th>
<th>Total</th>
<th>Standard Deviation</th>
<th>F</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPRQ Pos.</td>
<td>19.75</td>
<td>19.42</td>
<td>19.59</td>
<td>4.97</td>
<td>0.029</td>
<td>1,38</td>
</tr>
<tr>
<td>MPRQ Neg.</td>
<td>12.80</td>
<td>13.63</td>
<td>13.21</td>
<td>4.21</td>
<td>0.31</td>
<td>1,38</td>
</tr>
<tr>
<td>MPRQ Tot.</td>
<td>32.60</td>
<td>32.76</td>
<td>32.84</td>
<td>3.72</td>
<td>0.00</td>
<td>1,36</td>
</tr>
</tbody>
</table>

Note. Maximum Scores MPRQ Pos. = 36.00, MPRQ Neg. = 36.00, MPRQ Tot. = 36.00.

\[a_N = 20.\]

\[b_N = 19.\]

**TABLE 9**

**SUMMARY OF THE COMPARISON OF MPRQ GROUP MEAN SCORES AND F VALUES FOR GROUP A AND GROUP B BY AGE (N = 39)**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Age (years)</th>
<th>Group A</th>
<th>Group B</th>
<th>Total</th>
<th>F</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPRQ Pos.</td>
<td>10</td>
<td>19.00</td>
<td>18.00</td>
<td>18.55</td>
<td>1.72</td>
<td>1,38</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>20.50</td>
<td>20.89</td>
<td>20.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPRQ Neg.</td>
<td>10</td>
<td>14.00</td>
<td>13.60</td>
<td>13.80</td>
<td>0.85</td>
<td>1,38</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>11.60</td>
<td>13.67</td>
<td>12.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPRQ Tot.</td>
<td>10</td>
<td>33.00</td>
<td>31.80</td>
<td>32.40</td>
<td>0.10</td>
<td>1,36</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>32.20</td>
<td>34.14</td>
<td>33.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Maximum Scores MPRQ Pos. = 36.00, MPRQ Neg. = 36.00, MPRQ Tot. = 36.00.

\[a_N = 20.\]

\[b_N = 19.\]
Table 10

Summary of the Comparison of MPRQ Group Mean Scores and F Values for Group A and Group B by Sex (N = 39)

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Sex</th>
<th>Group A</th>
<th>Group B</th>
<th>Total</th>
<th>F</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPRQ Pos.</td>
<td>Boys</td>
<td>18.90</td>
<td>20.40</td>
<td>19.65</td>
<td>0.002</td>
<td>1, 38</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>20.60</td>
<td>18.33</td>
<td>19.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPRQ Neg.</td>
<td>Boys</td>
<td>14.80</td>
<td>13.30</td>
<td>14.05</td>
<td>1.66</td>
<td>1, 38</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>10.80</td>
<td>14.00</td>
<td>12.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPRQ Tot.</td>
<td>Boys</td>
<td>33.80</td>
<td>33.80</td>
<td>33.80</td>
<td>3.87</td>
<td>1, 36</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>31.40</td>
<td>31.29</td>
<td>31.35</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Maximum Scores MPRQ Pos. = 36.00, MPRQ Neg. = 36.00, MPRQ Tot. = 36.00.

a N = 20.
b N = 19.

Table 8 shows small differences between Group A and Group B mothers on all subscales. The analysis of variance shows that there are no significant differences between the mothers' attitudes toward the SLD children and the normal children.

Table 9 shows no differences between the two age groups for Groups A and B. The analysis of variance substantiates this with no significant results for the three subscales.

Table 10 shows no sex differences between the boys and girls for the MPRQ positive, MPRQ negative and MPRQ total subscales. The ANOVA supports this with no significant results for the three subscales.
For the two-way interactions, the analysis of variance shows no significant results. For the MPRQ Pos., the interaction between group and age shows a F value of 0.17 [1,38], n.s. The interaction between group and sex for the MPRQ Pos. shows a F ratio of 1.14 [1,38], n.s. The interaction between age and sex for the same subscale shows F = 2.30 [1,38], n.s.

For the MPRQ Neg., the interaction between group and age shows a F value of 0.84 [1,38], n.s. The interaction between group and sex for the same subscale shows F = 2.98 [1,38], n.s. and the interaction between age and sex shows F = 0.12 [1,38], n.s.

For the MPRQ Tot., the two-way interaction of the analysis of variance for group and age shows F = 0.60 [1,36], n.s. The interaction between group and sex for the MPRQ Tot. shows F = 0.10 [1,36], n.s. and the interaction between age and sex shows F = 2.03 [1,36], n.s.

Table 11 shows the relationships among sex, age and group for the MPRQ to determine if sex and age make a difference with SLD.

The three-way interactions show small differences in the mothers' attitudes between the two groups of mothers. The analysis of variance supports this with the three-way interaction between group, sex and age for the MPRQ Pos. showing F = 0.24 [1,38], n.s. The three-way interaction for the MPRQ Neg. shows F = 0.07 [1,38], n.s. and for the MPRQ Tot. F = 0.86 [1,36], n.s.

In summary, the analysis of the MPRQ statistics showed no significant differences between Group A and Group B for the three subscales of the MPRQ. The independent variables of age and sex did not influence the scores of the MPRQ subscales. The three-way analysis showed that
there were no significant differences for the MPRQ subscales among the sex, age and group variables.

**TABLE 11**

TWO BY TWO BY TWO TABLE OF MPRQ GROUP MEAN SCORES FOR SEX BY AGE BY GROUP A AND GROUP B (N = 39)

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Age (years)</th>
<th>Sex</th>
<th>Group A(^a)</th>
<th>Group B(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPRQ Pos.</td>
<td>10</td>
<td>Boys</td>
<td>19.00</td>
<td>20.60</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Boys</td>
<td>18.80</td>
<td>20.20</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Girls</td>
<td>19.00</td>
<td>15.60</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Girls</td>
<td>22.20</td>
<td>21.75</td>
</tr>
<tr>
<td>MPRQ Neg.</td>
<td>10</td>
<td>Boys</td>
<td>15.60</td>
<td>13.20</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Boys</td>
<td>14.00</td>
<td>13.40</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Girls</td>
<td>12.40</td>
<td>14.00</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Girls</td>
<td>9.20</td>
<td>14.00</td>
</tr>
<tr>
<td>MPRQ Tot.</td>
<td>10</td>
<td>Boys</td>
<td>34.60</td>
<td>34.00</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Boys</td>
<td>33.00</td>
<td>33.60</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Girls</td>
<td>31.40</td>
<td>29.60</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Girls</td>
<td>31.40</td>
<td>35.50</td>
</tr>
</tbody>
</table>

Note. Maximum Scores MPRQ Pos. = 36.00, MPRQ Neg. = 36.00, MPRQ Tot. = 36.00.

\(^a\)\(^N\) = 20.

\(^b\)\(^N\) = 19.
The fathers' PRQ group mean scores are recorded for the dependent variables; FPRQ positive, FPRQ negative and FPRQ total subscales followed by the group mean scores by age and by sex in Tables 12, 13 and 14.

**TABLE 12**

**SUMMARY OF THE COMPARISON OF FPRQ GROUP MEAN SCORES, STANDARD DEVIATIONS, AND F VALUES FOR GROUP A AND GROUP B (N = 38)**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Group A</th>
<th>Group B</th>
<th>Total</th>
<th>Standard Deviation</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPRQ Pos.</td>
<td>17.85</td>
<td>17.18</td>
<td>17.44</td>
<td>4.66</td>
<td>0.24</td>
</tr>
<tr>
<td>FPRQ Neg.</td>
<td>15.00</td>
<td>14.82</td>
<td>14.78</td>
<td>3.84</td>
<td>0.01</td>
</tr>
<tr>
<td>FPRQ Tot.</td>
<td>32.90</td>
<td>32.00</td>
<td>32.26</td>
<td>4.49</td>
<td>0.37</td>
</tr>
</tbody>
</table>

**Note.** Maximum Scores FPRQ Pos. = 36.00, FPRQ Neg. = 36.00, FPRQ Tot. = 36.00.

a\(df = 1, 36\).

b\(N = 20\).

c\(N = 18\).
### TABLE 13

**SUMMARY OF THE COMPARISON OF FPRQ GROUP MEAN SCORES AND F VALUES FOR GROUP A AND GROUP B BY AGE (N = 38)**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Age (years)</th>
<th>Group A</th>
<th>Group B</th>
<th>Total</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPRQ Pos.</td>
<td>10</td>
<td>17.70</td>
<td>17.60</td>
<td>17.65</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>18.00</td>
<td>16.57</td>
<td>17.41</td>
<td></td>
</tr>
<tr>
<td>FPRQ Neg.</td>
<td>10</td>
<td>14.30</td>
<td>13.60</td>
<td>13.95</td>
<td>2.80</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>15.70</td>
<td>16.57</td>
<td>16.06</td>
<td></td>
</tr>
<tr>
<td>FPRQ Tot.</td>
<td>10</td>
<td>32.00</td>
<td>31.20</td>
<td>31.60</td>
<td>1.78</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>33.80</td>
<td>33.14</td>
<td>33.53</td>
<td></td>
</tr>
</tbody>
</table>

**Note.** Maximum Scores FPRQ Pos. = 36.00, FPRQ Neg. = 36.00, FPRQ Tot. = 36.00.

- df = 1, 36.
- N = 20.
- N = 18.

### TABLE 14

**SUMMARY OF THE COMPARISON OF FPRQ GROUP MEAN SCORES AND F VALUES FOR GROUP A AND GROUP B BY SEX (N = 38)**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Sex</th>
<th>Group A</th>
<th>Group B</th>
<th>Total</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPRQ Pos.</td>
<td>Boys</td>
<td>16.70</td>
<td>18.20</td>
<td>17.45</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>19.00</td>
<td>15.71</td>
<td>17.65</td>
<td></td>
</tr>
<tr>
<td>FPRQ Neg.</td>
<td>Boys</td>
<td>15.20</td>
<td>15.70</td>
<td>15.45</td>
<td>0.67</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>14.80</td>
<td>13.57</td>
<td>14.29</td>
<td></td>
</tr>
<tr>
<td>FPRQ Tot.</td>
<td>Boys</td>
<td>31.90</td>
<td>33.90</td>
<td>32.90</td>
<td>0.37</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>33.90</td>
<td>29.29</td>
<td>32.00</td>
<td></td>
</tr>
</tbody>
</table>

**Note.** Maximum Scores FPRQ Pos. = 36.00, FPRQ Neg. = 36.00, FPRQ Tot. = 36.00.

- df = 1, 36.
- N = 20.
- N = 18.
The results from Table 12 show similar scores for both Group A and Group B fathers on all the subscales. The analysis of variance shows that there are no significant differences between the fathers' attitudes toward the SLD and normal children in the main effects.

Table 13 shows no differences between the two age groups for the SLD and normal groups. The ANOVA supports this with no significant differences for the three subscales.

Table 14 shows no sex differences between the boys and the girls for the FPRQ positive, FPRQ negative and FPRQ total subscales. The analysis of variance supports this with no significant differences for the three subscales.

For the two-way interactions, the analysis of variance shows significant differences with the age-sex interaction. For the FPRQ Pos. the F value is 9.68 [1,36], p<0.004. For the FPRQ Neg. the F value is 6.36 [1,36], p<0.017. But for the FPRQ Tot. the differences are not significant (F = 1.03 [1,36], n.s.).

With the two-way interaction between group and age, the analysis of variance shows no significant differences for the three subscales. For the FPRQ Pos. the F value is 0.07 [1,36], n.s. For the FPRQ Neg. the F value is 0.03 [1,36], n.s., and for the FPRQ Tot. the F value is 0.02 [1,36], n.s.

The two-way interactions between group and sex show significant differences with the FPRQ total subscale (F = 4.85 [1,36], p<0.036). There were no significant differences for the FPRQ Pos. (F = 1.89 [1,36], n.s.) or for the FPRQ Neg. (F = 0.67 [1,36], n.s.).
Table 15 shows the relationships among sex, age and group for the FPRQ to determine if sex and age make a difference with SLD.

**TABLE 15**

**TWO BY TWO BY TWO TABLE OF FPRQ GROUP MEAN SCORES FOR SEX BY AGE BY GROUP A AND GROUP B (N = 37)**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Age (years)</th>
<th>Sex</th>
<th>Group A&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Group B&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPRQ Pos.</td>
<td>10</td>
<td>Boys</td>
<td>17.80</td>
<td>21.60</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Boys</td>
<td>15.60</td>
<td>14.80</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Girls</td>
<td>17.60</td>
<td>13.60</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Girls</td>
<td>20.40</td>
<td>21.00</td>
</tr>
<tr>
<td>FPRQ Neg.</td>
<td>10</td>
<td>Boys</td>
<td>12.80</td>
<td>13.40</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Boys</td>
<td>17.60</td>
<td>18.00</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Girls</td>
<td>15.80</td>
<td>13.80</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Girls</td>
<td>13.80</td>
<td>13.00</td>
</tr>
<tr>
<td>FPRQ Tot.</td>
<td>10</td>
<td>Boys</td>
<td>30.60</td>
<td>35.00</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Boys</td>
<td>33.20</td>
<td>32.80</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Girls</td>
<td>33.40</td>
<td>27.40</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Girls</td>
<td>34.40</td>
<td>34.00</td>
</tr>
</tbody>
</table>

**Note.** Maximum Scores FPRQ Pos. = 36.00, FPRQ Neg. = 36.00, FPRQ Tot. = 36.00.

<sup>a</sup><sub>N = 20.  
<sup>b</sup><sub>N = 17.  

The three-way interactions show few differences in the fathers' attitudes between the two groups of fathers. The analysis of variance supports this with the three-way interaction among group, sex and age for the FPRQ Pos. showing $F = 2.54 \ [1,36]$, n.s. The three-way interaction for the FPRQ Neg. shows $F = 0.08 \ [1,36]$, n.s., and for the FPRQ Tot. $F = 3.52 \ [1,36]$, n.s.

A summary of the FPRQ statistics showed that there were no significant differences for the FPRQ positive and FPRQ negative subscales except with the age-sex interaction. There was a significant difference between Group A and Group B for the FPRQ total subscale with the group and sex variables. The differences appeared to be the result of higher FPRQ scores for the SLD boys and lower FPRQ scores for the SLD girls. The three-way analysis showed no significant differences for the FPRQ variables among the sex, age and group variables.

To further investigate the relationship between mothers' and fathers' attitudes, $t$-tests were performed for both groups. The results are shown in Table 16.

In Table 16 there was one significant relationship. In the PRQ negative subscale for Group A, the difference between the scores of the mothers and fathers was statistically significant ($t = -2.17, 19 \ df, p = 0.043$). There were no significant differences for the three subscales with Group B.
### TABLE 16
T-TESTS BETWEEN MPRQ AND FPRQ VARIABLES FOR GROUP A (N = 20) AND GROUP B (N = 17)

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Group</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPRQ Pos.</td>
<td>A</td>
<td>19.75</td>
<td>3.49</td>
<td>1.49</td>
<td>19</td>
</tr>
<tr>
<td>FPRQ Pos.</td>
<td>A</td>
<td>17.85</td>
<td>3.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPRQ Neg.</td>
<td>A</td>
<td>12.80</td>
<td>3.98</td>
<td>-2.17*</td>
<td>19</td>
</tr>
<tr>
<td>FPRQ Neg.</td>
<td>A</td>
<td>15.00</td>
<td>3.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPRQ Tot.</td>
<td>A</td>
<td>32.60</td>
<td>3.46</td>
<td>-0.25</td>
<td>19</td>
</tr>
<tr>
<td>FPRQ Tot.</td>
<td>A</td>
<td>32.90</td>
<td>3.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPRQ Pos.</td>
<td>B</td>
<td>19.29</td>
<td>6.22</td>
<td>1.15</td>
<td>16</td>
</tr>
<tr>
<td>FPRQ Pos.</td>
<td>B</td>
<td>17.18</td>
<td>5.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPRQ Neg.</td>
<td>B</td>
<td>13.41</td>
<td>4.14</td>
<td>-0.99</td>
<td>16</td>
</tr>
<tr>
<td>FPRQ Neg.</td>
<td>B</td>
<td>14.82</td>
<td>4.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPRQ Tot.</td>
<td>B</td>
<td>32.76</td>
<td>4.18</td>
<td>0.43</td>
<td>16</td>
</tr>
<tr>
<td>FPRQ Tot.</td>
<td>B</td>
<td>32.00</td>
<td>5.40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < 0.05 (two-tailed).

Analysis of Correlation between IAR and PRQ Scores

The relationships between the parents' PRQ scores and the children's IAR scores were analyzed using a Pearson product means of correlation. The resulting Pearson correlation coefficients are listed in Table 17.
### TABLE 17

PEARSON CORRELATION COEFFICIENTS FOR IAR AND PRQ SCORES (N = 40)

<table>
<thead>
<tr>
<th>Variables</th>
<th>IAR Pos.</th>
<th>IAR Neg.</th>
<th>IAR Tot.</th>
<th>MPRQ Pos.</th>
<th>MPRQ Neg.</th>
<th>MPRQ Tot.</th>
<th>FPRQ Pos.</th>
<th>FPRQ Neg.</th>
<th>FPRQ tot.</th>
</tr>
</thead>
<tbody>
<tr>
<td>IAR Pos.</td>
<td>1.00</td>
<td>0.5415</td>
<td>0.8705***</td>
<td>0.0178</td>
<td>-0.0390</td>
<td>-0.0215</td>
<td>0.4342**</td>
<td>-0.1458</td>
<td>0.3291</td>
</tr>
<tr>
<td>IAR Neg.</td>
<td>1.00</td>
<td>0.8851***</td>
<td>-0.0721</td>
<td>0.1677</td>
<td>0.0900</td>
<td>0.2729</td>
<td>-0.0220</td>
<td>0.2647</td>
<td></td>
</tr>
<tr>
<td>IAR Tot.</td>
<td>1.00</td>
<td>-0.0323</td>
<td>0.0767</td>
<td>0.0408</td>
<td>0.3941**</td>
<td>-0.0934</td>
<td>0.3311*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPRQ Pos.</td>
<td>1.00</td>
<td>-0.6793</td>
<td>0.5536***</td>
<td>0.0684</td>
<td>-0.2481</td>
<td>-0.1365</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPRQ Neg.</td>
<td>1.00</td>
<td>0.2335</td>
<td>-0.1310</td>
<td>0.1407</td>
<td>-0.0359</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPRQ Tot.</td>
<td>1.00</td>
<td>-0.0451</td>
<td>-0.1694</td>
<td>-0.2070</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FPRQ Pos.</td>
<td>1.00</td>
<td>0.6498***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FPRQ Neg.</td>
<td>1.00</td>
<td>0.3796**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FPRQ Tot.</td>
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* p<0.05.

** p<0.01.

*** p<0.001.
Table 17 shows high correlations between the IAR positive and the IAR total scores \( (r = 0.8705, p<0.001) \) and the IAR negative and IAR total scores \( (r = 0.8851, p<0.001) \) which are to be expected as they are components of the total score. For similar reasons, the MPRQ positive correlates with the MPRQ total \( (r = 0.5536, p<0.001) \). Also, the FPRQ positive and the FPRQ total correlate \( (r = 0.6498, p<0.001) \) and the FPRQ negative and FPRQ total show a correlation \( (r = 0.3796, p<0.01) \).

The comparison between the IAR variables and the PRQ variables shows a positive correlation between the IAR positive and the FPRQ positive scores \( (r = 0.4342, p<0.01) \). There is also a positive correlation between the IAR total and the FPRQ positive scores \( (r = 0.3941, p<0.01) \). The FPRQ total scores show a positive correlation with the IAR total scores \( (r = 0.3311, p<0.05) \). The FPRQ negative scores show negative correlations with all the IAR scores. There are no MPRQ subscales that correlate with any of the IAR subscales.

Discussion

A description of the parents and children in the study is provided from the analyses of the demographic data. The parents of the normal group were generally older, with a higher level of education and a higher income than the SLD group. In relation to the children, the normal group had more children per family than the SLD group. The child being tested showed 40 percent of the SLD children in the first ordinal position compared to 15 percent in the normal families. The literature through studies and personality theories has shown that first-born children accept more self-responsibility than do those born later with the
eldest child often using school as his best pathway to parental approval (Crandall, 1965, p. 106). This influence did not seem to affect the SLD children's locus of control.

The SLD group showed 85 percent having known about the diagnosis of a language disability for over two years with 55 percent having remediation for over two years. This meant that there was a time lag in the institution of remediation in proportion to the length of time that the parents were aware of their child's disability. The type of remediation showed that 75 percent of the SLD children were receiving two types of service which indicated an expensive treatment program. The question of who referred the child for remediation was asked the twenty SLD parents and none reported a request from the school for extra help. Therefore, the parents through their family doctor and friends found their own resources.

The SLD mothers were 78 percent satisfied with their child's remediation while the father were 50 percent satisfied. Eleven percent of the fathers ($N = 2$) were neutral but there were no parents who expressed dissatisfaction with the remediation program.

Several analyses of the responses to the questionnaires in relation to the three objectives were conducted and the findings are presented in the following discussion.

Objective 1. Is there a difference in locus of control between specific language disabled children compared to normal children?

The analyses of the IAR questionnaire answer objective 1 in the affirmative. Yes, there is a significant difference in locus of control
of specific language disabled children compared to normal children for both positive and negative achievement experience.

The analysis of variance found significant differences between the normal and SLD groups for the three IAR subscales. This suggests that the SLD group has less internal locus of control for both positive and negative events. The comparison by sex indicates that the girls lead the boys in exercising social controls for both the positive and negative subscales of the IAR for the normal and SLD groups. These results concur with the majority of the literature related to sex differences as reported by Crandall (1978) and Wolff (1969). The literature also stated that the locus of control scores were usually higher for the positive events than for the negative events which was evident in this study for both age groups. Because the age groups are close, there were no dramatic increases in internal control as was suggested in the literature by Crandall (1978) and Phares (1976). Though the analysis shows that age by itself is not significant the age-sex interaction is significant. This appears to happen because the eleven year old SLD boys have the lowest scores of all the groups on the IAR subscales thus influencing the age-sex interaction. In contrast the eleven year old SLD girls have the highest scores among the SLD groups. These findings agree with the research of Crandall (1978).

Recent studies (Hisama, 1976; Chapman et al., 1979) found conflicting results between locus of control scores of learning disabled children and comparison groups. Hisama did not find significant differences between the groups. Chapman found that learning disabled children had external locus of control for positive events (I+) but did not find significant
differences for negative events (I-) with a comparison group. Contrary to the cited studies, this study found that there were significant differences in locus of control scores for both positive and negative events between language disabled and normally achieving children. The SLD children had lower internal locus of control for both positive and negative experiences.

Objective 2. Does a difference exist in parents' attitudes toward the achievement behavior of language disabled children and normal children?

The analyses of the PRQ answer objective 2 in the negative. The analyses of variance for the parents' attitudes show few significant differences between the SLD and normal groups. The analyses show that there are no significant differences in mothers' attitudes between the two groups. For the fathers, there are significant differences for both the PRQ positive and PRQ negative subscales for the age-sex interaction and a significant difference for the fathers' total subscale between the normal and SLD groups for boys and girls.

Contrary to studies by Chapman (1979), Owen (1971) and Wetter (1972) who found negative attitudes by mothers toward their learning disabled children, this study found there were few differences between parents of the SLD and normal groups. These results may be influenced by the parents' understanding of their children's condition due to seeking specific remediation.
Objective 3. Is there a relationship between parents' positive and negative attitudes and their children's internal and external locus of control?

The comparison of the relationship between parents' attitudes and the children's locus of control showed no relationship between mothers' attitudes and locus of control. A positive correlation was substantiated between the fathers' positive PRQ scores and the children's IAR positive scores and the fathers' positive PRQ scores and the children's IAR total scores. There was also a positive correlation between the fathers' PRQ total scores and the children's IAR total scores. There appeared to be a relationship between fathers' positive and total subscales and the children's internal and total locus of control but no relationship between fathers' negative attitudes and the children's locus of control. These findings concur with the study by Katkovsky (1967) who suggested that the fathers' relationships with their children may have a stronger influence on their children's internal locus of control than the mothers' influences.

Other Findings

Other findings resulted from discussions with the SLD parents about the achievement behavior of their language disabled children. In discussing their SLD child's greatest problems, ten of the eighteen mothers identified reading, spelling, writing, learning, school, homework and "certainly dyslexia" as their children's greatest problems. One mother spoke of the "lack of success in his academic subjects in relation to his high intellectual potential" which affected her son's attitude.
toward his disability. Another mother spoke of "spelling as a terror" for her son and another said "he wants to succeed but he feels so devastated by his mistakes".

The second most prevalent problem was related to their social adjustment. Five mothers spoke of their child as not being very social; as being a loner and refusing to play with other children or refusing to participate in group activities. One mother spoke of her son's poor relations with his peers by stating his preference for going into his own room or going into the bush alone. A mother expressed the great dilemma for her son of being very sensitive and wanting to have a lot of friends but getting teased at school, therefore, it was the "saddest problem that he doesn't get on with friends at school but always gets on with adults".

Self-esteem and frustration were the third most common problems with three children in each of the categories. A father spoke of his daughter and said that she had a poor self-image which he indicated was worse than the dyslexia. Another parent said that confidence and his low self-esteem had been their son's biggest problem but that these had improved tremendously since the diagnosis was known. In relation to frustration, the three parents spoke of their children having a low level of tolerance especially when doing school work which led to frustration, blocking about not being able to achieve and being scared about school.

The other individual problems expressed by parents were their children's tendencies toward daydreaming, procrastinating, being easily distractible, having a short attention span, being hyperactive, having
difficulties expressing themselves, having a bad temper, being a perfectionist, bed wetting and not being motivated. Though a few parents mentioned their children's difficulties with sports due to no dominant side, many parents expressed that the assets their children had shown, were extremely good coordination and high ability at sports.

Parents talked about how they were trying to help their SLD child cope with his disability and how they helped him cope with his problems. Because the majority of problems were related to school achievement, seven of the parents focussed on helping improve the school situation. A number of parents mentioned seeking out a special school or getting the most effective remediation because as one father said: "regular school was a nightmare and very frustrating". Many parents mentioned it was necessary to provide supervision with homework so their child did not get too frustrated or discouraged.

Equally important, with seven responses, was the need for parents to be supportive and help their child talk about his feelings. One mother talked about "providing an understanding environment and accepting him as he is" as the most important approach. Two mothers spoke of the need for a lot of ego-boosting, needing more individual time and being more sensitive to ways of disciplining because of their tremendous fear of failure. The first mother said that her son ran away from school the second day of grade one and had been hiding his homework until recently. The other mother said that in order to cope with this fear of failure, they have always gone to see every new teacher and asked the teacher not to put their daughter down and yet recently, the
eleven year old girl said, "I hate the teacher! I tried so hard!"
Mothers said it required patience, constant reinforcement and guidance in dealing with their emotions.

Five mothers put considerable effort into social activities. Two mothers talked about encouraging other children to come around after school and having friends stay over night. One mother mentioned her son's great need to be part of the group but now he has found out "it's O.K. to be different".

A number of parents discussed promoting athletics and playing individual sports together because there is less pressure involved. Three mothers explained the need to be consistent in their management by having an organized, structured routine, by giving one instruction at a time and by having the child do his homework in his room to cut down on distractions.

The parents discussed the need for developing independence for language disabled children and all the parents were unanimous in the need to develop independence for their children. Many examples were given about how the SLD children were encouraged to develop independence, from household chores of cleaning and cooking to having paper routes and taking the bus to school daily by themselves.
CHAPTER V

SUMMARY AND CONCLUSIONS, IMPLICATIONS
AND RECOMMENDATIONS

Summary and Conclusions

The purpose of this study was to assess the locus of control of children with a specific language disability and to evaluate the parents' attitudes toward the achievement behavior of their SLD child. The SLD children and their parents were compared with a group of normally achieving children and their parents.

In order to study the problem, three specific questions were posed:

1. Is there a difference in locus of control between specific language disabled children compared to normal children?

2. Does a difference exist in parents' attitudes toward the achievement behavior of language disabled children and normal children?

3. Is there a relationship between parents' positive and negative attitudes and their children's internal and external control?

Two questionnaires were administered to assess the children's locus of control and the parents' attitudes. The Intellectual Achievement Responsibility questionnaire was administered to two groups of ten and eleven year old boys and girls: Group A consisted of children without a language disability and Group B consisted of children with
a specific language disability who met the study criteria. The Parent Reaction Questionnaire was given to the parents of Group A and Group B. The questionnaires were administered to forty families, with twenty families in each group. On the basis of the raw scores, an analysis of variance was done to determine if there was a difference in locus of control and parents' attitudes between the groups.

The findings of this study within the sample tested lead to the following conclusions:

1. Children with a specific language disability do have a significantly lower internal locus of control for both positive and negative events than do children without a language disability.

2. Parents' attitudes toward the achievement behavior of children with a specific language disability do not differ significantly from the attitudes of parents who have a normally achieving child.

3. Mothers' attitudes do not seem to influence their children's locus of control but the fathers' positive reinforcement is an important influence on their children's locus of control.

Implications for Nursing Practice

The goal of health education today is to promote a state of health and well-being with the emphasis on prevention. In our technological, knowledge-oriented world, society views education as a key to social mobility and success, therefore, inadequate role performance of students is viewed as a serious problem by the school and the family (Ross, 1974). Early intervention with school problems is important to prevent emotional trauma. The community health nurse is the logical person to act as a
uniting force to provide a team approach and a consolidation of professional services (Jacobson, 1979).

The public health nurses working with school children must assess the specific needs of the students and develop and implement plans for the management of the children in collaboration with other professionals. School nurses working with other professionals on screening committees are responsible for the assessment, management and follow-up of health and learning difficulties of school-age children. The role of school nurse practitioners include: participation in evaluating the physical, cognitive, social and emotional development of children; identification of learning, perceptual, and emotional problems; and collaboration with students, families, physicians, teachers and other school personnel to provide counseling and anticipatory guidance for children with health, developmental, or educational problems (Silver, 1976).

Nurses, as health educators, must be able to identify underlying causes of unhealthy behavior to prevent secondary emotional and behavioral problems and to promote positive mental health. Learning disabilities which are not diagnosed can be an important factor in a student's unhealthy lifestyle (Heit, 1979). Because of the lack of early assessment and care of emotional and learning disorders, children develop progressively more severe problems which may adversely affect their health and ability to learn. Frequently, the early symptoms of a language disability can be identified in the preschool years in well baby clinics.

The relationship between the academic, emotional and social problems of a language disability should not be overlooked and the school
nurse is in a unique position to obtain an early assessment of the child's disability and evaluate how he is coping with the disability in school and at home. Because of the social influences, it is also essential that the nurse work with the parents to promote parenting skills and to provide guidance for child management problems. Collaboration between the school, parents and nurses can provide early support for the parents and promote a favourable parent-child relationship. It is also important to provide accurate information to the parents on the child's disability and to suggest appropriate resources for assistance.

The Intellectual Achievement Responsibility questionnaire is a reliable instrument which is specific for measuring perceived control with school achievement. This sensitive area is of particular concern with specific language disabled children. The instrument can be administered individually or to a small group and may be a useful screening tool for the following applications:

1. To be included in a screening program to assess children for visual, auditory, perceptual, motor, speech and language problems in order to identify those school children who have low internal perceptions of control and low self-esteem about their school work.

2. To follow up children who exhibit weak language skills, who are failing a grade at school or who are being referred to a learning assistance center for extra help.

3. After identification by the IAR instrument, appropriate referrals should be made and follow-up discussions and counseling with the parents should be planned. The counseling would allow parents opportunity
to express feelings of frustration about coping with their SLD child and their feelings of guilt, particularly if it is a familial disability. It would allow the nurse an opportunity to encourage appropriate child management strategies to prevent further emotional and behavioral problems.

4. Based on the locus of control concept, an assertiveness training program could be developed for use with SLD children to help them cope with their disability.

**Recommendations for Further Research**

The significant findings of this study suggest that further research be carried out to discover the following:

1. A longitudinal study could be conducted to determine if the locus of control becomes more internal as the SLD child receives more remediation. The locus of control questionnaire should be administered at the beginning of the remediation program and as part of the follow-up evaluation of the program. Periodic testing could be done after the child is mainstreamed into the classroom. Thus, a profile for each child be established to be used on a comparison basis.

2. Studies could be conducted to determine if there was concurrent validity of locus of control with IQ and self-esteem for SLD children.

3. Children with a language disability could be compared with children who have emotional and behavioral problems to identify if behavioral problems influence locus of control.

4. It would be useful to establish minimal internal and external locus of control scores below which children would be at risk.
5. It would be important to discover the knowledge base of the parents concerning language disabilities, their degree of acceptance of their child's disability and their expectations for their child's future performance.

6. It would be important to assess parents' attitudes before and after a program of remediation has been instituted.

7. Children with SLD could be assessed for emotional and social problems and for their degree of independence.

If further research supports the findings of this study, the locus of control questionnaire could be included in a screening program to identify those language disabled children who require extra support services. Identification is now important in the United States because of the 1978 law which requires free, appropriate, public education for all handicapped children aged three to eighteen which includes children with specific learning disabilities (Jones, 1979). Similar legislation is being developed in some of the provinces in Canada. This leads to more individualized education programs which will influence the role of school nurses in caring for children with handicaps.
BIBLIOGRAPHY


APPENDIX A

LETTERS FROM THE PRIVATE AGENCIES
Kenneth Gordon School & Centre Ltd.
1111 - 6th Avenue
New Westminster, B.C.
V3M 2B7

September 19, 1980

Dear Mr. and Mrs.

A graduate student of the School of Nursing at the University of British Columbia, Barbara A. McWilliams, is doing a research project on language disability in children. She has been working in this field for the past ten years and is very interested in promoting the understanding and acceptance of language disabled children through further study in this area. She hopes to promote awareness of the needs of these children to public schools and public health nurses and to find ways of helping parents cope with their language disabled child.

Barbara has received the support and approval from our Board for her project. We would like to assist her by suggesting names of families having a ten or eleven year old child with a language disability to participate in her research project. If you would prefer not to have us provide her your name, please call me at the school and, of course, we won't.

Otherwise, we will give your names to Barbara and she will be contacting you to request your cooperation and participation. She will be sending you a letter with further explanations about her study soon. The letter will include a consent form to which both parents will be asked to sign and return to Barbara. I have been assured that confidentiality will be maintained through identification numbers and that you will receive a summary of her findings at the conclusion of her study. Each family would be entitled to withdraw from the study at any time during the study.

Thank you for your consideration.

Yours sincerely,

Margaret Follis,
Administrator
Dear Mr. and Mrs.

A graduate student in the School of Nursing at the University of British Columbia, Barbara A. McWilliams, is doing a research project on language disability in children. She has been working in this field for the past ten years and is very interested in promoting the understanding and acceptance of language disabled children through further study in this area. She hopes to promote awareness of the needs of these children to public schools and public health nurses and to find ways of helping parents cope with their language disabled child.

Barbara has received the support and approval from our Board for her project. We would like to assist her by suggesting names of families having a ten or eleven year old child without a language disability to participate in her research project.

I have given your name to Barbara and she will be contacting you to request your cooperation and participation. She will be sending you a letter with further explanation about her study soon. The letter will include a consent form to which both parents will be asked to sign and return to Barbara. I have been assured that confidentiality will be maintained through identification numbers and that you will receive a summary of her findings at the conclusion of her study.

Thank you for your consideration.

Yours sincerely,
APPENDIX B

LETTER FROM RESEARCHER AND CONSENT FORM
September, 1980

Dear Parents:

I am a graduate student in the School of Nursing at the University of British Columbia. I am studying parents' and children's attitudes towards school achievement and am collecting information from both language disabled and non-language disabled groups.

You will receive a letter from and I am writing to request your assistance.

This study would involve an hour of your time. I will be phoning you to arrange a convenient time, after I have received your consent form. Your participation would involve both parents filling out questionnaires simultaneously while a questionnaire is given to your child using a tape recorder with my assistance. Two examples will be given first to familiarize your child with the types of questions which are about school experiences. For your child, it would involve putting an "X" beside one of two answers.

I would appreciate your participation and contribution to my study and request that you complete the enclosed consent form and return it to me in the enclosed self-addressed envelope as soon as possible.

Yours sincerely,

Barbara A. McWilliams, R.N., B.Sc.N.
Graduate Student, M.S.N. Program
University of British Columbia
INFORMED CONSENT-PARTICIPANTS

We agree to participate in the study of parents' reactions and achievement behaviors of children being conducted by a graduate student from the University of British Columbia.

We understand

(1) that this is a research study for a masters student in nursing to complete her graduate program.

(2) that our participation involves our cooperation in the completion of questionnaires and the involvement of our child answering an oral questionnaire which will be given by tape recorder with the assistance of the researcher.

(3) that we may withdraw at any time during the study and that it will not affect our relationships with our school, doctor or public health nurse.

(4) that all information will be held in the strictest confidence and that our names will not be used in the report. Instead, identification numbers will be used.

(5) that the results of the study will be shared with us upon completion of the study.

We hereby consent to take part in this study.

Signed: ______________________, mother

Signed: ______________________, father

Phone number: ___________________

Date: _________________________
APPENDIX C

INSTRUCTIONS AND PARENT REACTION QUESTIONNAIRE
PARENT REACTION QUESTIONNAIRE

INSTRUCTIONS TO THE PARENTS

The purpose of this questionnaire is to learn more about how parents react to their children's activities particularly related to school activities, such as, reading, spelling, learning and remembering.

To complete the questionnaire please read the description of the situation. Then, from the statements which follow it, select the one which best describes the way you have reacted to your child in similar situations. I am interested in finding out how parents really do react toward their children rather than how parents feel they should react.

A number of everyday situations involving a parent and child are described. For each of these situations, a number of ways a parent might react are listed.

For example:

When X became tired from playing sports outside

_____ a. I did not interfere.
_____ b. I made him take a nap.
_____ c. I encouraged him to do something else.
_____ d. I became annoyed with him.
_____ e. I told him he needs more practice.

Read the description of the situation. Then from the statements which follow it, select the one which best describes the way you have reacted to your child in similar situations. Place a 1 in front of that statement. Next, select the statement which describes your second most usual reaction and place a 2 in front of it. If any of the additional statements describes ways in which you have responded to your child in similar situations, place a check in front of it. The way that the above example is marked indicates that the parent usually reacts in the manner described by sentence c.; that the next most usual reaction of the parent in that type of situation is described in sentence a.; and that the parent also responds in the manner described in sentence e. at times.
1. When X showed improvement or did well in a school subject
   a. I gave him a hug or kiss or expressed my affection for him.
   b. I told him he did very well in that subject.
   c. I told him I would like him to work harder in his other subjects too.
   d. I said very little about it.
   e. I told him he is showing good scholastic ability.
   f. I told him that he could still do better.

2. When X began to tell me about something he had learned in school
   a. I listened but didn't say much.
   b. I talked with him and showed interest in what he was saying.
   c. I told him that I was pleased that he understood the material.
   d. I told him that he seemed to know the material well.
   e. I explained the things discussed in school that he didn't completely understand.
   f. I told him that he needs to pay closer attention to the teacher's explanations.

3. When X brought home a low grade from school
   a. I asked him why he got the low grade.
   b. I told him that I was annoyed.
   c. I didn't say anything about it.
   d. I told him that his other grades were good.
   e. I told him that he needs to improve.
   f. I told him the grade wasn't too bad and that he probably would do better the next time.

4. When X didn't completely understand something I was explaining or teaching him
   a. I got impatient and spoke a little sharply.
   b. I let the matter drop.
   c. I corrected him and explained it in a simpler fashion.
   d. I told him to listen more carefully.
   e. I told him that he seemed to understand most of it clearly.
   f. I told him it didn't matter, and that I would explain it later, and that I'm sure he would understand.
5. When X was doing school work at home
   a. I told him I am very pleased with his progress.
   b. I showed him some of his mistakes.
   c. I told him to try to work harder at it than he did before.
   d. I was too busy to pay much attention to what he was doing.
   e. I told him I am glad he is interested in his school work.

6. When X read something out loud
   a. I suggested that he practice more.
   b. I didn't say anything.
   c. I told him that he is doing very well.
   d. I listened and talked with him about the material he had read.
   e. I corrected his errors and showed him how to improve.

7. When X was a little careless with his school work
   a. I didn't say anything.
   b. I told him I was disappointed in him.
   c. I picked out those things he did carefully and told him he did a good job on those.
   d. I told him that his work was poorer than usual.
   e. I suggested that he work harder on it.
   f. I showed an interest in what he was doing and asked him to tell me about it.

8. When X recited or showed that he remembered most of the information that he had been taught some time ago (such as a story, poem, or some general information)
   a. I told him he should try to learn the rest of it.
   b. I commented on how good his memory is.
   c. I told him he did fine.
   d. I didn't say anything about it.
   e. I told him I was very pleased and expressed affection to him.
   f. I told him I was sorry he couldn't remember the rest of it.

9. When X finished his school work very quickly
   a. I told him I'm pleased that he can do the work so fast.
   b. I told him that I'm happy he catches on to things so quickly.
   c. I didn't comment on that.
   d. I told him he should spend more time on his work.
   e. I told him that's fine.
   f. I told him that he probably would forget the material because he did it so fast.
10. When X wanted his homework checked
   a. I told him that he had done a good job and that I would show
      it to his father (mother).
   b. I found his mistakes for him and made him correct them.
   c. I told him I thought he should be able to do better.
   d. I praised him for the things he had done correctly.
   e. Since I was busy, I told him to ask his father (mother) to
      check it.

11. When X asked me to explain some information to him or give
    him the meaning of a word
   a. I suggested he ask his father (mother) about it.
   b. I first asked him what he thought and then corrected him.
   c. I told him that he needs to learn how to find out such
      things for himself.
   d. I told him that he catches on to things very quickly.
   e. I told him I was glad he was interested in learning new
      things.

12. When X said something that indicated childish reasoning
   a. I told him that he was wrong and was being childish.
   b. I corrected him.
   c. I told him to think about the matter more carefully.
   d. I didn't say anything.
   e. I told him that I was glad he was interested in the subject.
   f. I told him he was clever and imaginative to be able to make
      up something like that.
PARENT REACTION QUESTIONNAIRE    I.D. No. _________

1. When X showed improvement or did well in a school subject
   a. I gave her a hug or kiss or expressed my affection for her.
   b. I told her she did very well in that subject.
   c. I told her I would like her to work harder in her other subjects too.
   d. I said very little about it.
   e. I told her that she is showing good scholastic ability.
   f. I told her that she could still do better.

2. When X began to tell me about something she had learned in school
   a. I listened but didn't say much.
   b. I talked with her and showed interest in what she was saying.
   c. I told her that I was pleased that she understood the material.
   d. I told her that she seemed to know the material well.
   e. I explained the things discussed in school that she didn't completely understand.
   f. I told her that she needs to pay closer attention to the teacher's explanations.

3. When X brought home a low grade from school
   a. I asked her why she got the low grade.
   b. I told her that I was annoyed.
   c. I didn't say anything about it.
   d. I told her that her other grades were good.
   e. I told her that she needs to improve.
   f. I told her the grade wasn't too bad and that she probably would do better the next time.

4. When X didn't completely understand something I was explaining or teaching her
   a. I got impatient and spoke a little sharply.
   b. I let the matter drop.
   c. I corrected her and explained it in a simpler fashion.
   d. I told her to listen more carefully.
   e. I told her that she seemed to understand most of it clearly.
   f. I told her it didn't matter and that I would explain it later, and that I'm sure she would understand.
5. When X was doing school work at home
   a. I told her I am very pleased with her progress.
   b. I showed her some of her mistakes.
   c. I told her to try to work harder at it than she did before.
   d. I was too busy to pay much attention to what she was doing.
   e. I told her I am glad she is interested in her school work.

6. When X read something out loud
   a. I suggested that she practice more.
   b. I didn't say anything.
   c. I told her that she is doing very well.
   d. I listened and talked with her about the material she had read.
   e. I corrected her errors and showed her how to improve.

7. When X was a little careless with her school work
   a. I didn't say anything.
   b. I told her I was disappointed in her.
   c. I picked out those things she did carefully and told her she did a good job on those.
   d. I told her that her work was poorer than usual.
   e. I suggested that she work harder on it.
   f. I showed an interest in what she was doing and asked her to tell me about it.

8. When X recited or showed that she remembered most of the information that she had been taught some time ago (such as a story, poem, or some general information)
   a. I told her she should try to learn the rest of it.
   b. I commented on how good her memory is.
   c. I told her she did fine.
   d. I didn't say anything about it.
   e. I told her I was very pleased and expressed affection to her.
   f. I told her I was sorry she couldn't remember the rest of it.

9. When X finished her school work very quickly
   a. I told her I'm pleased that she can do the work so fast.
   b. I told her that I'm happy she catches on to things so quickly.
   c. I didn't comment on that.
   d. I told her she should spend more time on her work.
   e. I told her that's fine.
   f. I told her that she probably would forget the material because she did it so fast.
10. When X wanted her homework checked

   a. I told her that she had done a good job and that I would show it to her mother (father).
   b. I found her mistakes for her and her correct them.
   c. I told her I thought she should be able to do better.
   d. I praised her for the things she had done correctly.
   e. Since I was busy, I told her to ask her mother (father) to check it.

11. When X asked me to explain some information to her or give her the meaning of a word

   a. I suggested she ask her mother (father) about it.
   b. I first asked her what she thought and then corrected her.
   c. I told her that she needs to learn how to find out such things for herself.
   d. I told her that she catches on to things very quickly.
   e. I told her I was glad she was interested in learning new things.

12. When X said something that indicated childish reasoning

   a. I told her that she was wrong and was being childish.
   b. I corrected her.
   c. I told her to think about the matter more carefully.
   d. I didn't say anything.
   e. I told her that I was glad she was interested in the subject.
   f. I told her she was clever and imaginative to be able to make up something like that.
APPENDIX D

INSTRUCTIONS AND INTELLECTUAL ACHIEVEMENT RESPONSIBILITY QUESTIONNAIRE
Simplified Version of the Intellectual Achievement Responsibility Scale

Directions:

The questions on these pages describe a number of experiences most of you have in your daily lives. These questions have also been put on a tape recording, and the person who gave you the questions will play the tape while you read along on your copy. Read each question carefully and look at the two possible answers for each one. Choose the one answer that most often describes what happens to you or how you feel about it. Then put an "X" on the "A" or "B" in front of that answer. There are no right or wrong answers because different children feel differently about these things. Just be sure to answer each question according to how you really feel. Mark only one answer, "A" or "B", for each question, and do not skip any questions.

If, at any time, you aren't sure about the meaning of a question, raise your hand and the person handing out the questions will explain it to you.

Your answers will not be shown to your teacher or to anyone else.

Questions:

1. If a teacher passes you to the next grade, is it
   A because the teacher likes you, or
   B because you did good work?

2. When you do well on a test at school, is it
   A because you studied for it, or
   B because the test was easy?

3. When your school work is hard to understand, is it
   A because the teacher didn't explain it clearly, or
   B because you didn't listen carefully?

4. When you can't remember much of a story you read, is it
   A because the story wasn't written well, or
   B because you weren't interested in it?
5. If your parents say you are doing well in school, is it
   A because your school work is good, or
   B because they are in a good mood?

6. If you do better than usual in something at school, is it
   A because you worked harder, or
   B because someone helped you?

7. When you lose at a game of cards or checkers, is it
   A because the other player is good at the game, or
   B because you didn't play well?

8. Suppose a person doesn't think you are very smart.
   A Can you make them change their mind if you try to? or
   B Will some people think you are not very smart no matter what
      you do?

9. If you finish a puzzle quickly, is it
   A because the puzzle wasn't very hard, or
   B because you worked on it carefully?

10. If a boy or girl says that you are dumb, is it
    A because they are mad at you, or
    B because what you did really wasn't very smart?

11. If you wanted to become a teacher, scientist, or doctor and
    didn't make it, would it be
    A because you didn't work hard enough, or
    B because other people didn't help you when you needed it?

12. When you learn a thing quickly at school, is it
    A because you listened carefully, or
    B because the teacher explained it clearly?
13. If a teacher says to you, "Your work is fine," is it
   A  because teachers usually say that to encourage children, or
   B  because you did a good job?
14. When you find it hard to do arithmetic or number problems, is it
   A  because you didn't study enough before you tried them, or
   B  because the problems the teacher gave were too hard?
15. If you forget something the teacher says in class, is it
   A  because the teacher didn't say it very well, or
   B  because you didn't try very hard to remember?
16. If you remember most of a story you read, is it
   A  because you were interested in it, or
   B  because the story was written well?
17. If your parents say you're not thinking clearly, is it
   A  because of something you did, or
   B  because they happen to feel cranky?
18. When you don't do well on a test at school, is it
   A  because the test was hard, or
   B  because you didn't study for it?
19. When you win at a game of cards or checkers, is it
   A  because you played real well, or
   B  because the other person didn't play well?
20. If people think you are smart, is it
   A  because they happen to like you, or
   B  because you do things well?
21. If the teacher didn't pass you to the next grade, would it happen
   A  because the teacher had it in for you, or
   B  because your school work wasn't good enough?
22. If you don't do as well as usual in something at school, would it happen
    A because you didn't do your work, or
    B because someone bothered you?

23. If a boy or girl says that you are smart, is it
    A because you did something smart, or
    B because they like you?

24. If you became a famous teacher, scientist or doctor, would it happen
    A because other people helped you when you needed it, or
    B because you worked very hard?

25. If your parents say you're not doing well in your school work, is it
    A because your school work isn't good, or
    B because they are in a bad mood?

26. If you are showing a friend how to play a game and your friend has trouble with it, would that happen
    A because your friend wasn't able to understand how to play, or
    B because you didn't explain it well?

27. When you find it easy to do arithmetic or number problems, is it
    A because the teacher gave easy problems, or
    B because you studied well before you tried them?

28. When you remember something the teacher says in class, is it
    A because you tried hard to remember, or
    B because the teacher said it well?

29. If you can't work a puzzle, is it
    A because you are not very good at working puzzles, or
    B because the directions weren't written clearly?
30. If your parents tell you that you are bright, is it
   A because they are feeling good, or
   B because of something you did?

31. If you are explaining how to play a game to a friend and your
    friend learns quickly, would it happen
   A because you explained it well, or
   B because your friend was able to understand it?

32. If a teacher says to you, "Try to do better," is it
   A because teachers say that to get students to try harder, or
   B because your work wasn't as good as usual?
APPENDIX E

DEMOGRAPHIC DATA
Please complete the following information:

Are you the child's mother or father

___ 1. mother
___ 2. father

How old are you?

___ 1. 25-29 years
___ 2. 30-34 years
___ 3. 35-39 years
___ 4. 40-44 years
___ 5. 45-49 years
___ 6. over 50 years

How many grades have you completed?

___ 1. less than 8
___ 2. 8-10
___ 3. 11-12
___ 4. community college or technical school
___ 5. university
___ 6. post baccalaureate degree

What are the combined annual earnings of your partner and yourself?

___ 1. less than $5,000
___ 2. $5,000-9,000
___ 3. $10,000-14,999
___ 4. $15,000-19,999
___ 5. $20,000-24,999
___ 6. $25,000-29,999
___ 7. $30,000-34,999
___ 8. $35,000 or more

Is your child being tested a son or daughter?

___ 1. son
___ 2. daughter

How old is your daughter/son?

___ 1. nine
___ 2. ten
___ 3. eleven

Birth date: __________________

How many children are there in your family?

___ 1. one
___ 2. two
___ 3. three
___ 4. four
___ 5. five
___ 6. six
___ 7. seven
___ 8. eight
What position among your children is the child being tested?

1. first
2. second
3. third
4. fourth
5. fifth
6. sixth
7. seventh
8. eighth

How long have you known that your child has a language disability?

1. three months
2. six months
3. one year
4. one and a half years
5. two years
6. over two years

How long has your child with a language disability been receiving remediation (tutoring and/or special school)?

1. none
2. one to three months
3. three to six months
4. six months to one year
5. one to one and a half years
6. one and a half years to two years
7. over two years

What kind of remedial help has your child with a language disability been receiving?

1. one-to-one tutoring
2. attending special school for S.L.D.
3. attending learning assistance center
4. other, specify
5. no extra help

Do you feel the remedial help your language disabled child has received is helping?

1. extremely satisfied
2. very satisfied
3. rather satisfied
4. neither satisfied nor dissatisfied
5. somewhat dissatisfied
6. very dissatisfied
7. extremely dissatisfied