AN INVESTIGATION OF INTERNAL-EXTERNAL LOCUS OF CONTROL AND SELF-ESTEEM IN CHILDREN AND ADOLESCENTS DIAGNOSED AS LEARNING DISABLED AND NON-LEARNING DISABLED CHILDREN AND ADOLESCENTS

By

KRIKOR BEDROS GARABEDIAN II

Bachelor of Arts
Bethany Nazarene College
Bethany, Oklahoma
1971

Master of Education
University of Oklahoma
Norman, Oklahoma
1972

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
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Thesis Approved:

Paul G. Warden
Thesis Adviser

William H. Rambo

John D. Hampton

Judith E. Dobson

Barbara Peel

Norman N. Durham
Dean of the Graduate College

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CHAPTER I

INTRODUCTION

The Research Problem

> Children get into trouble because their parents punish them too much.
> People's misfortunes result from the mistakes they make.
> The average citizen can have an influence in government decisions (Rotter, 1966, p. 11).

These statements are the kind the person would be asked to agree or disagree with if he[1] were to take a test to determine his perceived locus of control. If the person looks carefully at them, he can probably see what they have in common: each of them has to do with how much a person himself, as opposed to outside forces, determines what happens to him. This is the essence of the locus-of-control concept, that each of us locates the controlling components in our lives inside ourselves, in between on the internal-external continuum, or outside ourselves. The person who believes that he can decide for himself what he will do or be, locates his control internally; the person who believes that what happens to him is largely a matter of luck or chance, or who depends on the decisions of others is locating his control externally.

In the past few decades, educators and psychologists have shown

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[1]Due to the lack of a neutral pronoun, regretfully the masculine pronoun (he) will be used to represent both sexes.

an increasing interest in the notion of the internal and external locus of control as important in the explanation and prediction of human behavior. Locus of control is of particular importance to educators because it influences a number of other behaviors (Moursound, 1976). A child's or an adolescent's perception of who is in control affects the way he deals with other people, the way he approaches his academic work, and the way he feels about himself as a human being (Moursound, 1976).

Rotter (1966) viewed belief in the locus of control as a stable characteristic of personality. As he dealt mainly with adults, the following questions remained to be investigated. Does locus of control become increasingly internal as the person gets older? At what age or grade level does this characteristic stabilize? In their work with a group of normal learners, Crandall, Katkovsky, and Crandall (1965) found that internal-external scores were relatively external at the third grade with internality increasing to a maximum between the eighth and tenth grades. Therefore, it is the purpose of this study to determine whether the above stated relationship across grade levels can be generalized to children and adolescents diagnosed as learning disabled.

The study also will attempt to investigate the relationship between self-esteem across grade levels for children and adolescents diagnosed as learning disabled. Finally, the study will attempt to determine the relationship between locus of control and self-esteem across grade levels for children and adolescents diagnosed as learning disabled.

Rotter's (1966) social learning theory will serve as a theoretical

basis for working with internal-external control of reinforcement. Internal-external control, according to Rotter is defined as:

> when reinforcement is perceived by a subject as following some action of his own but not being entirely contingent upon his action, then in our culture, it is typically perceived as the result of luck, chance, fate, as under the control of powerful others, or as unpredictable because of the great complex of the forces surrounding him. When the event is interpreted in this way by an individual, we have labeled this a belief in external control. If the person perceives that the event is contingent on his own behavior or his own relatively permanent characteristics, we have termed this a belief in internal control (p. 1).

Rationale and Problem Statement

The development of locus of control and self-esteem in children continues to be of interest to both researchers and educators. Among the questions proposed by research dealing with locus of control and self-esteem is that of age changes in locus of control and self-esteem. Research in these areas has shown differing results. Studies made by Crandall, Katkovsky, and Crandall (1965) indicate the locus of control as a generalized characteristic stabilizes at the age of eight and nine, and possibly even earlier, and does not change significantly between the ages of eight to nine and fifteen. Engle (1959) found a general positive increase of self-esteem over a two-year span among pre-adolescent and adolescent subjects. Engle concludes by indicating that the positive self-esteem scores increased significantly between the two testings for the pre-adolescent and adolescent subjects. An increase which could possibly be attributed to the effect of regression. Zigler (1967), however, found self-esteem scores for eighth and eleventh graders to be lower than fifth grader's scores. Zigler concludes that it is not known by what age the process of

self-definition reaches stability.

From the majority of related articles and studies reviewed, it appears that a minimal amount of research has been conducted about the developmental relationship of the variables age, locus of control, and self-esteem of children. Furthermore, research in regard to the above variables with learning disabled children seems to be very limited and inconclusive.

The stated problem then, is to find the developmental relationships of the following variables among children and adolescents diagnosed as learning disabled:

1. the differences among grade levels and locus of control;
2. the differences among grade levels and self-esteem, and;
3. the relationship between locus of control and self-esteem.

The Purpose of the Study

The present study is primarily directed at developmental questions relating to the variables of age, internal-external locus of control, and self-esteem among children and adolescents diagnosed as learning disabled. More specifically, the purpose of the present study is to investigate the developmental relationships across grade levels for the following variables: internal-external locus of control, self-esteem and the relationship between the two constructs among children and adolescents diagnosed as learning disabled. Based on the social learning theory and on empirical research, it is expected that

developmental trend in feelings of internal or external control will become increasingly internal with age, and the belief is that as children get older, they, rather than external forces, are in control of their experiences.

Definition of Terms

Learning Disabled (LD)[2] - "Specific learning disability" means a disorder in one or more of the basic psychological processes involved in understanding or in using language spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injured, minimal brain disfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, or emotional disturbance, or of environmental, cultural, or economic disadvantages (Oklahoma Special Education Section, 1978, p. 76). The learning disabled group used in this study were those students who were diagnosed as learning disabled. It is recognized that the diagnostic procedures are not infallible and misclassifications might have and continue to occur.

Non-Learning Disabled - is a person who has not had problems identified.

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[2]The researcher is aware that research indicates the debilitating influences of labeling. However, the terms "learning disabled" and "non-learning disabled" are used to designate two groups of students, each group comprised of persons who have been perceived as having in common at least similar histories of school success.

Locus of Control - refers to what the individual believes about who is in charge, and what he perceives to be the extent of his own power to control his life as measured by the Nowicki-Strickland Locus of Control Scale for Children.

Internal Control - refers to the individual's perception of positive and/or negative events as being a consequence of his own actions, and therefore are under his own personal control as measured by the Nowicki-Strickland Locus of Control Scale for Children.

External Control - refers to the individual's perception of positive and/or negative events as being unrelated to his own behaviors, and therefore, are beyond his personal control as measured by the Nowicki-Strickland Locus of Control Scale for Children.

Self-Esteem - is the individual's feeling of personal worth and his evaluative attitude toward himself in social, academic, family, and personal areas of experience as measured by the Coopersmith Self-Esteem Inventory (SEI).

Assumptions and Limitations of the Study

It is assumed that the selected samples are representative of their respective populations.

This study focused on children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents in grades four, seven, and ten. The findings of this study should not be generalized beyond the three grade levels from which the samples were drawn.

Need and Importance of the Study

Results of previous research related to grade levels, locus of control, and self-esteem among children and adolescents diagnosed as learning disabled have been somewhat inconsistent. Some studies (Hallahan, 1978; Tolor and Blumin, 1977; Hisama, 1978) indicate lower self-esteem and more externality for learning disabled children and others indicate no difference between such children and those in the regular educational mainstream. The present study is designed in an attempt to shed further light on the relationships of the above concepts among children and adolescents diagnosed as learning disabled.

The present investigation is important in that the findings could be used to further help teachers know or understand what kinds of locus of control and self-esteem children and adolescents diagnosed as learning disabled have. In addition, the information obtained from this study could be used in classroom situations to help children and adolescents diagnosed as learning disabled change their locus of control from an external to an internal direction, and to help them reverse their self-esteem from a negative one to a positive one.

Finally, the information gathered from this study could provide a better understanding of and impetus to further research on the developmental notions of locus of control and self-esteem among children and adolescents diagnosed as learning disabled.

Organization of the Study

The present chapter includes the introduction, rationale and problem statement of the study, purpose of the study, definition of terms, and assumptions and limitations of the study. Finally, it

concludes with the need and importance of the study and organization of the study. Chapter II contains the internal-external locus of control concept as delineated in social learning theory, and review of research literature related to locus of control and self-esteem among children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents, the summary of the chapter and hypotheses. Chapter III describes the instruments that were used, population and sample from which subjects for the study were selected, the data collection method, and the statistical procedures used for data analysis. Chapter IV presents the results of the analyses of the variables locus of control and self-esteem both for learning disabled and non-learning disabled groups, and summary of the chapter. Chapter V presents the overview of results, discussion of results as related to each hypothesis, summary recommendations for future research and some practical application suggestions, and concluding comment.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter reviews research related to the present study. First, the chapter deals with internal-external locus of control and basic concepts of the social learning theory. Subsequently, reviews of research related to the concepts of internal-external locus of control and self-esteem among children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents are included. Finally, it concludes with the summary and the hypotheses that are under investigation in the present study.

The concept of internal-external locus of control emerged from the social learning theory. Therefore, we should fully understand locus of control by reviewing its basic concepts and theoretical background.

Internal-External Control and Social Learning Theory

Social learning theory provides the general theoretical background for dealing with the constructs, internal and external loci of control of reinforcement (Rotter, 1954, 1955, 1960). In social learning theory, a reinforcement acts to strengthen an expectancy that a particular behavior or event will be followed by that reinforcement in the future. Once an expectancy for such a behavior-reinforcement sequence is built up, the failure of the reinforcement to occur will

reduce or extinguish the expectancy (Rotter, 1966).

Stemming from Rotter's explanation of internal and external control, the present study uses these concepts as an operational definition in determining the direction of internal and external locus of control in children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents at various grade (age) levels.

In social learning theory four basic concepts are used to predict behavior. These concepts are behavior potential, expectancy, reinforcement value, and the psychological situation (Rotter, Chance, and Phares, 1972). These concepts are more precisely defined by (Rotter, 1972, pp. 1-14): Behavior Potential, which is the potential of any behavior occurring in any given situation or situations as calculated in relation to any single reinforcement. Expectancy is defined as the probability held by the individuals that a particular reinforcement will occur as a function of a specific situation or situations. Expectancy is independent of the value or importance of the reinforcement. Reinforcement value is defined as the degree of preference for any reinforcement to occur if the possibilities of occurrence of this and other reinforcements are equal. Psychological situation is when the individual is continuously reacting to aspects of his external and internal environment. He reacts selectively to many kinds of stimulation, internal and external, simultaneously consistent with his unique experiences.

It is hypothesized in social learning theory that when an individual perceives two situations as similar, his expectancies for a class of reinforcements will generalize from one situation to another. This

above concept of generalized expectancy is defined as follows:

> when reinforcement is perceived by a subject as following some action of his own but not being entirely contingent, it is typically perceived as the result of luck, chance, fate, as under the control of powerful others, or as unpredictable because of the great complex of the forces surrounding him. When the event is interpreted in this way by an individual, we have labeled this a belief in external control. If the person perceives that the event is contingent on his own relatively permanent characteristics, we have termed this a belief in internal control (Rotter, 1966, p. 1).

Locus of Control Research

This section of the review of literature deals with research related to changes of locus of control, and the relationship of age to those changes among children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents. There has been very little research investigating the relationship between age and locus of control belief (Phares, 1976). At best we can patch together a few relationships taken from a variety of populations in a variety of life experiences. Although purely speculative, it seems likely that life experiences or conditions that are fairly common among people may seriously affect the relationship between locus of control and age. For example, with advanced age, one may revert toward the helplessness of childhood, and if so, we would expect the elderly as a group to show more external beliefs (Phares, 1976).

Phares (1976) states that the simplest reason for changes in locus of control beliefs stems from age changes. Phares further discusses that young children are relatively helpless and can effect little control over their own lives. They can be physically lifted, punished, hauled around, and generally controlled by all-powerful

adults in their lives. It is not surprising, then, as they become older, locus of control is increasingly internalized.

Penk (1969) in a study with elementary and secondary age school children observed a change in internal and external locus of control scores, older children being more internal than younger children. Phares (1976) concurs with Penk's findings and adds that it is not age alone that increases the strength of children's internal beliefs but the accompanying growth in the capacity to care for themselves, independence, and real ability to influence their surroundings as well.

The work of Crandall, Katkovsky, and Crandall (1965) on academic achievement provides evidence consistent with this general role of age. Although it was not the main focus of their study, Crandall, Katkovsky, and Crandall found a trend for internal-external scores to be relatively external at the third grade, with internality increasing to a maximum at the eighth and tenth grades. However, there was a reversion to a more external level in the twelfth grade, a trend more apparent for males than females. Staats (1972) investigated the construct internal-external locus of control among subjects, ranged ages five to sixty. The findings reveal an increase of internality with age. This result is in agreement with Strickland and Shaffer's (1971) report of a highly significant correlation between age and internal control.

Bartel (1971) conducted a study on locus of control and achievement in middle and lower socioeconomic status children in grades one, two, four, and six. Lower and middle socioeconomic status children did not differ significantly from one another on locus of control in grades one and two, but in grades four and six, significant

differences were found. Middle socioeconomic status children in grades four and six scored higher internal locus of control socres than the lower socioeconomic status fourth and sixth grade children. Correlations between locus of control and achievement were generally found to be positive for both lower and middle socioeconomic status children.

Pawlicki (1974) conducted research and investigated locus of control and social reinforcers among a sample of 149 children in third, fourth, sixth, and seventh grades. Pawlicki found a developmental trend of increasing internal control scores with increased maturity at each grade level.

Lifshitz (1976) conducted a study on internal-external locus of control and age with a sample of 183 Kibbutz children age nine to fourteen years. Lifshitz reported a significant correlation (.84) between locus of control and age. Responsibility for success scores consistently increased between the ages of ten and fourteen. Nowicki and Strickland (1971) investigated the hypothesis that internality will increase with age. Their study included a sample of 1017 elementary and high school students. They reported the following correlations between locus of control and grade levels: $r = .63$ (grades 3, 4, 5); $r = .68$ (grades 6, 7, 8); $r = .74$ (grades 9, 10, 11); $r = .81$ (grade 12). Thus, they concluded that locus of control is related with age, and that generally, as children get older they become more internal.

In a study involving age-related differences in locus of control orientation among 306 individuals ranging in age 13 to 90, Bradley and Webb (1966) reported a positive relationship between internality and age. In a study to assess the construct locus of control in an

adolescent population grades six through eight, Prawat (1976) found a significant increase of internality across grade levels in both learning and non-learning disabled adolescents.

From the majority of related articles and studies reviewed, the amount of research conducted about the developmental relationship of age and locus of control with children and adolescents diagnosed as learning disabled seemed very scanty. However, the investigator was able to locate a few studies that inconclusively dealt with the constructs of internal-external locus of control with children and adolescents diagnosed as learning disabled. Hallahan et al. (1978) studied selective attention and locus of control in learning disabled and normal children. They found learning disabled children were significantly different from the normal children on the locus of control variable. The learning disabled children exhibited a greater degree of external control than the normal subjects.

This result is in agreement with earlier studies (Bialer, 1961; Shaw and Uhl, 1971) which indicate a relationship between failure and external control. Hisama (1978) studied achievement motivation and the locus of control of 28 seventh, eighth, and tenth grade learning disabilities children matched with a control group. The results of the study show that the learning disabled children are significantly different from the normals on the locus of control variable. They exhibited a greater degree of external control than normal children. It was concluded that children with learning disabilities are externally oriented in relation to their locus of control.

In summary, in this section we have seen that there is a persistent relationship between internal locus of control and age in

non-learning disabled children and adolescents. Most of the studies presented in this section seemed to support the general developmental trend in non-learning disabled children and adolescents that as children get older they become increasingly more internal. However, the relationship between age and internality was not found to be similar among children and adolescents diagnosed as learning disabled. Several studies in this section showed that children and adolescents diagnosed as learning disabled generally were more externally oriented than non-learning disabled children and adolescents.

Self-Esteem Research

Longitudinal data on which to base a description of the development of the self-esteem is difficult, if not impossible to obtain. The results of cross-sectional studies from various age groups could be pieced together to attain a tentative developmental picture, allowing that most studies have wide differences in instruments, relevant characteristics of subjects, and testing conditions.

Studies of self have held considerable interest in American psychology and education for many years. William James (1890) accorded this topic an important place in his psychological thinking. Chapter ten of his two-volume Principles of Psychology dealt specifically with self. It is almost impossible to review the psychological literature concerned with personality development and mental health without encountering a reference to the self-concept. Most generally, the self-concept (Evans, 1970) is thought to represent an organized system of expectancies and self-evaluative tendencies. Evans discusses that such expectancies may be reflected by a person's subjective estimates

concerning what he can or cannot do. Self-evaluative tendencies may be manifested by the feelings one has regarding the quality of his behavior.

Research on self-concept is most likely grounded in self-theory (e.g. Moustakas, 1956; Combs and Snygg, 1959; Jersild, 1963; Hamacheck, 1965). This point of view holds that behavior be understood mainly in terms of a person's perception of himself and his environment and the meaning he attaches to his experience. Thus, according to self-theory, behavior is mediated by one's perceptions and self-reference tendencies, regardless of how closely such perceptions correspond to reality and how appropriate self-references may be in one actual situation.

Currently, scores of theories and definitions of "self" are found in the literature. Widely acceptable terms include "self-actualization" (Goldstein, 1940), "self-acceptance" (Allport, 1961), "self-identity" (Erikson, 1959), "self-concept" (Raimy, 1943), and "self-esteem" (Coopersmith, 1959). Of all self-prefixed terms currently used to identify or describe some facet of the self, self-concept and self-esteem remain the most popular (Calhoun and Morse, 1977).

Many of the researchers included in this study tend to use the terms self-concept and self-esteem interchangeably. For that reason, the author of this study is also using these terms interchangeably for the purpose of this review.

In the past few decades, psychologists and educators have shown an increasing interest in the notion of self-concept as important in the explanation and prediction of behavior (Bohan, 1973). In response to this increasing interest, a great deal of research has appeared dealing with the correlates of self-concept in children and adolescents.

Among the questions addressed by research dealing with self-concept is that of age changes in self-concept or self-esteem. Coopersmith (1967) claims that the person's general appraisal of his worth remains stable over a period of several years. He also comments that people generally are unwilling to accept evidence that they are better or worse than they themselves have decided. Furthermore, according to Coopersmith (1967), self-esteem is referred to as the value a child or a youth puts on himself, his behavior and his personal judgment of his own worth. How a child feels about himself. How does he judge himself in terms of "goodness" and "badness." Self-esteem is intimately related to the self-concept because value judgments are so frequently involved in what children and youth learn about themselves from other people (McCandless and Evans, 1973).

Engle (1959) conducted a study of adolescence which explored the test-retest stability of the self-concept in 172 subjects over a two year period. One group of boys and girls was tested in the eighth and tenth grades; the second group was tested in the tenth and twelfth grades. She found no significant difference between the older and younger groups with respect to self-concept and age correlations over the two year period.

Perkins (1958), using fourth and sixth grade students as subjects, investigated the agreement between self and ideal self. He called this agreement self-ideal congruence. The study utilized a Q-sort technique. The results of the Q-sort indicated the "ideal self" that the child would like to be and the "self" of the child as he saw himself at the moment. The congruence or lack of it between the ideal

self and the self of the moment is the self ideal congruence. He found that sixth grade students show greater self-ideal congruence than did the fourth grade children.

Montemayor and Eisen (1977) conducted a study on self-concept development from childhood to adolescence from a cognitive and structural perspective in 262 subjects in fourth, sixth, eighth, tenth, and twelfth grades. The students were given the Twenty Statements Test (Bugental and Zelen, 1950). Students were given a test form with 20 spaces and were asked to write twenty different answers to the question "Who am I?" The results of the study show a positive correlation between self-concept and abstract reasoning. They also conclude that with increasing age an individual's self-concept becomes more abstract and less concrete.

Grant (1969) conducted a study on age differences in self-concept from early adulthood through old age. His sample involved 500 subjects ranging in age 20 through 69. The most general finding in this study was that the feelings which a person reports about himself tend to become more positive with increasing age. He concluded that people's feelings about themselves do change, to some extent, as a function of the maturing process.

Bohan (1973) conducted a study involving age and sex differences in self-concept among fourth, sixth, eighth, and tenth graders. The results reveal significantly lower self-concept scores for tenth-grade subjects than any other comparison group. This finding is in conflict with longitudinal research (e.g. Engel, 1959) which has generally found an increase in self-concept with age and other data (e.g. Engel, 1959) which has generally found an increase in self-concept

with age and other data (e.g. Piers and Harris, 1964) indicating higher self-concept for adolescents than for younger children. However, it corresponds with Katz and Zigler's (1967) finding indicating a lower self-concept for adolescents than for younger subjects.

Kokenes (1974) conducted a study to investigate the construct validity of the Coopersmith Self-Esteem Inventory. Her additional intention was to study differences of self-esteem that might occur in pre-adolescent and adolescent children. Her study included approximately 7,600 subjects in fourth, fifth, sixth, seventh, and eighth grades. Kokenes concluded that in her population there was little difference in expressed self-attitudes from grade level to grade level. However, she found more rejecting self-attitudes expressed by sixth-graders and strong negative perceptions by eighth graders.

In a longitudinal study of stability of self-esteem ratings and their relation to academic achievement, Rubin (1978), in a sample of 380 children ages nine through fifteen, found a significant increase in the magnitude of the correlation between Self-Esteem Inventory scores over the age range nine to fifteen. The scores became more stable and more highly correlated with school achievement as the children grew older. Further she concluded that self-esteem ratings become more stable as young people move into early adolescence.

Carlson (1965) conducted a study on age and stability of self-esteem in 49 sixth grade subjects. He retested 49 boys and girls, who had been tested originally when they were in the sixth grade and when they were high school seniors. In his findings he concluded that self-esteem is a relatively stable dimension. By his definition, only one-third of the forty-nine boys and girls studied showed self-esteem instability.

Constantinople (1969) in her three-year study of college students also found a considerable continuity of self-concept. In her study, Constantinople investigated Erikson's theory of psychosocial development and followed up her original study for two successive years for as many of the original sample as remained in school. During their college years, both male and female students improved in their search for identity, both showed progress away from identity diffusion, and both sexes suffered less from feelings of isolation. Results of a two-year follow up of this study show that as the subjects became older they displayed more maturity, better self-concept and self-identity.

Although the findings of some studies reveal conflicting results in relation to self-esteem and age in non-learning disabled children and adolescents, most of the studies in this section indicate that feelings which a person develops about himself tend to become more positive with age. Further, the studies support the general developmental notion that as children get older they develop higher and more positive self-esteem.

Self-Esteem Research in Children and Adolescents Diagnosed as Learning Disabled

To provide a child with learning disabilities the opportunity for maximum realization of potential, educators and psychologists must assess what effect the disability has on the child's perception of himself (Larsen, Parker, and Jorjorian, 1973). The child with a learning disability has established a pattern of academic failure. He is a child who can not avoid realizing his differentness in

academic areas, coupled with a sense of impotence to eradicate learning handicap, leading to feelings of inadequacy, lack of se. esteem and helplessness in the learning setting (Rosenberg and Gaier, 1977). As the associated problems of behavior and emotional status tend to increase in frequency with increasing age in learning disabled children, (Gates, 1941), a circular process between personality and learning problems is probable, with both school failure and poor self-concept being mutually punishing to the learning disabled.

Black (1974) conducted a study on self-concept as related to achievement and age in 50 learning disabled and non-learning disabled children with a mean age of twelve. Black reported significant decrease of scores with increasing age and grade level among the learning disabled children. In addition, the results of Black's study indicate that older learning disabled children tend to view themselves more negatively than do the non-learning disabled children.

Rosenberg and Gaier (1977) conducted a study on a sample of 70 learning disabled and normal adolescents ranging in ages twelve to fifteen. The purpose of their study was to investigate whether differences existed between the self-esteem of the adolescent with learning disabilities and the normally achieving adolescent. The results of the study show a significant difference in self-concept between learning disabled and the normal adolescents. The authors found that mean scores on the self-esteem inventory were lower for the adolescent with learning disabilities than the comparison group, and they also found a trend that showed a weaker and more negative self-concept for the adolescents with learning disabilities as opposed to the comparison group.

Larson, Parker, and Jorjorian (1973) conducted a study with third and fourth grade children investigating differences in self-concept. Their sample consisted of 60 learning disabled and normal children, grades three and four. Prior to the study, it was hypothesized that students with learning disabilities would have a more negative self-concept than normal children. The results of the study support their stated hypothesis by indicating that students with learning disabilities demonstrated significantly different "lower" self-concepts than the normal children.

Smith, Dokecki, and Davis (1977) conducted a study to investigate the school related factors influencing the self-concepts of children with learning problems. Their sample included 206 learning disabilities and normal children with a mean age of 9 years and 6 months. The findings in their study show that the total mean self-concept score obtained by the learning disabilities children in special programs are almost identical to the mean score of the normal children.

Brunner and Starkey (1974) conducted a study to determine the self-concepts of four groups of students with learning disabilities, with emotional disturbances, in remedial classes, and in average classes. Their study was based on the hypothesis that high school students who were diagnosed and enrolled in special education courses for learning disabilities and emotional disturbances, will tend to have lower self-concepts than those enrolled in remedial and/or regular classes. The four groups studied consisted of 65 students from three different high schools. The sample was divided into four groups: group one consisted of eighteen students diagnosed with learning disabilities; group two consisted of eight students diagnosed as

emotionally disturbed; group three consisted of twenty-two remedial students according to grade point average; and group four consisted of seventeen average students. The data collected in their research did not support the original hypothesis. The results of the study reveal significant lower self-concept scores for the remedial and average students than for the learning disabilities and emotionally disturbed students. The authors, however, do not give any reasons or offer any explanations why the self-concept scores of the learning disabled and emotionally disturbed students were higher than the scores of remedial and average students.

This section provided a brief overview of some specific studies that are related to the variables self-esteem and age in children and adolescents diagnosed as non-learning disabled children and adolescents. The construct self-esteem is also investigated and compared among children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents. In relation to the variables, self-esteem and age, among children and adolescents diagnosed as learning disabled, the general findings of the studies cited in this section reveal that children and adolescents diagnosed as learning disabled have lower and more negative self-esteem than non-learning disabled children and adolescents. However, no clear and definite developmental relationship between age and the directionality of self-esteem (low-negative or high-positive) was established among children and adolescents diagnosed as learning disabled.

The Relationship of Locus of Control and Self-Esteem in Learning Disabled and Non-Learning Disabled Children

The personality dimensions of self-concept and the generalized expectancy of internal and external control are probably two of the more important aspects of the total functioning of the child (Tolor and Blumin, 1977). It is widely accepted that a child must "believe in himself" in order to perform confidently and successfully in school (Rubin et al. 1977). It is further assumed by the above authors that high self-esteem promotes happiness, social acceptance, and achievement, whereas low self-esteem contributes to failure, partly in the manner of a self-fulfilling prophecy.

With respect to the personality dimension, (internal-external control), the generalized expectancy that success or failure will be either a function of one's own behavior or of factors extraneous to the self, it has been demonstrated by Rotter (1966), Crandall, Katkovsky, and Crandall (1965) that the internal versus external expectancy construct is an important behavioral determinant. A poor self-concept may well be an impediment to effective functioning. A more positive self-concept is assumed to be associated with a better adjustment at school regardless of the cause-effect direction of the variables self-concept and locus of control (Tolor and Blumin, 1977).

In keeping consistent with the conclusions of a number of previous studies (e.g., Annesley, 1974; Coleman, 1966; Crandall, Katkovsky, and Crandall, 1965), it is proposed that children and adolescents having a variety of problems, including emotional or cognitive immaturity,

personality disturbances, perceptual handicaps, differences in cultural backgrounds, and learning disabilities, would have more negative self-concepts and would more likely tend to expect factors external to the self, such as fate, luck, or chance, to be accountable for their successes or failure than would children who do not have such problems. The forced dependency of these children as a result of their handicapping conditions and the concern of adults around them would tend to make these children feel less able to cope with or attain mastery of their environment. Because mastery of the environment is one of the key elements in developing a positive self-concept and feelings of higher self-esteem, it also would be expected that a more negative self-concept and external locus of control would be shown in children having relatively serious problems.

In a comparison study, Tolor and Blumin (1977) compared aspects of self-concept and locus of control of two contrasting groups, one that presented coping problems and one that did not manifest such problems. The 28 children comprising the problem group were diagnosed as culturally deprived, perceptually handicapped, emotionally disturbed and having multiple learning disabilities. The problem children were matched with a normal group comprising of 28 children who were not experiencing the above described coping and learning problems. The scores achieved by the two groups indicate a significantly lower overall self-esteem for the problem group than the normal group.

In their final analysis the authors discussed the degree to which the variables self-concept and locus of control related to each other. Self-concept scores were correlated with locus of control scores for problem and normal children as well as for combined group. For

problem children, higher self-concept scores were negatively related to externality. In the problem group, however, externality tended to be positively correlated with higher self-concept scores. When all subjects were combined no significant relationship between the two variables was found. The results of the study reveal no significant relationship between internality and positive self-concept for normal children, while for the problem children the relationship was toward externality and positive self-concept.

With a sample of 12 Negro boys, ages ten through thirteen, Epstein and Komoritol (1971) studied internal-external control and self-esteem. The results of this study show a significant correlation between internal locus of control and positive self-esteem. That is, they found a greater internality among high self-esteem subjects. A study by Burback and Bridgeman (1976) on relationships between self-esteem and locus of control in a sample of 274 black and white fifth graders indicates a correlation between total locus of control scores and self-esteem scores. This correlation generally has a low positive relationship that was fairly consistent across all of the racial subgroups.

Page (1975) studied changes in self-esteem and belief in internal versus external control of reinforcement among 24 black males and females, ages twelve through nineteen. The results show a significant gain in self-esteem only for subjects under sixteen years of age, and found no significant gain in self-esteem for the older subjects (e.g. seventeen, eighteen, and nineteen year olds). On the construct internal-external control, the results of the study show no significant increase in belief in internal-external control by any of the subjects.

In a correlational study investigating the relationship between self-esteem and locus of control among 200 college students, Fish and Karabenick (1974) pointed out that people with higher self-esteem tend to be more internally oriented. Beebe (1970) conducted a study on self-concept and internal-external control in 200 children and adolescents in grades four, six, eight, and ten. Beebe found internality increasing with age, and leveling off at adolescence. She also pointed out that the relationship between internality and self-concept was positive at all ages.

Summary

A search of literature revealed scanty and contradictory findings in reference to internal versus external locus of control and self-esteem in children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents. Some studies indicate lower self-esteem and more externality for children and adolescents diagnosed as learning disabled, while others indicate no difference between such children and those in the educational mainstream.

It is, however, established by several investigators, that children and adolescents diagnosed as learning disabled are more external in their reinforcement orientation (Hallahan, 1978; Tolor and Blumin, 1977; Hisama, 1978). They concluded that children with learning disabilities are more externally oriented in relation to their locus of control than normal children. The construct of self-esteem was also studied by several investigators. Larsen et al. (1973) reported that learning disabled students had more negative self-concepts than normal children. Rosenberg and Gaier (1977) found that adolescents with

learning disabilities obtained lower and more negative self-esteem scores than the normal adolescents.

To provide more substantive information on the relationships of internal-external locus of control, self-esteem, and age, the present study investigates these variables in two samples of children: children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents.

On the basis of previous research the following hypotheses are investigated in the present study.

Hypotheses

Hypothesis I: Children and adolescents diagnosed as learning disabled will have higher external locus of control scores across fourth, seventh, and tenth grade levels than the non-learning disabled children and adolescents.

Hypothesis II: Children and adolescents diagnosed as learning disabled will have lower self-esteem scores across fourth, seventh, and tenth grade levels than the non-learning disabled children and adolescents.

Hypothesis III: There will be a higher positive relationship between internal locus of control and self-esteem scores for non-learning disabled children and adolescents than for children and adolescents diagnosed as learning disabled across fourth, seventh, and tenth grade levels.

CHAPTER III

DESIGN AND METHODOLOGY OF THE STUDY

Introduction

The research procedures described in Chapter III includes the instruments used, the population and sample, the data collection method, and the statistical procedures used in the data analysis. The purpose of this study is to measure the concepts of internal-external locus of control and self-esteem among children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents, and to correlate these concepts with different grade levels (or ages). Internal locus of control was measured by the Nowicki-Strickland Locus-of-Control Scale for Children. Self-esteem was measured by the Coopersmith Self-Esteem Inventory (SEI), Form A.

Instruments Used

The Nowicki-Strickland Locus-of-Control Scale for Children (see Appendix A) is a paper and pencil measure which consists of forty questions (e.g., "Do you believe that most problems will solve themselves if you don't fool with them"?). If the subject agrees with the question he is instructed to draw a circle around YES. If the subject does not agree with the question, he is asked to draw a circle around NO. Subjects were instructed that there were no right or wrong answers and that all responses would be kept confidential. The locus

of control score was calculated by summing the items keyed to give external direction. The higher the score, the more external is the orientation.

This form of the measure was derived from work which began with a large number of items (k = 102), constructed on the basis of Rotter's (1966) definition of the internal-external control of reinforcement dimension. The items describe reinforcement situations across interpersonal and motivational areas such as affiliation, achievement, and dependency. The test items, along with Rotter's description of the locus of control dimension, were then given to a group of nine clinical psychology staff members who were asked to answer the items in an external direction. Items were dropped for which there was not complete agreement among the judges, leaving fifty-nine items. Item analysis reduced the test further to the present forty items. The test included a variety of samples, ranging from third grade through college. The main sample consisted of 1017 children ranging from third through twelfth grade in four different communities.

Hollingshead's Index of Social Position Scale was used to obtain the socioeconomic data of the samples. According to the rankings, all levels of occupations were very well represented in the samples. Intelligence test scores, measured by the Otis Lennon Scale for males and females in grades three through twelve, ranged from means of 101 to 106 with no significant differences across groups.

Estimates of the internal consistency by the split-half method, corrected by the Spearman-Brown prophecy formula, are r = .63 (grades 3 through 5), r = .68 (grades 6 through 8), r = .74 (grades 9 through 11), and r = .81 (grade 12). Approximate sample sizes for the first

three groups were three hundred students, and 87 students were used for the grade twelve group.

Others have reported information concerning the internal consistency of the Nowicki-Strickland Locus-of-Control Scale for Children. Anderson (1976) reported KR_{20} = .68 for 80 third grade students. Wyner and Blanchard (1976) reported coefficient alphas of between .65 to .70 for 166 elementary school age children. Edwards (1972) found a test-retest reliability of .63 over a nine month period for 202 third and sixth grade children. Anderson (1976) reported a test-retest reliability coefficient of .67 over a six week period for 80 third and fourth grade students.

In terms of validity of the Nowicki-Strickland Locus-of-Control Scale for Children, Nowicki and Strickland (1973) reported moderate relations between their scale and the other measures of locus of control. For example, the Intellectual Achievement Responsibility Scale (Crandall, Katkovsky, and Crandall, 1965) indicated significant correlations with I+ but not the I- scores, with 182 Negro third grade and seventh grade subjects (the third grade, $r = .31$, $P < .01$; seventh grade, $r = .51$, $P < .01$). In addition, Nowicki and Strickland (1973) showed a significant correlation with the Bialer-Cromwell Children's Locus of Control Scale ($r = .4$, $P < .05$) in a sample of 29 white children ages nine through eleven.

The Coopersmith Self-Esteem Inventory (SEI), Form A (see Appendix B) is devised for use with individuals ages nine to adulthood. The Inventory consists of fifty trait-descriptive sentences (e.g., "I'm pretty sure of myself"), to which the subject responds by checking either "Like Me or Unlike Me." The self-esteem score is calculated by

summing the items scored in the positive direction. That is, the higher the score, the more positive is the self-esteem. Subjects were instructed that there were no right or wrong answers and that all responses would be kept confidential.

The Inventory consists of four subscales designed to measure evaluative attitudes toward the self in social, academic, family, and personal areas of experience. It also has a lie scale to assess extremely socialized response set. Table I gives the Intercorrelation Matrix for SEI subscales. The fifty items of the scale are divided into two groups--those indicative of high self-esteem and those indicative of low self-esteem. Each subscale contains both high and low self-esteem items.

General Self subscale deals with the individual's general self-esteem as it is perceived adequate, inadequate, or in total rejection. The subject is asked to respond to statements (e.g., "I'm pretty sure of myself."). The Social Self subscale deals with the individual's relationships, social roles, and attitudes toward his peers and significant others. The subject is asked to respond to statements (e.g., "I'm popular with kids my own age."). Home Parents subscale deals with the individual's family roles and relationship with his parents in his home environment. The subject is asked to respond to statements (e.g., "My parents usually consider my feelings."). School Academic subscale deals with the individual's feelings about school achievements, and general academic successes and failures. The subject is asked to respond to statements (e.g., "I'm proud of my school work."). Lie subscale items are not counted in scoring the test for self-esteem. This subscale is comprised of fairly absolute statements

and the subject is asked to respond to statements (e.g., "I never worry about anything.").

The original pool of items was drawn from Rogers and Dymond (1954) and Coopersmith's (1967) original research. Rogers and Dymond extensively investigated the construct self-esteem with individuals who were enrolled in psychotherapy sessions. Coopersmith's original research consisted of a series of extensive investigations and experiments specifically dealing with the antecedents of self-esteem in children and adults.

Reliability measures have been derived by several researchers. Fullerton (1972) reported a correlation of .87 while Taylor and Reitz (1968) reported a correlation of .90 split half reliability. A test-retest reliability for the original fifty-item scale was .88 over five weeks and .70 over three years (Coopersmith, 1967). Fullerton (1972) reported a test-retest reliability of .64 over a 12 month interval.

In terms of validity of the SEI, Getsinger (1972) reported a correlation of .63 between the Soares Scale and the SEI, and .60 between a derived picture test and the SEI. Taylor and Reitz reported a correlation of .45 between the CPI Self-Acceptance Scale and the SEI and correlation of .75 and .44 with the Edwards and the Marlowe-Crowne Social Desirability scales, respectively. Ziller et al. (1969) found correlations for males of .46 with the Bill's Scale, .37 with the Cutick Scale, and .02 with the Ziller Scale; for females correlations were .17, .23, and .04 with Cutick Scale.

TABLE I

INTERCORRELATION MATRIX FOR SEI SUBSCALES

	GS	SSP	HP	SA	LIE
GS	----	0.49	0.52	0.42	0.02
SSP	0.49	----	0.28	0.29	0.09
HP	0.52	0.28	----	0.45	0.04
SA	0.43	0.29	0.45	----	0.12
LIE	-.02	0.09	0.04	0.12	----
	r = .12	P < .01;	r = .08	P < .05	

GS = General Self
SSP = Social Self
HP = Home Parents
SA = School Academic
LIE = Lie

Population and Sample

The investigation was conducted during the spring semester of 1980. The subjects for this study were drawn from a total of seventeen schools located in two different counties in north-central Oklahoma: twelve elementary schools, three middle schools, and three high schools. The subjects in the learning disabled group were selected on the basis of teacher recommendations of students from the various learning disabilities programs. The entire learning disabled population was used. All who were thought not truly learning disabled were excluded from the sample. The subjects in the non-learning disabled group were selected from a pool of names utilizing a table of random numbers technique. Demographic records show that approximately eighty-six percent of the population is white, approximately seven percent is Native American, approximately five percent is black, and approximately two percent is Spanish and Oriental. Every third grade or year was selected in order to cover a reasonable age range for the observation of developmental trends which may exist across the age groups. The drawn samples were comprised of three different grade levels: the grade four sample consisted of 34 students diagnosed as learning disabled and 34 non-learning disabled students; grade seven consisted of 22 students diagnosed as learning disabled and 22 non-learning disabled students; and grade ten consisted of 18 students diagnosed as learning disabled and 18 non-learning disabled students. In all, 148 students were used in this investigation.

The following criteria were met by all students included as subjects for the sample of this study:

1. Group one included subjects who were diagnosed as "learning disabled," and were enrolled in the special education program.
2. The eligibility, identification, and definition criteria for the learning disabled were determined from the guidelines and handbook for special education programs in the state of Oklahoma.
3. Group two included non-learning disabled subjects who were enrolled in regular school curriculum and were achieving at their respective grade placement levels.
4. On the basis of teacher observations and recommendations, all the students who were included in the study were informally observed as being free of gross mental, physical, or emotional handicaps which might interfere with the learning process.
5. Teacher judgment was sought regarding the classification of each of the 148 students in the study. If teacher judgment differed in regards to a student's inclusion in a group, the student was replaced in the sample. A total of six students were replaced.
6. Due to a limited number of the learning disabled population, the sample selection at each different grade level was based on teacher judgment and voluntary participation of the individual student.
7. Since the nature of the study was particularly focused on feelings and attitudes, all of the

randomly selected students were given the free choice of either participating or rejecting participation in the study.

8. Parental permission forms were signed and obtained for all of the selected students who participated in the study. After random selection of the students was completed, the investigator developed a standard letter containing specific information about the nature and purpose of the study, and requested the parents to grant permission, if their child is willing to participate in the study. A format copy of the letter is included in Appendix C. Original letterheads were obtained from each respective school principal.
9. At the end of the indicated return dates, telephone follow up was conducted by the investigator for unreturned and nonrespondent parent permission forms.
10. For those students who were absent at the time testing was conducted, special make-up session arrangements were made with the cooperation of teachers and principals of each respective school.

Data Collection Method

The Nowicki-Strickland Locus of Control Scale for Children and the Coopersmith Self-Esteem Inventory were administered to both children and adolescents diagnosed as learning disabled and the non-learning disabled groups. The subjects were tested in an appropriate locale

during school hours on the school premises between the dates of March 4, 1980, and May 2, 1980. The students were informed of the nature and the purpose of the testing and assured of the confidentiality of their scores. Strict adherence to the standardized directions and procedures was followed. The tests were administered by the investigator with the assistance of the classroom teachers who acted as monitors and coordinators. At the time of test administration, the students were divided into small groups of five in each group, and each item of the test was read aloud in order to assure understanding. Some student questions were answered by defining words or rephrasing test items, particularly for subjects at the lower grade levels who might have a limited vocabulary or reading difficulties.

Statistical Procedures Used for Data Analysis

Each of the statistical analyses which follow utilized the Statistical Analysis System computer program (SAS). Analyses were conducted at the Oklahoma State University Computer Center on IBM System 370/158 computer.

The F Test for unequal cell ns 3 x 2 analysis of variance was conducted to test and determine significant differences between the means of locus of control and the means of self-esteem for children and adolescents diagnosed as learning disabled and non-learning disabled across fourth, seventh, and tenth grade levels.

$$F = \frac{MS_{bg}}{MS_{wg}}$$

Duncan's Multiple Range Test, as a post hoc comparison approach was used to determine whether or not the obtained F values were significantly different at the .05 level of confidence. More specifically, the objective of Duncan's Multiple Range Test was to identify the SC (Studentized Critical) significant difference between the group means of learning disabled and non-learning disabled students across fourth, seventh, and tenth grades.

$$\text{C. diffs.} = K_r \sqrt{\frac{\text{MS within gp. error}}{n \text{ (per gp.)}}}$$

$$\bar{n} = \frac{\text{number of groups}}{\frac{1}{n_1} + \frac{1}{n_2} + \frac{1}{n_3}}$$

Finally, the Pearson Product-Moment correlation coefficient technique was used to determine the degree of relationship that might exist between locus of control and self-esteem across grade levels for both children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents.

$$r = \frac{\frac{XY}{N} - \bar{\bar{XY}}}{S_x \quad S_y}$$

CHAPTER IV

STATISTICAL ANALYSIS

Introduction

Presented in this chapter are the results of the analysis of the data for each hypothesis presented in Chapter II. This chapter presents the results of analysis of variance of selected variables of locus of control and self-esteem in children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents across fourth, seventh, and tenth grade levels. Research Hypothesis I deals with the locus of control score means between children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents across fourth, seventh, and tenth grade levels; Research Hypothesis II deals with the self-esteem score means between children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents across fourth, seventh, and tenth grade levels; and Research Hypothesis III deals with the relationship between the locus of control and self-esteem scores for children and adolescents diagnosed as learning disabled and non-learning disabled children of adolescents across fourth, seventh, and tenth levels.

In order to determine how the three grades differ in each group, Duncan's Multiple Range Test for unequal numbers was used to determine which differences between the means are significant and which are not.

Hypothesis I: Children and adolescents diagnosed as learning disabled will have higher external locus of control scores across fourth, seventh, and tenth grade levels than the non-learning disabled children and adolescents.

The results of the analysis of variance of locus of control scores for children and adolescents diagnosed as learning disabled and the non-learning disabled children and adolescents are presented in Table II. Significant differences were found between the means of children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents across fourth, seventh, and tenth grade levels, with the variable locus of control. The following F ratios were obtained: for the learning disabled group, $F = 27.23$, for the non-learning disabled group, $F = 12.96$, and for the interaction between the two groups, $F = 2.26$. The F ratios of both groups are significant at .05 level of confidence, with no significant interaction.

Locus of Control: Group and Grade Differences

One of the important questions in this study was: Will children and adolescents diagnosed as learning disabled have higher external locus of control scores than the non-learning disabled children and adolescents? Table III presents the results of locus of control for both learning disabled and non-learning disabled groups for grades four, seven, and ten. From it we see that the mean external locus of control scores obtained by children and adolescents diagnosed as learning disabled are numerically higher than the non-learning disabled

TABLE II

ANALYSIS OF VARIANCE OF LOCUS OF CONTROL SCORES WITH CHILDREN AND ADOLESCENTS DIAGNOSED AS LEARNING DISABLED AND NON-LEARNING DISABLED CHILDREN AND ADOLESCENTS

Source of Variance	df	Sum of Squares	Mean Square	F
Grade	2	610.40	305.20	12.96*
Label	1	640.97	640.97	27.23*
Grade x Label	2	106.52	53.26	2.26
Error	142	3342.68	23.54	

*Significant at the .05 level of confidence.

TABLE III

MEANS AND STANDARD DEVIATIONS OF LOCUS OF CONTROL SCORES FOR LEARNING DISABLED AND NON-LEARNING DISABLED GRADES: FOUR, SEVEN, AND TEN

Grade	N	Mean	Standard Deviation
Learning Disabled Group:			
4	34	18.79	4.44
7	22	17.36	5.57
10	18	15.72	4.84
Non-Learning Disabled Group:			
4	34	16.47	5.24
7	22	11.72	2.74
10	18	9.88	5.80

children and adolescents at each grade four, seven, and ten, respectively. The above obtained data partially did concur with the investigator's first stated hypothesis. These data are also supported by the results suggested from the review of the literature (Hallahan, 1978; Tolor and Blumin, 1977; Hisama, 1978).

On a group basis, the obtained mean external locus of scores for the learning disabled group is higher than the non-learning disabled group. These results are displayed in Table IV. A further analysis of the two group means shows that the locus of control of the learning disabled group is significantly higher than the non-learning disabled group. The results for these comparisons of the two group means are shown in Table V.

The locus of control score means of both learning disabled and non-learning disabled groups were also compared for between grade significant differences. The data for these analyses are shown in Table VI. From this table we can see that the locus of control score means of children and adolescents diagnosed as learning disabled grades seven and ten are significantly higher than the non-learning disabled seventh and tenth graders. However, no significant difference of means was found between the fourth graders.

For the purpose of more specificity, an analysis for significant differences was also conducted to determine within-grade differences for both the learning disabled and non-learning disabled groups, grades four, seven, and ten. The results in Table VII show that mean locus of control score of children disgnosed as learning disabled fourth graders is significantly higher than adolescents disgnosed as learning

TABLE IV

MEANS AND STANDARD DEVIATIONS OF LOCUS OF CONTROL SCORES FOR LEARNING DISABLED AND NON-LEARNING DISABLED GROUPS

N	Mean	Standard Deviation
Learning Disabled Group:		
74	17.62	4.98
Non-Learning Disabled Group:		
74	13.45	5.54

TABLE V

LOCUS OF CONTROL MEANS COMPARED FOR SIGNIFICANT DIFFERENCE BETWEEN LEARNING DISABLED AND NON-LEARNING DISABLED GROUPS

NLD Group	LD Group
13.15	17.62
LD Group	4.17*

*Studentized Critical difference significant at the .05 level of confidence.

TABLE VI

LOCUS OF CONTROL MEANS COMPARED FOR SIGNIFICANT DIFFERENCE BETWEEN LEARNING DISABLED AND NON-LEARNING DISABLED GRADES: FOUR, SEVEN, AND TEN

Grades Four	
$NLD\text{-}Grade_4$	$LD\text{-}Grade_4$
16.42	18.79
$NLD\text{-}Grade_4$	2.32
Grades Seven	
$NLD\text{-}Grade_7$	$LD\text{-}Grade_7$
11.72	17.36
$NLD\text{-}Grade_7$	5.64*
Grades Ten	
$NLD\text{-}Grade_{10}$	$LD\text{-}Grade_{10}$
9.88	15.72
$NLD\text{-}Grade_{10}$	5.84*

*Studentized Critical difference significant at the .05 level of confidence.

TABLE VII

LOCUS OF CONTROL MEANS COMPARED FOR SIGNIFICANT DIFFERENCE WITHIN LEARNING DISABLED GRADES: FOUR, SEVEN, AND TEN

	G_{10} 15.72	G_7 17.36	G_4 18.79
G_{10}		1.64	3.07*
G_7			1.43
G_4			

*Studentized Critical difference significant at the .05 level of confidence.

disabled tenth graders. No significant differences, however, are found within the means of fourth and seventh graders, nor the seventh and tenth graders.

For the non-learning disabled group, an examination of within-grade differences show that the mean locus of control score of grade four is significantly higher than grades seven and ten. No significant differences, however, are found within the means of grades seven and ten. The results of the above analyses are displayed in Table VIII.

Hypothesis II: Children and adolescents diagnosed as Learning Disabled will have lower self-esteem scores across fourth, seventh, and tenth grade levels than the Non-Learning Disabled children and adolescents.

Self-Esteem: Group and Grade Differences

Table IX reports the results of the analysis of variance of self-esteem scores for children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents. The table shows that there is significant difference among the means of children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents on the variable self-esteem. The results of this analysis in Table IX indicate significant main effect on the variable self-esteem for the learning disabled and non-learning disabled groups. The following F ratios were obtained: for grades, F = 0.09; for the learning disabled and non-learning disabled groups, F = 8.86 (this value is significant at .05 level of confidence); and for interaction between label and grades, F = 0.11. Table X presents the separate means and standard deviations of self-esteem for learning

TABLE VIII

LOCUS OF CONTROL MEANS COMPARED FOR SIGNIFICANT DIFFERENCE WITHIN NON-LEARNING DISABLED GRADES: FOUR, SEVEN, AND TEN

	G_{10} 9.88	G_7 11.72	G_4 16.47
G_{10}		1.84	6.59*
G_7			4.75*
G_4			

*Studentized Critical difference significant at the .05 level of confidence.

TABLE IX

ANALYSIS OF VARIANCE OF SELF-ESTEEM SCORES WITH CHILDREN AND ADOLESCENTS DIAGNOSED AS LEARNING DISABLED AND NON-LEARNING DISABLED CHILDREN AND ADOLESCENTS

Source of Variance	df	Sum of Squares	Mean Square	F
Grade	2	15.36	7.68	0.09
Label	1	731.36	731.36	8.86*
Grade x Label	2	17.74	8.87	0.11
Error	142	11724.94	82.57	

*Significant at the .05 level of confidence.

TABLE X

MEANS AND STANDARD DEVIATIONS OF SELF-ESTEEM SCORES FOR LEARNING DISABLED AND NON-LEARNING DISABLED GRADES: FOUR, SEVEN, AND TEN

Grade	N	Mean	Standard Deviation
Learning Disabled Group:			
4	34	63.88	9.90
7	22	62.63	12.00
10	18	63.66	6.83
Non-Learning Disabled Group:			
4	34	68.17	8.56
7	22	68.04	8.82
10	18	67.22	5.98

disabled and non-learning disabled groups, grades four, seven, and ten. On a separate group basis Table XI shows the means and standard deviations of self-esteem scores for learning disabled and non-learning disabled groups. From the displayed data in this table we can see that the mean self-esteem score for the non-learning disabled group is numerically higher than the learning disabled. As a result of post hoc analysis for comparing significant differences, Table XII also shows that the mean self-esteem scores of the non-learning disabled group is significantly higher than the mean of the learning disabled group. This difference is significant at .05 level of confidence.

The learning disabled and non-learning disabled grades were also compared for between-grade differences on the variable self-esteem across grade levels. The results of the analysis of the post hoc test for significant differences between the learning disabled and non-learning disabled grade means are shown in Table XIII. The data in this table reveal no significant differences between grades in means for both children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents at each grade level.

For the purpose of more specificity, the variable, self-esteem, is examined on the basis of within-grade differences for both learning disabled and non-learning disabled groups. For the within group learning disabled grades no significant difference of means was present. The above results are shown in Table XIV. Similar results are displayed for the non-learning disabled grades in Table XV. The displayed results in this table show no significant difference of means within the non-learning disabled grades four, seven, and ten.

TABLE XI

MEANS AND STANDARD DEVIATIONS OF SELF-ESTEEM SCORES FOR LEARNING DISABLED AND NON-LEARNING DISABLED GROUPS

N	Mean	Standard Deviation
Learning Disabled Group:		
74	63.45	9.84
Non-Learning Disabled Group:		
74	67.90	8.00

TABLE XII

SELF-ESTEEM MEANS COMPARED FOR SIGNIFICANT DIFFERENCE BETWEEN LEARNING DISABLED AND NON-LEARNING DISABLED GROUPS

LD-Group	NLD-Group
63.45	67.90
LD-Group	4.45*

*Studentized Critical difference significant at the .05 level of confidence.

TABLE XIII

SELF-ESTEEM MEANS COMPARED FOR SIGNIFICANT DIFFERENCE BETWEEN LEARNING DISABLED AND NON-LEARNING DISABLED GRADES: FOUR, SEVEN, AND TEN

---------- Grades Four ----------	
$LD\text{-}Grade_4$	$NLD\text{-}Grade_4$
63.88	68.17
$LD\text{-}Grade_4$	4.29
---------- Grades Seven ----------	
$LD\text{-}Grade_7$	$NLD\text{-}Grade_7$
62.63	68.04
$LD\text{-}Grade_7$	5.41
---------- Grades Ten ----------	
$LD\text{-}Grade_{10}$	$NLD\text{-}Grade_{10}$
63.66	67.22
$LD\text{-}Grade_{10}$	3.66

Note: Studentized Critical difference not significant at the .05 level of confidence.

TABLE XIV

SELF-ESTEEM MEANS COMPARED FOR SIGNIFICANT DIFFERENCE WITHIN LEARNING DISABLED GRADES: FOUR, SEVEN, AND TEN

	G_7 62.63	G_{10} 63.66	G_4 63.88
G_7		1.03	.22
G_{10}			1.25
G_4			

Note: Studentized Critical difference not significant at the .05 level of confidence.

TABLE XV

SELF-ESTEEM MEANS COMPARED FOR SIGNIFICANT DIFFERENCE WITHIN NON-LEARNING DISABLED GRADES: FOUR, SEVEN, AND TEN

	G_{10} 67.22	G_7 68.04	G_4 68.17
G_{10}		.82	.13
G_7			.95
G_4			

Note: Studentized Critical difference not significant at the .05 level of confidence.

Hypothesis III: There will be higher positive relationship between internal locus of control and high self-esteem score for non-learning disabled children and adolescents than children and adolescents diagnosed as learning disabled across fourth, seventh, and tenth grade levels.

Learning Disabled: Group and Grade Differences

The Pearson Product-Moment correlation coefficients for both learning disabled and non-learning disabled groups of grades four, seven, and ten range from -.01 to -.64. The correlation coefficients between the two variables yielded negative values because of the following scoring rules. A high score on locus of control indicates a greater external control or externality than does a low score. A low score represents the internalization of the locus of control. By contrast, a high score on self-esteem indicates an independence of action and/or feeling, and therefore, would be expected to be positively correlated with low external locus of control scores and negatively correlated with high external locus of control scores. The results of Pearson Product-Moment correlation between locus of control and self-esteem for the total learning disabled group are presented in Table XVI. Significant negative relationship is found between locus of control and self-esteem for the learning disabled group. The yielded value of -.31 is significant at the .05 level of confidence.

The results shown in Table XVII indicate that the relationship between the variables locus of control and self-esteem at grade four is $r = -.31$; at grade seven is $r = -.47$; and at grade ten is $r = -.03$. These indicate that the only significant negative relationship between

TABLE XVI

CORRELATION BETWEEN LOCUS OF CONTROL AND SELF-ESTEEM FOR LEARNING DISABLED GROUP

df	r	P
72	-.31*	S

*Significant at the .05 level of confidence.

TABLE XVII

CORRELATION BETWEEN LOCUS OF CONTROL AND SELF-ESTEEM FOR LEARNING DISABLED GROUP AT GRADES: FOUR, SEVEN, AND TEN

Grade	df	r	P
4	32	-.31	NS
7	20	-.47*	S
10	16	-.03	NS

*Significant at the .05 level of confidence.

locus of control and self-esteem is for the seventh graders. The obtained value of -.47 is significant at the .05 level of confidence.

Non-Learning Disabled: Group and Grade Differences

The correlation between locus of control and self-esteem for the non-learning disabled children and adolescents as a group is presented in Table XVIII. The correlation coefficient value for the non-learning disabled group is -.36, and this is significant at .05 level of confidence.

Correlation coefficients for the non-learning disabled grades are presented in Table XIX. The correlation coefficients range from -.01 to -.64. As we can see from the results of this table the relationship between locus of control and self-esteem for the non-learning disabled grades are: fourth, $r = -.64$; seventh, $r = -.57$; and tenth, $r = -.01$. The relationship for grades four and seven are significant at .05 level of confidence.

Summary

In summary, the results of the analyses of variance show that both the non-learning disabled and learning disabled grade means are significantly different from each other on the variable of locus of control. Using Duncan's procedure as a post hoc test, it is found that the learning disabled seventh and tenth graders scored significantly higher than the non-learning disabled seventh and tenth graders on the variable external locus of control. However, no significant external

TABLE XVIII

CORRELATION BETWEEN LOCUS OF CONTROL AND SELF-ESTEEM FOR NON-LEARNING DISABLED GROUP

df	r	P
72	-.36*	S

*Significant at the .05 level of confidence.

TABLE XIX

CORRELATION BETWEEN LOCUS OF CONTROL AND SELF-ESTEEM FOR NON-LEARNING DISABLED GROUP AT GRADES: FOUR, SEVEN, AND TEN

Grade	df	r	P
4	32	-.64*	S
7	20	-.57*	S
10	16	-.01	NS

*Significant at the .05 level of confidence.

locus of control mean differences were found between the learning disabled and non-learning disabled fourth graders.

On the variable self-esteem, according to the analysis of variance, significant main effect is found for both the learning disabled and non-learning disabled groups. Post hoc procedure for analysis of significant differences between the mean self-esteem scores of learning disabled and non-learning disabled groups at each grade was utilized. The yielded differences of this analysis are not found to be significant possibly because of the smaller Ns of each group.

On separate group basis, the Pearson Product-Moment correlations between the variables locus of control and self-esteem are found to be significant for both learning disabled and non-learning disabled groups. Both obtained group coefficients are significant at the .05 level of confidence.

Finally, the results of the Pearson Product-Moment correlation between the variables locus of control and self-esteem for learning disabled and non-learning disabled grades yielded some significant findings. The correlation between locus of control and self-esteem is significant only for seventh grade learning disabled students. For the non-learning disabled group, the correlations between these variables are significant for both fourth and seventh grade students.

CHAPTER V

DISCUSSION OF THE RESULTS, CONCLUSIONS, AND RECOMMENDATIONS

Overview of the Study

The means of children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents across fourth, seventh, and tenth grade levels were compared for significant difference on the variables locus of control and self-esteem. An analysis of the degree of relationships between locus of control and self-esteem was also completed for the learning disabled and non-learning disabled groups at grades four, seven, and ten. The study included two independent samples: one of learning disabled subjects and one of non-learning disabled subjects. Each of the groups consisted of 74 subjects. A total of 148 subjects were included in the study.

The Nowicki-Strickland Locus of Control Scale for Children (Nowicki and Strickland, 1973) was used as a measure of locus of control and Coopersmith's Self-Esteem Inventory (SEI), Form A (Coopersmith, 1967) was used as a measure of self-esteem. Using a 3 x 2 analysis of variance technique for unequal numbers, Duncan's Multiple-Range Test and the Pearson Product-Moment correlation, important differences and relationships were identified.

Overview of Results

The results of this study are presented in detail in Chapter IV. Basically these results can be stated concisely: (1) The mean external locus of control scores for children and adolescents diagnosed as learning disabled are numerically higher than the non-learning disabled children and adolescents across grades four, seven, and ten. However, only grades seven and ten are significantly different at .05 level of confidence. (2) The mean self-esteem scores for children and adolescents diagnosed as learning disabled are numerically lower than the non-learning disabled children and adolescents across grades four, seven, and ten. However, the differences of these scores are not significant at any grade level. The overall difference between the groups was significant at .05 level of confidence. (3) The relationship between external locus of control and self-esteem is significant at .05 level of confidence for non-learning disabled fourth and seventh graders and learning disabled seventh graders. On a group basis, the relationship between external locus of control and self-esteem is negative and significant at .05 level of confidence for both the learning disabled and non-learning disabled groups.

Discussion of Results and Conclusions

Discussion of Results as Related to Hypothesis I

The hypothesis for locus of control was partially supported. The external locus of control score means for children and adolescents diagnosed as learning disabled are numerically higher than the means of

non-learning disabled children and adolescents. The results of this study indicate that children and adolescents diagnosed as learning disabled rated themselves as more external at grades seven and ten than the non-learning disabled seventh and tenth grade children and adolescents. These findings are consistent with results of previous studies (Hallahan, 1978; Tolor and Blumin, 1977; Hisama, 1978), reporting that learning disabled children exhibit a greater degree of external control than the non-learning disabled children.

However, in terms of dealing with locus of control and grade (age), it is found that the mean external locus of control score of learning disabled fourth graders is significantly higher than the mean of learning disabled tenth graders. It is also found that mean external locus of control scores for the non-learning disabled fourth graders are significantly higher than the non-learning disabled seventh and tenth graders. On the basis of between grade comparisons, the analysis of post hoc test shows the obtained mean external locus of control scores of the learning disabled seventh and tenth graders are significantly higher than the non-learning disabled seventh and tenth graders. Learning disabled fourth graders significantly rated themselves as more external than learning disabled tenth graders, and the non-learning disabled fourth graders significantly rated themselves more external than the non-learning disabled seventh and tenth graders.

One of several explanations for the lack of difference in locus of control for children diagnosed as learning disabled and non-learning disabled at the fourth grade level is on developmental grounds. This explanation is supported by research (e.g., Moursund, 1976); as the child grows and matures, his area of experiences broadens, he begins

to move about and manipulates his physical environment, and gradually he begins to change from a relatively helpless receiver to an active initiator. As he masters his environment, his locus of control becomes more internal as a result of physical distance from adult significant others and reliance on his own mastery of the environment.

In summary it might be concluded that opportunities for self-determination are usually less for all children at younger age levels. It also might be speculated that the restrictions and regimentations of the environment of special education could cause the older learning disabled children or adolescents to continue to maintain more external locus of control than the non-learning disabled children and adolescents as they get into higher grade levels. Therefore, on the basis of previous related research and the results of this study, it seems valid to conclude that children and adolescents diagnosed as learning disabled are more externally oriented than non-learning disabled children and adolescents at grades seven and ten.

Discussion of Results as Related to Hypothesis II

The results of this study revealed numerically lower self-esteem scores for the learning disabled group at all three grade levels. On a group basis, the difference was significant at the .05 level of confidence for the total group. It could be postulated that the larger N of the total groups combined resulted in the statistisally significant difference between the non-learning disabled self-esteem mean score as compared with the self-esteem mean score of the learning disabled group. However, the differences of the scores are not significant at each grade level.

The finding of statistical significance for the total group and the consistency of the lower self-esteem scores at all grade levels for the learning disabled as compared for the non-learning disabled would indicate a consistent trend. Further research could additionally isolate these differences.

These results are partially supportive of this hypothesis that children and adolescents diagnosed as learning disabled were expected to have lower scores of self-esteem than the non-learning disabled children and adolescents. This pattern of results for self-esteem in children and adolescents diagnosed as learning disabled is also consistent with studies conducted by Larsen, Parker, and Jorjorian (1973). The results of their study indicated that third and fourth grade children with learning disabilities demonstrated significantly lower self-esteem scores than normal children. The general findings in relation to hypothesis II do reveal numerically higher mean self-esteem scores at every grade level for the non-learning disabled than for the learning disabled group. These results are displayed in Table X.

The reason that children and adolescents diagnosed as learning disabled have lower self-esteem scores across fourth, seventh, and tenth grade levels than the non-learning disabled children and adolescents might be that they have been viewed by teachers, professionals, and adults as persons who have severe learning and behavior problems, and have been labeled as lazy, and have been placed in special education programs. As a result of the above negative experiences, the children and adolescents diagnosed as learning disabled view themselves as failures and feel very inadequate in coping with life situations and, therefore, maintain a lower self-esteem. However, the

lack of finding significant differences between mean self-esteem scores at each grade level is possibly because of the small size of N.

Discussion of Results as Related to Hypothesis III

In order to be able to understand and interpret the results of the correlation values, it is important to know the following scoring rules which result in inverse relationships between the scores of the two instruments. A high score of locus of control indicates a greater external control or externality than does a low score. A low score represents the internalization of the locus of control. By contrast, a high score on self-esteem indicates an independence of action and/or feeling, and, therefore, would be expected to be positively correlated with low external locus of control scores and negatively correlated with high external locus of control scores.

The Pearson Product-Moment correlation coefficients between locus of control and self-esteem are found to be significant for both learning disabled and non-learning disabled groups. It might be speculated that failure leads to external locus of control and success leads to internal locus of control. It also might be assumed that as a cause and effect relationship, locus of control is a consequence of self-esteem. Therefore, children and adolescents who view themselves less positively also tend to feel helpless, powerless, and subsequently become more externally oriented.

On grade-to-grade basis, significant negative correlations between external locus of control and positive self-esteem are found for non-learning disabled fourth and seventh graders, and for learning

disabled seventh graders. The lack of significant correlation for children diagnosed as learning disabled at the fourth grade level might be due to small size of N. However, at grade ten, the correlation coefficient for adolescents diagnosed as learning disabled and non-learning disabled adolescents is not significant. This lack of relationship between locus of control and self-esteem for older children might be explained in several ways.

First, Watkin (1978) points out: As a child grows into adult life, areas such as "the heterosexual" and "the economic" may well increase markedly in significance for him. At the same time, he is developing value systems and is at time hypercritical of his abilities to cope with these changes. As a result of these transitional changes from childhood to adult life, the child's self-esteem and self-ratings could well be low. Therefore, some of the tenth grade students might have rated themselves low on self-esteem as suggested by the restricted range of scores on the variable self-esteem. Thus, it might be concluded that the truncated range of the self-esteem scores might have led to a decrease in the relationship.

Second, there is a possibility that the instruments in this study do not accurately measure self-esteem and internality with adolescents. The self-esteem measure, for example, may be reflecting a defensive or unrealistic self-esteem rather than an accurate subjective view of the self. Similarly, the locus of control scale may elicit responses with apparent social desirability, yielding a picture of what the older students believe the locus of control ought to be rather than what they perceive it actually to be in their own experiences. The restricted range of scores for the adolescents on the variable of self-esteem may

have decreased the relationship of the two. If the validity of their responses can be questioned, maybe the adolescents did not want to divulge their true feelings and experiences, and, therefore, this "faking" type of responding pattern restricted the range of scores which decreased the relationship. Problems such as this indicate the need for further research on the construct validity and reliability of both these instruments when used with adolescent persons.

Summary

The purpose of this study was to investigate the developmental relationships across grade levels for the following variables: Internal-external locus of control, self-esteem, and the relationship between the two constructs in children and adolescents diagnosed as learning disabled and non-learning disabled children and adolescents. The learning disabled group (N = 74) and non-learning disabled group (N = 74) were randomly selected from grades four, seven, and ten. A total of 148 subjects were used in the study. Internal-external locus of control was measured by the Nowicki-Strickland Locus of Control Scale for Children. and self-esteem was measured by the Coopersmith Self-Esteem Inventory, Form A. Three by two (3 x 2) analysis of variance for unequal Ns, the Duncan's Multiple Range Test, and the Pearson Product-Moment correlation coefficient were used to analyze the data. The alpha of .05 was established to identify significant differences and relationships between the variables. The quantitative data were secured for testing the following hypotheses. Hypothesis I: Children and adolescents diagnosed as learning disabled will have higher external locus of control scores across fourth, seventh, and tenth grade levels than the

non-learning disabled children and adolescents. Hypothesis II: Children and adolescents diagnosed as learning disabled will have lower self-esteem scores across fourth, seventh, and tenth grade levels than the non-learning disabled children and adolescents. Hypothesis III: There will be a higher positive relationship between internal locus of control and self-esteem scores for non-learning disabled children and adolescents than for children and adolescents diagnosed as learning disabled across fourth, seventh, and tenth grade levels.

The analysis of the data led to the following conclusions: (1) the learning disabled seventh and tenth graders obtained significantly higher external locus of control scores than the non-learning disabled seventh and tenth graders. On group comparison basis the mean external locus of control score for the learning disabled group was significantly higher than the non-learning disabled group. (2) On the variable self-esteem, no significant difference was found between the mean self-esteem scores of learning disabled and non-learning disabled across the fourth, seventh, and tenth grade levels. However, the non-learning disabled group overall mean self-esteem was significantly higher than the non-learning disabled group. (3) Because of the method of scoring of the instruments, there is an inverse relationship between the scores, i.e., a high on locus of control score correlates positively with a low self-esteem score. Thus, the obtained correlations yielded negative values. Significant negative relationships between locus of control and self-esteem was found for learning disabled seventh graders and non-learning disabled fourth and seventh graders. Significant correlation between the variables locus of control and

self-esteem was also found for both the learning disabled and non-learning disabled groups.

The data in the present study also indicated that, in general, the children and adolescents diagnosed as learning disabled rated themselves more externally on their locus of control and viewed themselves less positively than the non-learning disabled children and adolescents.

Recommendations

The following are recommendations concerning further research. Some practical applications are suggested in terms of using the results of this study in dealing with children and adolescents diagnosed as learning disabled in regard with their locus of control and self-esteem.

Research Recommendations

1. This study needs to be replicated in order to establish more clearly the direction of locus of control (external to internal) and self-esteem (low to high) in children and adolescents diagnosed as learning disabled. This research is particularly important considering the conflicting and ambiguous results from studies in this area.

2. The grade levels used in this study were fourth, seventh, and tenth. Further studies should use students in lower, between, and higher grades not included in this study.

3. Although this investigator was basically interested in the variables locus of control and self-esteem in children and adolescents diagnosed as learning disabled, additional investigation should be made to determine whether labeling and subsequently treating a child as

learning disabled causes a greater degree of external locus of control and/or also causes lower self-esteem.

4. Although a general interpretation of this study and previous research suggests that internal locus of control, positive self-esteem, and age are positively related in children and adolescents, more studies are needed to determine if these associations hold across socioeconomic, ethnic, and other groupings (e.g., low, middle, high socioeconomic status, of Whites, Blacks, Native Americans, Spanish, Orientals, broken homes, one parent homes, etc.).

5. Some research needs to be done in the education of the teachers of children and adolescents diagnosed as learning disabled. Teachers should be trained to know what kind of locus of control and what level of self-esteem children and adolescents diagnosed as learning disabled might have. The teacher will be able to better identify and understand these children in regard to their emotional, social, and motivational dynamics. In the case of the externally-oriented children and adolescents diagnosed as learning disabled in particular, it is very likely that they are regarded as "lazy" children and adolescents.

6. Further research is needed to re-examine the practices and innovations of teachers and educators of children and adolescents diagnosed as learning disabled, not only in light of how the professionals affect academic development, but how they contribute to the development of the more informal reinforcement of locus of control and positive self-esteem of the children and adolescents diagnosed as learning disabled.

7. A study should be developed to attempt to determine what factors affect the lack of a significant correlation between locus of

control and self-esteem among tenth grade learning disabled and non-learning disabled students.

8. Further studies should be conducted in the areas of locus of control and self-esteem using at least two types of instrumentation for each variable. The instruments would be selected with this guideline in mind, for example, combining the use of a projective technique with the paper and pencil response type of instrument for both locus of control and self-esteem variables.

9. Longitudinal studies should be conducted encompassing birth through age 18 to determine the developmental sequences of the establishment of internal-external locus of control and level of self-esteem.

10. Finally, since a positive self-esteem is generally regarded as essential for healthy personality development and subsequent success in school, further research should identify educational strategies that may prove useful in alleviating both academic failure and subtle self-esteem problems in children and adolescents diagnosed as learning disabled.

Practical Applications Recommendations

1. Teachers could help children and adolescents diagnosed as learning disabled change their locus of control from an external to an internal direction by providing them with realistic success experiences on educational tasks and leading them to realize that events are mainly the results of their own actions, not outside forces such as fate, chance, or luck. Teaching children and adolescents diagnosed as learning disabled that they have control over their own behavior consequences is very important. Many children and adolescents diagnosed as learning disabled may feel that they are destined to failure in school and they

have no control over their environmental happenings. Remediation and treatment programs should strive to provide children and adolescents diagnosed as learning disabled with feelings of control over their own behavior by stressing the cause and effect relationship that are in operation.

2. Teachers and parents of children and adolescents diagnosed as learning disabled should work cooperatively together to promote maximum self-direction for the students as possible.

Concluding Comment

It is hoped that the results of this study will facilitate the understanding of the nature and the development of locus of control and self-esteem of children and adolescents diagnosed as learning disabled. Perhaps it will be a stimulus to researchers, investigators, and educators to examine further the constructs of locus of control and self-esteem as they relate to children and adolescents diagnosed as learning disabled from various backgrounds and of differing ages. It is also the hope of this investigator that this study has laid the groundwork for more comprehensive studies, specifically dealing with children and adolescents diagnosed as learning disabled.

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APPENDIXES

APPENDIX A

NOWICKI-STRICKLAND LOCUS OF CONTROL SCALE FOR CHILDREN

PLEASE PRINT

NAME _____ AGE _____

SCHOOL _____

GRADE _____ SEX: M____ F____ DATE _____

DIRECTIONS

We are trying to find out what boys and girls your age think about certain things. We want you to answer the following questions the way you feel. If you do agree with the question draw a circle around YES. If you do not agree with the question draw a circle around NO. There are no right or wrong answers. Don't take too much time answering any one question, but do try to answer them all.

Example: Do you have four noses? YES NO

There are 40 questions to be answered.
Answer every question.

Nowicki-Strickland Locus of Control
Scale for Children

1.	Do you believe that most problems will solve themselves if you just don't fool with them?	Y	N
2.	Do you believe that you can stop yourself from catching a cold?	Y	N
3.	Are some kids just born lucky?	Y	N
4.	Most of the time do you feel that getting good grades means a great deal to you?	Y	N
5.	Are you often blamed for things that just aren't your fault?	Y	N
6.	Do you believe that if somebody studies hard enough he or she can pass any subject?	Y	N
7.	Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway?	Y	N
8.	Do you feel that if things start out well in the morning that it's going to be a good day no matter what you do?	Y	N

9.	Do you feel that most of the time parents listen to what their children have to say?	Y	N
10.	Do you believe that wishing can make good things happen?	Y	N
11.	When you get punished does it usually seem it's for no good reason at all?	Y	N
12.	Most of the time do you find it hard to change a friend's (mind) opinion?	Y	N
13.	Do you think that cheering more than luck helps a team to win?	Y	N
14.	Do you feel that it's nearly impossible to change your parent's mind about anything?	Y	N
15.	Do you believe that your parents should allow you to make most of your own decisions?	Y	N
16.	Do you feel that when you do something wrong there's very little you can do to make it right?	Y	N
17.	Do you believe that most kids are just born good at sports?	Y	N
18.	Are most of the other kids your age stronger than you are?	Y	N
19.	Do you feel that one of the best ways to handle most problems is just not to think about them?	Y	N
20.	Do you feel that you have a lot of choice in deciding who your friends are?	Y	N
21.	If you find a four leaf clover do you believe that it might bring you good luck?	Y	N
22.	Do you often feel that whether you do your homework has much to do with what kind of grades you get?	Y	N
23.	Do you feel that when a kid your age decides to hit you, there's little you can do to stop him or her?	Y	N
24.	Have you ever had a good luck charm?	Y	N
25.	Do you believe that whether or not people like you depends on how you act?	Y	N
26.	Will you parents usually help you if you ask them to?	Y	N
27.	Have you felt that when people were mean to you it was usually for no reason at all?	Y	N

28.	Most of the time, do you feel that you can change what might happen tomorrow by what you do today?	Y	N
29.	Do you beleive that when bad things are going to happen they just are going to happen no matter what you try to do to stop them?	Y	N
30.	Do you think that kids can get their own way if they just keep trying?	Y	N
31.	Most of the time do you find it useless to try to get your own way at home?	Y	N
32.	Do you feel that when good things happen they happen becuase of hard work?	Y	N
33.	Do you feel that when somebody your age wants to be your enemy there's little you can do to change matter?	Y	N
34.	Do you feel that it's easy to get friends to do what you want them to?	Y	N
35.	Do you usually feel that you have little to say about what you get to eat at home?	Y	N
36.	Do you feel that when someone doesn't like you there's little you can do about it?	Y	N
37.	Do you usually feel that it's almost useless to try in school because most other children are just plain smarter than you are?	Y	N
38.	Are you the kind of person who believes that planning ahead makes things turn out better?	Y	N
39.	Most of the time, do you feel that you have little to say about what your family decides to do?	Y	N
40.	Do you think it's better to be smart than to be lucky?	Y	N

APPENDIX B

COOPERSMITH SELF-ESTEEM INVENTORY, FORM A

COOPERSMITH SELF-ESTEEM INVENTORY, FORM A

NAME _____ AGE _____

SCHOOL _____

GRADE _____ SEX M/F DATE _____

DIRECTIONS

On this page, you will find a list of statements about feelings. If a statement describes how you usually feel, put a check (X) in the column "LIKE ME." If the statement does not describe how you usually feel, put a check (X) in the column "UNLIKE ME."

There are no right or wrong answers.

Example:	Like Me	Unlike Me
I am a hard worker.	_____	_____

		Like Me	Unlike Me
1.	I spend a lot of time daydreaming.	_____	_____
2.	I'm pretty sure of myself.	_____	_____
3.	I often wish I were someone else.	_____	_____
4.	I'm easy to like.	_____	_____
5.	My parents and I have a lot of fun together.	_____	_____
6.	I never worry about anything.	_____	_____
7.	I find it very hard to talk in front of the class.	_____	_____
8.	I wish I were younger.	_____	_____
9.	There are lots of things I'd change about myself if I could.	_____	_____
10.	I can make up my mind without too much trouble?	_____	_____
11.	I'm a lot of fun to be with.	_____	_____
12.	I get upset easily at home.	_____	_____
13.	I always do the right thing.	_____	_____

		Like Me	Unlike Me
14.	I'm proud of my school work.	_____	_____
15.	Someone always has to tell me what to do.	_____	_____
16.	It takes me a long time to get used to anything new.	_____	_____
17.	I'm often sorry for the things I do.	_____	_____
18.	I'm popular with kids my own age.	_____	_____
19.	My parents usually consider my feelings.	_____	_____
20.	I'm never unhappy.	_____	_____
21.	I'm doing the best work that I can.	_____	_____
22.	I give in very easily.	_____	_____
23.	I can usually take care of myself.	_____	_____
24.	I'm pretty happy.	_____	_____
25.	I would rather play with children younger than I am.	_____	_____
26.	My parents expect too much of me.	_____	_____
27.	I like everyone I know.	_____	_____
28.	I like to be called on in class.	_____	_____
29.	I understand myself.	_____	_____
30.	It's pretty tough to be me.	_____	_____
31.	Things are all mixed up in my life.	_____	_____
32.	Kids usually follow my ideas.	_____	_____
33.	No one pays much attention to me at home.	_____	_____
34.	I never get scolded.	_____	_____
35.	I'm not doing as well in school as I'd like to.	_____	_____
36.	I can make up my mind and stick to it.	_____	_____
37.	I really don't like being a boy___girl.	_____	_____

		Like Me	Unlike Me
38.	I have a low opinion of myself.	_____	_____
39.	I don't like to be with other people.	_____	_____
40.	There are many times when I'd like to leave home.	_____	_____
41.	I'm never shy.	_____	_____
42.	I often feel upset in school.	_____	_____
43.	I often feel ashamed of myself.	_____	_____
44.	I'm not as nice looking as most people.	_____	_____
45.	If I have something to say, I usually say it.	_____	_____
46.	Kids pick on me very often.	_____	_____
47.	My parents understand me.	_____	_____
48.	I always tell the truth.	_____	_____
49.	My teacher makes me feel I'm not good enough.	_____	_____
50.	I don't care what happens to me.	_____	_____
51.	I'm a failure.	_____	_____
52.	I get upset easily when I'm scolded.	_____	_____
53.	Most people are better liked than I am.	_____	_____
54.	I usually feel as if my parents are pushing me.	_____	_____
55.	I always know what to say to people.	_____	_____
56.	I often get discouraged at school.	_____	_____
57.	Things usually don't bother me.	_____	_____
58.	I can't be depended on.	_____	_____

APPENDIX C

PARENTAL PERMISSION LETTER

Dear Parent:

Your child, _____, is being considered as a possible member of a group to participate in a study to help better understand the ways children learn and feel about themselves.

I am a doctoral candidate in Educational Psychology at Oklahoma State University, who is interested in the factors influencing the ways children learn and feel about themselves. I have had 10 years of experience working with children as an educational consultant, and am currently employed by the Regional Education Service Center in Stillwater. For the past four years, I have worked with children, parents, and school staff in your school district.

To do this study we are giving two different tests which deal with effective styles of motivation. This will take approximately 30 minutes of your child's time and will be administered at school during school hours. The results of the study will be used to help better meet the educational needs of students in your school district. Your child's name and test results will be kept confidential. If you wish to know about the results of your child's testing, please indicate below. If you choose yes, you will be notified when the results are available.

Your cooperation and contribution in making this project possible is sincerely appreciated.

Sincerely yours,

Greg B. Garabedian

Please detach and return

I give permission for my son/daughter (Name) _____

to be tested. School _____ Grade _____

Parent or Guardian signature _____ Date _____

[ ] YES, I WISH TO BE NOTIFIED OF THE TEST RESULTS.

[ ] NO, I DO NOT WISH TO BE NOTIFIED OF THE TEST RESULTS.

Please return this form in the enclosed stamped self-addressed envelope by _____.

VITA

Krikor Bedros Garabedian

Candidate for the Degree of

Doctor of Philosophy

Thesis: AN INVESTIGATION OF INTERNAL-EXTERNAL LOCUS OF CONTROL AND SELF-ESTEEM IN CHILDREN AND ADOLESCENTS DIAGNOSED AS LEARNING DISABLED AND NON-LEARNING DISABLED CHILDREN AND ADOLESCENTS

Major Field: Applied Behavioral Studies

Biographical:

Personal Data: Born in Tel-Abyad, Syria, February 7, 1943, the son of Bedros and Aznif Garabedian.

Education: Graduated from Christian Teaching Institute, Beirut, Lebanon, May, 1967; received the Bachelor of Arts degree from Bethany Nazarene College, Bethany, Oklahoma, in 1971 with a major in Psychology; received the Master of Education degree from the University of Oklahoma, Norman, Oklahoma, in 1972 with a major in Mental Retardation; completed requirements for the Doctor of Philosophy degree at Oklahoma State University in December, 1980.

Professional Experience: Tutor and Instructor, Highland Reading Center, Oklahoma City, Oklahoma, 1970-1973; Chief Clinician and Diagnostician, Highland Learning Clinic, Oklahoma City, Oklahoma, 1973-1975; Education Service Consultant and School Psychologist, Bureau of Education for the Handicapped, Stillwater, Oklahoma, 1975-1977; Psychometrist/School Psychologist, State Regional Education Service Center, Stillwater, Oklahoma, 1978 to present.

Professional Organizations: National Association of School Psychologists, Oklahoma School Psychological Association.