SELF-CONCEPT OF MAINSTREAMED LEARNING DISABLED CHILDREN IN JUNIOR HIGH AND MIDDLE SCHOOL

BY

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SELF-CONCEPT OF MAINSTREAMED LEARNING DISABLED CHILDREN IN JUNIOR HIGH AND MIDDLE SCHOOL

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Mainstreamed early adolescent learning disabled students are typically segregated from other students for a portion of the school day, while attending a resource classroom. This segregation may influence the learning disabled student's self-concept as he relates to significant others at various levels of achievement. The different school organizations of junior high and middle school may also affect student self-concept. This study sought to investigate the learning disabled student's self-concept, its relation to academic achievement, and the interaction effect of the school organizations—junior high and middle school.

Two 2 x 2 factorial designs were constructed to determine whether learning disabled adolescents possess a lower self-concept than regular class students and whether a relationship was apparent between school organization and achievement.
The sample utilized 38 middle school students, 22 classified as learning disabled and 16 as regular class. Forty-one students were from the junior high, 23 learning disabled and 18 regular class students. The students were in grades six, seven, and eight. The response variable was the Piers-Harris Children's Self Concept Scale's total score and six cluster scores.

Analysis of variance revealed that mainstreamed learning disabled students possess a significantly lower self-concept ($p < .05$) than regular class students in either organization, even though achievement levels were similar. Tests of the influence of organizations were significant for both student groups on the Anxiety Cluster of the scale. The middle school students exhibited more anxiety in their self-concept. There was a significant difference in the scores of the low and high achieving learning disabled students on the Cluster of Appearance scale. High achievers possessed a more adequate self-concept.

The lower self-concept of the learning disabled student may be a result of his resource class participation. Learning disabled students may require more support and socialization of atypical behavior patterns prior to mainstreaming. Students in the junior high organization exhibited fewer signs of anxiety. The higher achieving learning disabled students exhibited a better self-concept of their physical attributes.
CHAPTER ONE
INTRODUCTION

The growth of the self is a social phenomenon, arising and developing in social contexts. Next to the home, the school is perhaps the most important social force in shaping and maintaining the child's self-concept (Strang, Smith, & Rogers, 1978).

The optimum development of the child requires that educators understand the effects of school organization upon self-concept as well as upon academic achievement. In the case of the special education student, school organization affects the child directly by allowing the child to associate with certain children and not with others during the school day. The implications of this association upon the academic achievement and self-concept of the mainstreamed child, within two different instructional settings—the junior high and middle school—need to be known.

Statement of the Problem

Mainstreamed students are typically segregated from other students for a portion of the school day. This structural division may impose certain restrictions of the development of self-concept and affect academic achievement. The effect that mainstreaming may exert upon the early adolescent student within a middle school or junior high
setting, in regard to one's self-concept and achievement, needs to be better understood. Existing research has not addressed this topic (Yauman, 1980). This study served to investigate the effect of mainstreaming, within the two instructional arrangements of the junior high and middle school, upon the learning disabled (LD) student's self-concept and academic achievement level.

**Need for the Study**

The Council for Exceptional Children (C.E.C.) estimates that presently there are approximately seven million handicapped children in the United States. Currently, 40% of this number receive special instruction, either in segregated educational facilities or in regular public schools. The percentage of those children classified as LD has yet to be determined; however, it is definitely a significant portion of this number (Brenton, 1980).

Since the policy of including exceptional children within the mainstream of education is becoming more prevalent, knowledge of the effects of mainstreaming upon self-concept and academic achievement becomes imperative. Educators need to know the effects of specialized groupings and school instructional settings on children's perceptions of themselves in relation to significant others in school. If children's perceptions of themselves, as worthy individuals, are affected by special groupings and school instructional settings, then the organizations imposed by schools must be critically analyzed.
Hypotheses

1. There is no significant difference between the self-concepts of regular class students and part-time resource class LD students, whether in a junior high or a middle school setting.

2. There is no significant difference between the self-concepts of LD students in junior high and middle school settings.

3. There is no significant difference between the self-concept of low and high achieving LD students, whether in a junior high or a middle school setting.

Limitations and Assumptions

This study was limited to the Dade County, Florida, Public School District. The limited geographical area, from which subjects were selected, limits the generalizability of the results of the study.

The target population was mainstreamed LD students and regular class students from one junior high and one middle school. Because only two schools were involved, generalizability of results is further limited.

Sample was limited to those students who obtained parental permission and had previously taken an achievement test. An assumption was made that the sample was representative of the LD school population. An assumption was made that the members of the sample were candid in their responses to the attitudinal instrument.
This study was also limited by the cooperating school district, Dade County Public School District, Miami, Florida. A request was granted which included elimination of two items from the attitudinal instrument, thereby reducing the total of 80 to 78 response items.

Definition of Terms

**Self-Concept.** Self-concept is the evaluation which an individual makes and customarily maintains with regard to himself. It expresses an attitude of approval or disapproval and indicates the extent to which the individual believes himself to be capable, significant, successful, and worthy. In this study, self-concept is operationally defined as data obtained from the Piers-Harris Children's Self Concept Scale.

**Adolescence.** Adolescence is the period that begins with the onset of puberty and ends when the individual is relatively independent of the emotional and financial bonds of the family unit. At the end of adolescence, the individual is able to function in the adult society.

**Learning Disabilities.** Learning disabilities (LD) are a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language. It does not include learning difficulties due primarily to visual, auditory, or motor handicaps, to mental retardation, emotional disturbance, or to environmental disadvantage (Kirk & Kirk, 1976).

**Mainstreaming.** Mainstreaming is the placement of learning disabled students into regular classrooms. A student may be mainstreamed for either the entire school day or for a portion of the day while continuing to receive resource class instruction.
**Resource Class.** Resource class is a special education classroom. The LD sample students were involved either on a part-time basis of at least seven and one-half hours per week, or on a full-time basis of at least twelve hours per week.

**Junior High.** The junior high includes grades seven, eight, and nine. It is characterized by departmentalization, age-level grouping, and discipline specialists teaching their subjects.

**Middle School.** The middle school includes grades six, seven, and eight. The middle school is characterized by block scheduling, multi-age grouping, and team teaching.

**Summary**

This chapter has stated the problem that mainstreamed LD early adolescent students, due to their exceptional classification, are segregated for a portion of the school day in a resource classroom. The questions proposed are that as a result of this segregation, what is the relation on one's self-concept and academic achievement level? A further analysis is sought as to whether the school instructional arrangement--junior high or middle school--has an influence on the LD student's self-concept or level of academic achievement. The study of LD students' self-concepts involves consideration of their exceptional education classification, particular school instructional environment, and current developmental stage of early adolescence.

Chapter Two provides a review of the literature concerning early adolescence, self-concept, mainstreaming, and the school instructional arrangements of middle school and junior high school. The review of
literature provides current research results which have been evidenced in these areas as it pertains to this study.

Chapter Three details the design of the study. The design includes the sample population, instrumentation, and the procedures of data collection and analysis.

Chapter Four presents analysis of the data. This chapter includes hypothesis testing, analysis of variance results, and a correlation of the clusters of the Piers-Harris Children's Self Concept Scale.

Chapter Five includes discussion of the data analysis. A summary is supplied. Recommendations for further research are also addressed.
CHAPTER TWO
REVIEW OF THE LITERATURE

Introduction

The literature review is divided in four sections. The first section is research concerning LD early adolescent. The second section is research on self-concept and its relation to academic achievement for normal class students, exceptional students, and LD students. The third section is a review of mainstreaming research literature. The third section will include teacher and peer attitudes towards the mainstreamed student. The final research section encompasses junior high and middle school structure and its relationship to the LD early adolescent. This research chapter does not attempt a review of all previous research in each field, as it would not apply to the early adolescent LD student.

Early Adolescence

The 12 to 15 age range is a usual approximation of the period of early adolescence (Kagan & Coles, 1972). It is a socially recognized period of transitional status. There is a general increase during adolescence of maturity and independence and a granting to the individual of greater social and economic status (Ausubel, Montemayor, & Svajian, 1977). The adolescent strives to instill his own status, among his peers, based on his own merit, performance, ability, and competence.
as a person in his own right, rather than for reflected status derived from a dependent relationship to parents. To accomplish this new status, the adolescent must successfully solve certain developmental tasks, such as skill acquisition, knowledge, and certain attitudinal changes (Havighurst, 1951).

Atypical adolescents can be expected to experience the inner drives, urges, and interests that are characteristic of other teenagers (Crow & Crow, 1965). The fact that an adolescent is atypical does not lessen or eliminate his fundamental physical and psychological needs; since the satisfaction of his felt needs may be limited by his atypical condition, he often encounters frustrating situations (Crow & Crow, 1965).

One study of self-concept, by Rosenthal (1973) incorporated 60 males, aged eight to fourteen. The experimental group was diagnosed as experiencing reading difficulties. The students were administered the Coopersmith Self-Esteem Inventory. The experimental group had a significantly lower mean score on the inventory. This result, concerning the student experiencing reading and possessing a lower self-concept, was later affirmed by Thomson and Hartley (1980).

The LD adolescent must cope with his inner drives and urges coupled with possible years of failure, low self-esteem, poor motivation, and inadequate peer acceptance (Lerner, Evans, & Meyers, 1977). These factors may lead to behavioral and social problems which take precedence over the learning problems during adolescence (Lerner et al. 1977). As the adolescent encounters more failure in school, his self-concept declines and frustration increases, hindering academic achievement and resulting in even more failure (Hewett & Foreness, 1974).
A study by Kendall (1979) utilized 30 LD students within three different classes—secondary regular classes, vocational training classes, and mainstreamed classes. The study sought to obtain measures of the students' self-concepts. The students were administered the Illinois Index of Self-Derogation, the Wechsler Intelligence Scale for Children--Revised (WISC-R), and the Career Maturity Index. The results revealed that those students who were mainstreamed and those in the vocational training classes held lower self-concepts than the group participating in regular classes. Kendall concluded this result may suggest that instructional approaches for the LD adolescent should emphasize relevancy of emotional, educational, and career educational components.

Research in early adolescence, regarding LD students, has received little attention in recent years. Research has particularly been minimal in its relation to the self-concept of the early LD adolescent (Black, 1974; Houck & Houck, 1976; Kendall, 1979; Lerner et al. 1977; Ribner, 1978), much remains to be done.

Significance of the Self-Concept and Academic Achievement of LD Students

The self-concept is a complex and dynamic system of beliefs which an individual holds to be true about himself (Smith, 1977). This assumption that the self-concept is a conglomeration of beliefs classifies self-concept into more specific subcomponents—self-esteem, self-concept of ability, and peer-group identification. The self-concept is also dynamic and may be measured (Smith, 1977).
Educators have long assumed the existence of a definite relationship between academic achievement and self-concept (Purkey, 1970; Yauman, 1980). A reciprocal relationship may exist between scholastic failure and a negative self-concept. This assumption, therefore, suggests that enhancing the self is a vital influence in improving one's academic performance (Purkey, 1970).

Few studies have addressed LD pupils' self-concepts, particularly as they relate to academic achievement and educational placement (Yauman, 1980). The academic achievement of exceptional students is a primary concern of special educators. When the academically handicapped child is integrated into regular classrooms (mainstreamed), a new peer reference group is formed, consisting of children potentially possessing greater academic performance capabilities than those of the previous special class peer reference group. Dozens of studies have been conducted on the self-concept of students in regular classrooms; fewer studies enlighten educators about the self-concept of LD students; fewer still focus on early adolescent LD students.

In a study utilizing regular classroom students, varying results were evidenced by Marx and Winne (1975). Thirty-eight fifth grade and sixty sixth grade students were administered the Stanford Achievement Test and the Sears Self-Concept Inventory. The girls scored higher academically but lower on the self-concept measure. No differences were apparent between the two grades. The authors concluded that variables, such as the student's perception of his ability, social relations, and comparisons with peers, other than solely achievement, relate to the various facets of self-concept.
This result was also supported by Leviton and Kiraly (1975). First, second, and third grade LD students were administered the Metropolitan Achievement Test and the Self-Concept Self-Appraisal Inventory. The results indicated that a direct, positive relationship between academic achievement and self-concept for the LD students, in this sample, was not realized. The authors concluded that the relationship between academic achievement and self-concept for those students may be different than from that of more normal learners.

A different result was exhibited when 50 educable mentally retarded (EMR), and 50 emotionally handicapped (EH) students' academic achievement and self-concept were longitudinally assessed over a period of three years (Calhoun & Elliott, 1977). The students, half remaining in regular classrooms and half in special education classrooms, were pre- and post-tested utilizing the Piers-Harris Children's Self Concept Scale and the Stanford Achievement Test. Results indicated a relationship between self-concept and achievement. Both the EMR and EH students, within the regular classrooms, had higher self-concept and achievement scores. The authors concluded that the regular classrooms were significantly more effective than the special education classrooms.

A contrasting result (Boersma, Chapman, & Battle, 1979) collected pre-post data using the Student's Perception of Ability Scale. The subjects were 50 LD, 18 EMR, and 83 regular class students. The results revealed that full-time special class placement was accompanied by improvements in academic self-concept.

A study by Black (1974) sought to determine if LD students possess a lower self-concept of academic ability than regular class students. Regular class students numbering 25 and 25 LD students were administered
the Wide Range Achievement Test, the Wechsler Intelligence Scale for Children, and the Piers-Harris Self Concept Scale. The subjects were matched on age, grade, sex, and IQ. The mean age of the sample was 11 years. The results indicated that children with deficit performance on achievement testing tend to perform in a manner suggesting a more negative view toward self than do similar children with adequate achievement test performance. Further analysis revealed that the older LD children tended to view themselves and their personal worth in terms of their academic performance. A further conclusion was made that LD and difficulties in self-concept were associated in a circular fashion, and that this hypothesis may account for the high dropout rate of LD adolescents.

A later study (Yauman, 1980) measured 45 male LD third graders' self-concepts and extent of participation in a special education program. The students were evenly divided within three groups—those in self-contained special education classrooms, those receiving individualized tutoring, and those with a regular classroom. The students were administered the reading subtest of the Wide Range Achievement Test and the Piers-Harris Children's Self Concept Scale. The students within the regular class scored the highest on the self-concept scale, thus exhibiting a more positive self-concept than those in the special class. The tutored students scored the lowest of the three groups. The reading scores were highest for those in the tutored group. The author stated that since the higher reading achievement of the tutored group did not operate to enhance their measured self-concepts, then some other factor was negatively affecting the group's measured self-concepts. Perhaps also the tutored group may have utilized the regular class group as their criterion for comparison when evaluating successes or failures (Yauman, 1980).
Results evidenced by Kendall (1979) concluded that secondary LD students enrolled in vocational programs possessed lower self-concepts than non-LD students. The conclusion of the study suggested that instructional approaches to the LD adolescent must emphasize relevance of emotional, educational, and career education components.

Educational research yields no consensus on whether an LD student possesses a more negative self-concept and lower academic achievement level when compared to regular class students. A number of studies report lower self-concepts and academic achievement levels, when academically handicapped students are compared to their regular classroom peers (Bryan, 1978; Kendall, 1977; Myers, 1976b; Upshur, 1977). Other studies report more positive results stemming from the influence of special resource class, which may allow the special education student to possess a more positive self-concept of academic ability (Schurr & Brookover, 1967). Exceptional education students may experience academic achievement in a regular classroom, as well as in a special resource classroom, if they are provided with appropriate individual guidance and tutoring (Fountain Valley School District, 1972; Gerke, 1975).

**Mainstreaming**

The possible negative effect on children's self-concept of special resource class placement has been a concern of educators for some time (Gershman, 1975; Houck & Houck, 1976; Jones, 1972; Lilly, 1971; Myers, 1976a, 1976b; Rucker, 1969; Schurr & Brookover, 1967; Smith, 1977). This concern for the special education child's self-concept, coupled with the growing belief among some researchers that special resource class
assignment does not result in accelerated academic achievement, has served as impetus for the mainstreaming movement, where children with learning and behavior problems assigned previously to self-contained classrooms are placed in regular classrooms, a less restrictive environment. The mainstreaming movement includes involvement of teacher attitudes, peer attitudes, and academic achievement in regard to the LD adolescent's self-concept.

Classroom teachers have not been trained to deal with the wide range of individual differences of the special education student (Gershman, 1975; Lerner et al. 1977). Not only have teachers usually been unable to deal with this wide array of individual differences, but they are not trained to properly identify children with potential learning or behavior problems. This situation may create a lack of understanding concerning the special education child and may influence the teacher's attitudes toward that child (Bryan, 1978).

In an observational study, Bryan (1978) utilized 80 to 100 LD students in the sample. The interactions between the students and their regular classroom teachers were observed and coded, using a time interval scale of every ten seconds. The results indicated that the LD students were twice as likely to be ignored by the teachers as compared to the regular classroom children. In their initiations to teachers, the LD boys were twice as likely to be ignored as compared to the girls. The LD students were given twice as many negative reinforcements as comparison subjects. However, in their special education resource classrooms, the students engaged in more peer and teacher interactions. The special education teachers gave fewer negative reinforcements and many more positive reinforcements. This study concluded that the ability to express oneself
in order to elicit positive responses was a critical deficit in many of the LD students.

An additional study by Bryan (1978) supported the same conclusion. College students viewed videotapes and read transcripts of interactions between an LD student and a regular class student. The LD child's classification was unknown to the viewers. The viewers consistently rated the LD children as less attractive and less able to express themselves. Thus, strangers, unaccustomed to learning problems, inexperienced at evaluation, and with no prior knowledge of the child's status, consistently made more negative judgements of LD children than nondisabled children on the basis of one and a half to four minutes of exposure to very poor videotapes or written transcripts. This conclusion supports the assumption that LD children's patterns of rejection are attributed to their specific deficit in expressive language (Bryan, 1978; Kehle & Barclay, 1979; Lilly, 1971). The conclusion of several additional research studies (Alexander & Strain, 1978; Chapel Hill City Schools, 1974; Jones, 1972; Moore & Fine, 1978; Stephens & Braun, 1980; Vacc & Kirst, 1977) has detailed the negative attitudes expressed by classroom teachers towards special education students.

The Fountain Valley School District (1972), using a Semantic Differential Scale administered to classroom teachers, revealed that the attitudes held by classroom teachers concerning special education children were no different than those concerning the regular classroom children. This study concluded that this result may have been obtained because the classroom teachers were assisted by special education teachers who gave them instructional guidance and advice on behavioral techniques.
The importance of the special educator's role in assisting the classroom teachers has been greatly emphasized (Fotos, 1976; Hoben, 1980). The more training teachers have in understanding the atypical child, the more effective those teachers are, and the more positive their attitudes become towards an exceptional education student (Vacc & Kirst, 1977).

A recent study (Ascione & Borg, 1980) was successful in utilizing a module workshop approach in changing teacher behaviors related to pupil self-concept. Ten volunteer teachers of fourth, fifth, and sixth grades within mainstreamed classrooms, participated in the 20 hours of the Utah State University Self-Concept Protocol Program. Prior to their participation, an observation record was made of the teachers and their interactions with the students. Their students also were administered a self-concept measure. The control group was similarly observed and the students in those classes were administered the self-concept measure. Following each workshop session, the teachers were to utilize learned concepts with their students in the classroom. Upon completion of the entire program, observations were repeated and the self-concept measure was again administered to the students. Teachers in the experimental group showed significant increases in positive behaviors toward their handicapped mainstreamed students. Appreciative praise, inviting student cooperation, modeling favorable remarks, and prompting students, were all increased in frequency. However, the self-concept gains made by the experimental students did not exceed the gains made by the control group students. Additional studies (Alexander & Strain, 1978; Harasymiw, 1976; Stephens & Braun, 1980; Stern & Keislar, 1977) confirm the conclusion that an inservice workshop approach can be successful in fostering positive teacher attitudes toward mainstreamed special education students.
The peer group exhibits a great deal of influence over the adolescent, exerting pressure to conform to its standards. It is through this conformity that the adolescent gains acceptance by his peers (Ausubel et al. 1977).

Students assigned to special classes are typically segregated from regular class children for most or all of each school day. They may, therefore, predominantly utilize their immediate peer reference group in forming and maintaining their self-concepts. Social comparison theory (Festinger, 1954) suggests that in the absence of objective standards of comparison, people will employ significant others in their environment as the basis for forming estimates of self-worth. Also, given the choice of relatively similar and dissimilar others, similar individuals are more likely to be selected as the basis for social comparisons (Rucker, 1969; Smith, 1977, 1979; Strang et al. 1978).

Educationally handicapped children in special classes would be expected to base relevant self-concept social comparisons on other academically handicapped children in the same classroom. When social comparisons are based exclusively on other special class children, their self-concepts may be robust. If they compare themselves to more successful children, their self-regard may be diminished (Smith, 1979). It may be hypothesized that only to the extent that handicapped children are regularly, on a daily basis in the classroom, exposed to other, nonhandicapped children, would their estimations of self-worth be diminished. The presence of other children without academic handicaps would introduce another basis for social comparisons (Smith, 1979). Since the new social comparison group generally would possess superior academic performance capabilities, the self-concepts of the special class children might be
somewhat diminished (to the extent that the children utilized the new reference children when making relevant self-concept social comparisons). Mainstreaming provides the LD child with multiple reference groups that he may selectively use, basing academically relevant comparisons on other LD children and nonacademically relevant comparisons on regular class children. In this manner, the mainstreamed child is provided the intensive curricular and social-emotional support of the special classroom while simultaneously experiencing an enhanced sense of belonging in the larger school context (Smith, 1979).

Strang et al. (1978) measured the self-concepts of 50 special education students who were in daily attendance in self-contained classrooms. The students aged from six to nine years old, and were 78% male. They were administered the Piers-Harris Children's Self Concept Scale on a pretest-posttest basis. At the same time, academic and intellectual data were collected. The results indicated that children who were mainstreamed for half of each day exhibited significantly more positive self-concepts compared to other academically handicapped children who remained in segregated special classrooms. The study concluded that possibly this occurred as a result of the mainstreamed children's ability to selectively utilize different comparative reference groups.

A longitudinal study (Kennedy, 1976) followed 11 auditorily-impaired mainstreamed students who were periodically administered a sociometric test. Results of the study indicated that their peers were more accepting of them in earlier grades than in later years—grades fourth, fifth, and sixth. Kennedy concluded that perhaps the younger regular class students were more accepting because of their lack of knowledge concerning disabilities and lack of awareness of physical differences.
Parish (1978) also concluded that older students were less accepting of handicapped children. On a Personal Attribute Inventory rating completed by 131 regular classroom students in grades fifth, sixth, and seventh, results indicated that, as classmates, they preferred normal children, and preferred physically handicapped children, before either LD or emotionally disturbed children.

Rucker (1969) utilized 23 EMR students, in attendance at a junior high, in a study of social acceptance data. The students had a mean age of 14.9 years, and a mean IQ of 71. The Ohio Social Acceptance Scale was given to all regular nonacademic and academic classes in the junior high to measure the level of acceptance of retarded and nonretarded students. The scale was also given in the special education classes. The results of this latter testing provided a measure of each retarded student's social acceptance as judged by his retarded classmates. Analysis of results revealed that the social position scores of the retarded subjects were significantly below those of the nonretarded subjects. The retarded subjects were equally low in the social structure of both academic and the nonacademic classes. The retarded subjects significantly overestimated their level of acceptance in both academic and nonacademic classes. The retarded students received significantly higher social position scores from their retarded classmates in the special class than from their non-retarded classmates in regular classes. Rucker concluded that the retarded students were not aware of their lower social status or were not willing to admit it.

Kendall (1977) obtained opposite results in a study of 90 EMR students randomly chosen from both middle and lower socio-economic groups. The 90 subjects comprised three groups: 30 segregated EMR students; 30
mainstreamed EMR students and; 30 EMR students in regular class attendance for the entire school day. Scores obtained from the Wechsler Intelligence Scale for Children--Revised (WISC-R) ranged in IQ from 50 to 70. The students ranged in age from seven to twelve years old. All of the subjects attended a learning resource center for 40 minutes each day. During each session, regular classroom students and a special education teacher were in attendance. The EMR students were provided with emotional support, encouragement, and counseling to aid them in coping with some of the problems they encountered in their other classes. The students were administered the Illinois Index of Self-Derogation, which measured self-concept. The results indicated that those EMR students who were in segregated self-contained classrooms and those who were mainstreamed held significantly lower self-concepts than those who were in the regular classrooms. The author concluded that this result of self-concept gain of regular class EMR students may be due to the fact that they invested considerable amounts of energy attempting to conceal the fact from their classmates that they had previously been enrolled in a special class for retarded pupils. This would be accomplished by not engaging in behaviors that would tend to identify them as different from the group.

Myers (1976b) studied the self-concepts of 276 EMR students. The subjects compromised three groups: 104 EMR students in a special school setting; 111 EMR students attending a self-contained special class, for the entire day, at a regular school and; 61 EMR students, so labeled, but in full daily attendance in regular classrooms. The IQ scores of the students ranged from 49 to 85. The students were administered the Piers-Harris Children's Self Concept Scale and the Ohio Social Acceptance
The tests' results showed that low IQ students in the special day school had higher self-concepts than low IQ students in either special classes or regular classes. Low IQ students had more positive self-concepts in the special classes than compared to those in the regular classrooms. The high IQ students demonstrated no significant differences among the three groups. This study indicated that differences exist between high IQ and low IQ students in terms of the most appropriate educational placement relative to self-concept. While high IQ EMR pupils appear to have an equally positive self-concept in any of the three administrative settings, low IQ pupils appear to have a more positive self-concept in the special school than in either the special class or the regular class (Myers, 1976b).

Three studies (Gerke, 1975; Houck & Houck, 1976; Stephens, 1977) indicated that the mainstreamed child does not exhibit lower academic capabilities or a lower self-concept than regular class children. These results are explained in terms of social comparison theory (Festinger, 1954), as persons at the lower end of an ability scale may remain unaffected by a group situation, provided they have other relevant comparison groups for self-evaluation. Providing an individual at the lower end of an ability scale maintains contact with relevant others, his self-concept may remain unaffected when placed in certain group situations. Therefore, mainstreaming could be a valuable experience for academically handicapped children and create an increase in self-esteem, provided contact with similar others is maintained (Strang et al. 1978).

Research indicates that differences with respect to self-concept and peer acceptance may exist between handicapped children and nonhandicapped children (Sheare, 1978). Sheare's study incorporated 41 ID students
and 41 non-LD students. The LD students attended a resource based special education program for part of the school day. The students were in grades three, four, and five. All of the subjects were administered the Piers-Harris Children's Self Concept Scale and the Peer Acceptance Rating Scale. Both instruments were read aloud in the classes. Scale administration occurred twice, in November and again at the end of the school year. Results revealed a significant difference in the level of peer acceptance between the LD and non-LD students. The LD students received lower ratings than the regular class students. The LD group also scored significantly lower in self-concept than the regular class students. The author concluded that participation in a special education resource based program assists in developing academic skills but no appreciable effect is evidenced upon student self-concept and peer acceptance.

The handicapped child's self-concept appears to relate to his ability to selectively chose relevant comparison groups as a means of enhancing both his social self-concept and academic self-concept. The special education student's social behavior often lends to rejection by his peers (Kehle & Barclay, 1979). This behavior-related rejection may suggest that integration of atypical children into normal educational settings should be only attempted after inappropriate behaviors are corrected and socially acceptable behaviors are learned (Eryan, 1978). Research on social acceptance by peers yields conflicting results; it is apparent that social acceptance will not simply occur because of mainstreaming (Ascione & Borg, 1980).
School Structure--Middle and Junior High Schools

One of the main social contexts of the early adolescent period is the shift from the small, neighborhood elementary school to the more distant, larger junior high or middle school (Kagan & Coles, 1972). This shift can create a diminished self-concept (Soares & Soares, 1971). The secondary school has the opportunity, and institutionalized arrangements both formal and informal, to accomplish deep and extensive socialization. Educators should seek to provide an organizational framework which allows a smooth transition from the elementary school to the secondary school.

The rationale of the middle school and the basic concepts underlying the junior high school movement are similar. The basic concepts underlying the junior high school idea, which were stressed by various planning groups around the turn of the century, includes better provision for the needs of young adolescents, better provision for exploration by the pupils of their interests and abilities, better individualization in the instructional program, and better articulation between elementary and secondary education (Gruhn & Douglass, 1956). The principal concepts of justification for middle schools includes the provision of a program especially adapted to the wide range of individual differences and special needs of the in-between-ager, a school ladder arrangement that promotes continuity of education from school entrance to exit, and the introduction of needed innovations in curriculum and instruction (Alexander & George, 1981; Alexander & Kealy, 1969).
The difference between the junior high and middle school, therefore, is not in the basic philosophies but in the method and procedures used to attain the goals. The initial movement toward the junior high school was actually an attempt to alleviate the crowded conditions in existing school organizations caused by the post-World War I population boom (Alexander & Kealy, 1969). This was accomplished by removing the two upper grades from the eight-year elementary school and taking the ninth grade from the high school. The junior high school typically included grades seven, eight, and nine. The junior high school inherited the Carnegie Unit requirements, schedule, departmentalization and the extra curricular activities of the senior high school. It also was staffed mainly by teachers from the senior high schools.

The typical middle school encompasses grades six, seven, and eight. The rationale behind this grade grouping is that sixth graders have more in common with seventh and eighth graders than children in the elementary school, and ninth graders are more closely related to the senior high school students than to the seventh and eighth graders (Moss, 1974). A successful middle school program is based on student needs. These needs include self-contained classes, multi-age grouping, and team teaching. The basic education program (Stelle & Wallace, 1979, p. 25) should include

- large blocks of time to provide for continuity and intensive teacher contact with individual students; teacher-student planning in which students are guided through problem solving and carrying out projects of interest; personal attention to each student by limitation of teacher-student ratio; cross-discipline learnings in which various subject areas are interrelated and; skills in social relationships that are learned in the context of democratic processes.
A survey of 299 middle schools (McEwin, 1981, p. 1) listed the following reasons for establishment:

- to accommodate a new building—14%;
- to facilitate overcrowdedness in another building—19%;
- to provide a better instructional program for the age group—39%;
- to attempt an innovation—6%;
- to aid in reorganization of existing programs—8%;
- and other—2%.

Differences were noted in the instructional organization found in middle and junior high schools. Self-contained classrooms, block scheduling, team teaching, interdisciplinary teaming, large and small group instruction, and mini courses were among practices found more frequently in middle schools. Departmentalization and back-to-back scheduling were more often a characteristic of the junior high school instructional organization. Middle schools had larger percentages of elementary-trained teachers and junior high schools had more secondary trained teachers. Most of the junior high schools included grades seven through nine, while the middle schools included other combinations and rarely grade nine.

Multi-age grouping, nongraded and graded approaches, and team teaching are often associated with a middle school program. A research study of 366 students compared traditional grouping and multi-age grouping upon achievement and self-concept (Way, 1979). The students were administered the Piers-Harris Children's Self Concept Scale. While a significant difference in achievement was not noted between the two approaches, a difference in self-concept was apparent. The students within the multi-age grouping had higher self-concepts. The author concluded that the benefits of multi-age classrooms are in the affective domain.
A group of 80 sixth grade students in a nongraded school and 80 sixth grade students in a graded school were administered a battery of achievement and attitude instruments (Ramayya, 1972). Results revealed that the males in the nongraded program achieved more favorably in the attainment of reading skills. The nongraded program also contributed to a higher level of self-esteem for both sexes. The author concluded that the self-esteem findings were probably due to individualized instruction and the provision for progress at one's own rate.

A conflicting result was evidenced by Vogel and Bowers (1972). Pupils in a graded, traditional school had a more positive self-concept. The authors stated that the possibility existed that pupils in the nongraded school felt more comfortable in replying honestly while pupils in the traditional school were more concerned with giving the responses they thought the teachers expected. The nongraded school possessed a more child-centered program.

Team teaching, a situation where two or more teachers possess complementary teaching skills and cooperatively plan and implement the instruction, can be beneficial to students. In a review of research, Martin and Pavan (1976) cited that early adolescent students perceived team teaching as a more effective means of instruction. The benefits of team teaching instruction, as it concerns the LD early adolescent, still need to be determined.

A comparison study of eighth graders in junior high and middle schools in the New York city area concerned the effectiveness of both settings with respect to achievement, attitude, and self-concept (Ehrlich & Murray, 1969). The students, both male and female, were in attendance for at least three years in the school system. A semantic
differential survey was utilized. The results revealed no difference in student achievement between school settings. The comparison of attitude and self-concept between the two settings also yielded no significant differences for either sex. The author concluded that both educational settings stress similar objectives but that there is a marked difference in the method and procedures used to attain the goals.

The basic philosophies underlying junior high and middle schools' organization appear to be similar. However, the method of obtaining the objectives significantly differs between each educational setting. The middle school is often characterized by variations in grade structure and organization (Hofman, 1977). Block scheduling, team teaching, multi-age grouping, curricular exploration, emphasis on human development and flexibility are most often associated with middle schools (Brown, 1981; George, 1981; Lounsbury, 1981; McGlasson, 1973). The needs and interests of the learner are emphasized and the learning environment is often constructed to facilitate continuous development in the learner (Silvern & Wiles, 1978). The junior high school remains an adaptation of high school with departmentalization, fifty-five minute time periods, age-level grouping, and discipline specialists teaching their subjects.

Summary

Early adolescence, a period of increased responsibility and renewed peer pressures, may be a difficult period of development. For LD early adolescents, this period may be even more difficult. The fact that an adolescent is atypical, may impede social adjustment and maintenance
of an adequate self-concept during this developmental period (Lerner et al. 1977).

Goals for the mainstreamed child often stress both academic needs and educating the whole child (Sheare, 1978). Educators, however, may be falling short of their commitment, if the social and emotional development of the exceptional child is not considered. Schools have the opportunity and responsibility to enhance the development of each individual beyond the acquisition of facts (Beane, Lipka, & Ludewig, 1980).

Mainstreaming can be a valuable experience for handicapped children and even be accompanied by an increase in self-concept if the children are provided contact with similar others. On a given dimension of self-concept, with similar others available, children may employ those similar and disregard those not similar for academic self-concept comparisons, thus protecting their self-concepts from possible diminution. If similar others are removed as a source of comparison, self-concept may decline, if those remaining are superior on the relevant ability or self-concept dimension. Therefore, in light of Festinger's social comparison theory, sudden, full-day integration into regular classrooms, might be seriously detrimental to the self-regard of the exceptional student.

The particular school settings of the junior high and middle school may influence the learner (Silvern & Wiles, 1978). In relation to the influence the settings may or may not have upon a LD early adolescent student's self-concept, this comparison, not made previously in educational research, is addressed in this study.
The present study considered the relationship of additional factors which may influence the social acceptance, and thus, self-concept of early adolescent LD students. These factors included academic achievement, and the instructional arrangements of the middle and junior high schools. Since specialized groupings within different instructional settings and the practice of mainstreaming may continue for the LD early adolescent student, additional data regarding the influence upon the exceptional student's self-concept within separate instructional settings, need to be researched.
CHAPTER THREE
THE DESIGN OF THE STUDY

Introduction

Chapter Three presents a restatement of the hypotheses, the data collection sequence, the description of the sample, a description of the school settings, the instrumentation used as the response variable, a description of the data analysis, and the designs used for the study. The following three null hypotheses were the focus of this study:

1. There is no significant difference between the self-concepts of regular class students and part-time resource class LD students, whether in a junior high or a middle school setting.

2. There is no significant difference between the self-concepts of LD students in junior high and middle school settings.

3. There is no significant difference between the self-concept of low and high achieving LD students, whether in a junior high or a middle school setting.
Data Collection

The sample, identified in April, 1982, was administered the Piers-Harris Children's Self Concept Scale (The Way I Feel About Myself), in May, 1982. Scale administration was conducted within the subjects' schools during a morning class period. The setting was a classroom and scale administration usually included 30 to 40 pupils. The scale administrator was the author and another certified teacher, who served to test for experimenter bias. Make-ups were scheduled one week later and the author served as the administrator of the scale. Eight students participated in the make-up administration. The directions were read to the students. The scale's directions are in Appendix 1. To avoid any variability due to differences in reading levels, the scale was read aloud to each group. The administrators alternated the reading of the scale with each group. Items number 32, "I pick on my brother(s) and sister(s)," and number 72, "I like my brother (sister)," were omitted from the scale, as requested by Dade County Public Schools, Florida. In the administration of the scale, it was noted that item number 41, "I have nice hair," always produced laughter. Item number 55, "I have lots of pep," needed to be clarified as "pep" was not understood. The synonym of "energy" was given as an explanation. Items number 57, "I am popular with boys," and number 69, "I am popular with girls," required clarification. The boys felt they should not respond to number 57, and the girls felt they should not respond to number 69. An explanation was given to respond to all items, and that if you were of the same sex as mentioned in the item, it meant you were popular with members of your own sex.
Following the scale's administration, data were gathered from the subjects' cumulative school folders. These data included sex, grade, birthdate, ethnic origin, and for the LD subjects, also whether full-time or part-time classification, and length of attendance in an LD resource classroom.

The following steps were implemented in testing the previously cited hypotheses:

1. Identification of the target population
2. Distribution of parental permission letters
3. Three additional visits were made to each school during the course of two weeks to encourage return of the letters
4. Additional letters were given to those students who had lost the originals
5. Collection of parental permission letters
6. Stratified sampling to obtain representative sample
7. Elimination of those students lacking achievement data
8. Agreement from schools for administration dates
9. Piers-Harris Children's Self Concept Scale administration
10. Collection of information from subjects' cumulative school folders
11. Make-up scale administration for eight students
12. Scoring of scale's results including the cluster scores
13. Analyzing of results utilizing ANOVA procedure
14. Comparison of group mean results between organization and classification
15. Comparison of group mean results between organization and achievement level of LD students
Data collection followed the steps mentioned above. The duration for data collection was approximately two months.

Sample

A procedure of stratified random sampling was implemented for solicitation of students for the study, based on classification and achievement. The procedure of stratified random sampling accounted for the external threat to validity of interaction effects of selection and experimental variables.

Sample selection was based upon Stanford Achievement Test (Madden, Gardner, Rudman, Karlsen, & Merwin, 1973) stanine results. The Stanford Achievement test is a series of comprehensive achievement tests developed to provide an assessment of learning at various levels of the educational process. A stanine is a value on a nine-point scale of normalized standard scores. Scores are expressed along a scale ranging from a low of one to a high of nine, with the value of five representing the average performance for the norm group. Test administration had previously included the three subtests of reading comprehension, math computation, and math concepts. For the purposes of this study, the reading comprehension subtest stanine score was interpreted as level of achievement since reading comprehension is indicative of one's achievement in other academic subject areas. Those students scoring on stanine one or two were categorized as the low achievers. Students who had scored on stanines three through seven were categorized as the high achievers.

The target population were mainstreamed LD students in a junior high school, grades seven and eight, and in middle school, grades six and seven, and regular class students from three language arts classes
in junior high, grade seven, and in middle school, grades six and seven. The students were in attendance during the 1981-1982 school year in Dade County, Florida.

The subjects included in the sample were chosen at random, using a table of random numbers, once parental permission was secured. Parental permission was sought from a pool of 265 students. Permission was obtained from 101 parents. A copy of the parental permission letter is in Appendix 2. From the group of 101 students, ten students were not selected due to the following: three were classified as EMR and were erroneously given permission slips, and achievement data were not available on seven other students. Therefore, sample selection was made from a pool of 91 students. A total of 82 were included in the administration of the Piers-Harris Children's Self Concept Scale. During scale administration, three additional students were exempted due to off-task behaviors. Thus, valid scale data were collected on 79 subjects.

The sample included 40 males and 39 females, with 24 being in sixth grade, 44 in seventh grade, and 11 in eighth grade. The mean chronological age was approximately 13.5 years at the time of test administration. According to ethnic classification, 35 subjects were caucasian, 27 were black, and 17 were of hispanic origin. Regular class students numbered 34, and the mainstreamed LD students numbered 45. The LD students possessed an average length of attendance time in a resource classroom of approximately 3.9 years. Eleven LD students had been previously designated as full-time, which involved at least 12 hours per week in the LD resource classroom. Thirty-four LD students were classified as part-time, which resulted in LD resource classroom attendance of at least seven and one-half hours per week. The resource room
program was diagnostic-prescriptive in nature and was geared towards specific skill development. A listing of subject data per experimental unit is found in Table 1.

School Settings

Two different instructional settings were chosen for the purposes of this study so a comparison of instructional arrangements could be achieved. A middle school, in south Dade County, Florida, was selected as it was the only middle school in the area operating as a middle school with multi-age grouping, block scheduling, team teaching, and emphasis on student attitudes. This situation, however, was only available to the sixth grade students. Since the middle school was in its second year of operation, the current seventh graders had also been exposed to these characteristics of a middle school. Multi-age grouping was employed in the LD resource classrooms only. Different curriculum requirements prohibited multi-age groupings in the subject areas. Block scheduling, for the sixth graders, consisted of reading, math, science, social studies, and a library period. The teachers who taught these subjects had a common planning period to prepare adequately for the needs of the students. The subjects were taught using a team teaching approach. The middle school included grades six, seven, and eight.

The middle school is in the process of attempting to extend the accepted characteristics of a middle school to all grade levels, but is currently hampered by funding. The middle school administrators state that they have as their objectives to successfully modify their personnel, curriculum, and physical plant to effect a smooth transition as a middle school.
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<th>Organization</th>
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<th>Middle School</th>
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<tr>
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</table>
The middle school has an instructional staff of 47. Middle school certification is held by 25% of the staff. Master's degrees are held by 36% of the staff, and 25% are first year teachers. The average length of teaching experience, in Florida, is five years.

The middle school is in the southern portion of Dade County, Florida, and draws a large portion of its students from Homestead Air Force Base. Students also come from a nearby rural district--Homestead.

The junior high school selected for the study, was in close proximity to the middle school. The distance between schools is 11 miles. This close proximity increases the likelihood of having a similar student population from both schools.

The junior high operates in a traditional junior high mode, with departmentalization, fifty-five minute time periods, age-level grouping, and subject specialization teachers. The grades included seventh, eighth, and ninth. The administration state as their objectives to include improving the teaching and learning situation in various identified areas so that the educational objectives can be attained in a better manner.

The junior high has an instructional staff of 49 teachers. Master's degrees are held by 32% of the instructional staff. The average length of teaching experience, in the state of Florida, is 11 years.

The junior high is located north of the middle school. The students live in nearby rural and suburban areas, with 81% being bussed to the school.
The difficulty of self-concept measures has been noted by researchers for some time (Wells & Marwell, 1976). Self-concept studies are also frequently criticized in that the self-concept interpretations of test measurements may not be valid (Shaverson, Hubner, & Stanton, 1976).

First, definitions of self-concept are imprecise and vary from study to study. This imprecision makes it extremely difficult to specify the population of self-concept items from which a representative sample would be drawn for the instrument or the population of subjects for which the measurement techniques and interpretations would be appropriate.

A parallel difficulty in interpreting measures of self-concept arises because data are not readily available on the equivalence of various self-concept measurement instruments. In many instances, researchers develop their own instruments for their own particular problem so that the number of different measurement techniques is increasing almost as rapidly as the number of self-concept studies. Numerous past studies have utilized the classroom or clinical observation technique solely, in an attempt to gain a measure of student self-concept (Bryan, 1978; Hartrup & Glazer, 1968; Nash & McQuisten, 1977).

There is a need for integration of the various features that are common to the definition of self-concept. Shaverson, Hubner, and Stanton (1976) contend that it may be possible to construct a working definition of self-concept that is consistent with current research and can be used to begin to integrate empirical evidence on the validity of self-concept interpretations. Shaverson et al. identify seven features of one's self-concept: organization, multifaceted, hierarchical,
stable, developmental, evaluative, and differentiable. An understand-
ing of the features of self-concept is imperative prior to constructing or utilizing an existing self-concept instrument.

This study employed the widely utilized Piers-Harris (1969) Children's Self Concept Scale (The Way I Feel About Myself), (Brown & Richard, 1972; Ellis, Gehman, & Katzenmeyer, 1980; Myers, 1976b; McIntire & Drummond, 1977; Sheare, 1978; Smith, 1977; Stephens, 1977; and over 30 additional references in Buros, 1978). The Piers-Harris Children's Self Concept Scale was developed as a measure of general self-concept. The 80 item declarative statement test is appropriate for grades three to twelve. A listing of the test items are in Appendix 3 of the study, reproduced by publisher's permission. The scale administration takes 15 to 20 minutes and may be read to younger or academically handicapped students. The student responds to the statements (i.e. "I am a happy person," or "I am cheerful") with a yes or no. Half of the items are worded to indicate a positive self-concept and half to indicate a negative self-concept. A total score and cluster scores may be obtained. The six clusters are labeled: Behavior, Intellectual and School Status, Physical Appearance and Attributes, Anxiety, Popularity, Happiness and Satisfaction.

The 80 items were derived from a preliminary pool of 164 statements administered in a pilot study of 90 children from the third, fourth, and sixth grades in a small school district (Piers & Harris, 1964). The test was later standardized on 1,183 students in grades four through twelve in a Pennsylvania school district. A cross section of economic levels were representative, and slow, average, and bright students participated. There were no apparent sex or grade differences in the
mean scores. The scores of the students in the slow classes were lower, as anticipated by the authors.

The validity and reliability of the test are stated in the manual. The internal consistency of the test ranges from .78 to .93, and retest reliability, after an interval of four months, ranged from .71 to .77. The test correlates with other instruments, at a median of .65 and possesses teacher and peer validity coefficients, at a median of .40.

The Piers-Harris Children's Self Concept Scale, which considers the total self-concept, should be employed for research use, as emphasized by the authors, in contrast to applications for which the scale is not yet validated. The manual indicates that the cluster scores are so tentative and their main application should be in research. Shaverson et al. (1976) supports the scale's consideration of a multi-faceted self-concept. The scale also supports the general self-concept, a stable characteristic of the individual.

Michael, Smith, and Michael (1975) conducted a study to test the factorial dimensions of the scale and to ascertain whether the constructs associated with the six factors reported by Piers and Harris could be replicated. The study included 299 elementary students, 302 junior high students, and 300 senior high students. Across each of the three educational levels, the existence of three factors lent support to the scale: physical appearance, socially unacceptable behavior, and academic competence reflecting school and intellectual status. The factors of anxiety and happiness, reported by Piers and Harris, were only partially supported. The suggestion of a new factor was apparent involving the perception of competence in psychomotor skills for the junior high and senior high school samples. The conclusion was made that several of the
factorial dimensions identified by Piers and Harris were replicated in the samples studied but, that the test would be enhanced if items could be anchored by comprehensive and clear-cut theoretical formulations of the nature of affective behaviors in the self-concept.

The appropriateness of the Piers-Harris Children's Self Concept Scale has been evident, not only by its wide usage in research with regular class students, but in evaluating the self-concept of academically handicapped students (Myers, 1976b; Sheare, 1978; Smith, 1977; Stephens, 1977; Strang et al. 1978; Upshur, 1977). The Piers-Harris Children's Self Concept Scale was utilized as the response variable in this study.

Data Analysis

To test the aforementioned hypotheses, two 2 x 2 factorial designs were utilized. Each design allowed for two independent variables, each at two levels.

In the first design, the variables were instructional organization—the middle school or the junior high—and classification—regular class students or mainstreamed LD students. This design was utilized to test hypothesis 1. The following groups were required: junior high regular class students, middle school regular class students, junior high mainstreamed LD students, and middle school mainstreamed LD students.

The second factorial design utilized the independent variables of instructional organization—middle school or junior high, and achievement level of mainstreamed LD students—low or high. This design tested hypotheses 2 and 3. The following groups were required: junior high low achievers, junior high high achievers, middle school low achievers, and middle school high achievers.
Data analysis employed a factorial analysis of variance technique. The factorial analysis of variance was appropriate since this study was based upon two factorial designs (Gay, 1976).

Statistical Package for the Social Sciences (SPSS) was the program used for data analysis (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975). Subprogram ANOVA was employed for the analysis of variance, which accepted unequal cell frequencies. The ANOVA allowed for investigation of two independent variables and the interactions between them for each design. A separate $F$ ratio for each independent variable and one for each interaction was produced. An option card specifying a regression approach was chosen. The option permitted the main effects, covariate effects, and interaction effects to be assessed simultaneously as in a multiple regression. The results of the data analysis are reported in Chapter Four.
CHAPTER FOUR
RESULTS

Introduction

Using a sample drawn from a middle school and a junior high, this study investigated the relationship between self-concept, level of achievement, and classification as a regular class student or a part-time resource class LD student, within the two instructional arrangements. The following three hypotheses were tested at the .05 level of significance:

1. There is no significant difference between the self-concepts of regular class students and part-time resource class LD students, whether in a junior high or a middle school.
2. There is no significant difference between the self-concepts of LD students in junior high and middle school settings.
3. There is no significant difference between the self-concept of low and high achieving LD students, whether in a junior high or a middle school setting.

The analysis of variance (ANOVA) procedure was utilized for the analysis of results. The ANOVA permitted use of unequal cell means and tested the effects of two independent variables and the interactions between them. Separate F ratios were yielded for each independent variable and one for each interaction.
The first factorial design was constructed to test hypothesis 1: There is no significant difference between the self-concepts of regular class students and part-time resource class LD students, whether in a junior high or a middle school. The independent variables were organization—middle school or junior high—and classification—regular class students or part-time resource class LD students. The first set of analyses tested the effects of the variables of organization and classification and their interaction on the dependent variables of the Piers-Harris Children's Self Concept Scale total score and the six cluster scores.

Hypothesis 1 was rejected as there was a significant difference in the total mean self-concept score between students classified as LD and those classified as regular class students in both the junior high and the middle school, as reported in Table 2. The regular class students had higher total self-concept scores, 57.22, compared with the LD mean of 50.60, as reported in Table 3. This difference in group means resulted in $F(5.27)$ which was significant, $p < .05$.

There was a significant difference on Cluster 1—Behavior—between the regular class students and the LD students, as reported in Table 4. The regular class students possessed a more positive self-concept of behavior (13.20) than the LD students (9.71), as reported in Table 5. This difference in group means resulted in a computed $F(17.26)$ which was significant, $p < .05$. 
### TABLE 2
ANOVA FOR EFFECTS OF ORGANIZATION AND CLASSIFICATION ON STUDENT SELF-CONCEPT: TOTAL

<table>
<thead>
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<th>Source</th>
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<tr>
<td>Organization (A)</td>
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<td>Classification (B)</td>
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<tr>
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<td>60</td>
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</table>

*p < .05

### TABLE 3
MEANS FOR ORGANIZATION AND CLASSIFICATION: TOTAL

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<tr>
<td>Regular</td>
<td>57.43</td>
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<tr>
<td>Learning Disabled</td>
<td>48.69</td>
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<td>50.60</td>
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<td>Total</td>
<td>53.06</td>
<td>54.75</td>
<td>53.91</td>
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### TABLE 4
ANOVA FOR EFFECTS OF ORGANIZATION AND CLASSIFICATION ON STUDENT SELF-CONCEPT: BEHAVIOR CLUSTER

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<td>Organization (A)</td>
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<td>1.21</td>
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*p < .05

### TABLE 5
MEANS FOR ORGANIZATION AND CLASSIFICATION: BEHAVIOR CLUSTER

<table>
<thead>
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<th>Organization</th>
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<tr>
<td></td>
<td>Middle School</td>
<td>Junior High</td>
<td>Total</td>
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<tr>
<td>Regular</td>
<td>12.56</td>
<td>13.83</td>
<td>13.20</td>
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<tr>
<td>Learning Disabled</td>
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<td>9.71</td>
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<tr>
<td>Total</td>
<td>11.28</td>
<td>11.63</td>
<td>11.46</td>
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Statistical significance was noted on Cluster 2—Intellectual and School Status—between the regular class students and the LD students, as reported in Table 6. The regular class students had a mean of 12.52 and the LD students had a mean of 10.05, as reported in Table 7. The difference in means resulted in a computed $F(9.13)$ which was significant, $p < .05$.

Significance was not noted at the $p < .05$ level for Cluster 3—Physical Appearance and Attributes—between the regular class students and the LD students. However, increasing the alpha level to $p < .10$, would have resulted in a significant interaction between organization of middle school or junior high, and classification of regular class student or an LD student, as reported in Table 8. The group means for the regular class students was 7.58 in the junior high and 9.69 in the middle school. The group means for the LD students was 8.85 in the junior high and 8.23 in the middle school, as reported in Table 9. The differences suggest that differences in organization have a greater effect for regular class students than for the LD students on this cluster. The difference in group means resulted in $F(3.70)$ which approached significance at $p < .05$, and was significant at $p < .10$.

On Cluster 4—Anxiety—a significant difference was noted between students in the junior high and those in the middle school (see Table 10). As Table 11 indicates, regular class students and LD students in the junior high exhibited less anxiety (10.40) as compared with the middle school students (8.59). The difference in group means resulted in $F(5.01)$ which was significant at $p < .05$.

Significance was not noted on Cluster 5—Popularity—between organization or classification, as reported in Table 12. The means are reported in Table 13.
TABLE 6
ANOVA FOR EFFECTS OF ORGANIZATION AND CLASSIFICATION ON STUDENT SELF-CONCEPT: INTELLECTUAL AND SCHOOL STATUS CLUSTER

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*p < .05

TABLE 7
MEANS FOR ORGANIZATION AND CLASSIFICATION: INTELLECTUAL AND SCHOOL STATUS CLUSTER

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<tr>
<td>Regular</td>
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<td>12.52</td>
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<td>Learning Disabled</td>
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<td>10.05</td>
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<td>11.03</td>
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### TABLE 8
ANOVA FOR EFFECTS OF ORGANIZATION AND CLASSIFICATION ON STUDENT SELF-CONCEPT: PHYSICAL APPEARANCE AND ATTRIBUTES CLUSTER

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*p < .10

### TABLE 9
MEANS FOR ORGANIZATION AND CLASSIFICATION: PHYSICAL APPEARANCE AND ATTRIBUTES CLUSTER

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<td></td>
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<td>9.69</td>
<td>7.58</td>
<td>8.64</td>
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<tr>
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<td>8.85</td>
<td>8.54</td>
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**TABLE 10**  
ANOVA FOR EFFECTS OF ORGANIZATION AND CLASSIFICATION ON STUDENT SELF-CONCEPT: ANXIETY CLUSTER

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<td>Total</td>
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*p < .05

**TABLE 11**  
MEANS FOR ORGANIZATION AND CLASSIFICATION: ANXIETY CLUSTER

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<td>10.40</td>
<td>9.50</td>
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### TABLE 12
ANOVA FOR EFFECTS OF ORGANIZATION AND CLASSIFICATION ON STUDENT SELF-CONCEPT: POPULARITY CLUSTER

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<tr>
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<td>.21</td>
<td>.03</td>
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<td>Error</td>
<td>57</td>
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<td>Total</td>
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### TABLE 13
MEANS FOR ORGANIZATION AND CLASSIFICATION: POPULARITY CLUSTER

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<td>Regular</td>
<td>8.31</td>
</tr>
<tr>
<td>Learning Disabled</td>
<td>7.92</td>
</tr>
<tr>
<td>Total</td>
<td>8.12</td>
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</tbody>
</table>
Significance was not evident on Cluster 6—Happiness and Satisfaction. The ANOVA results are reported in Table 14. The means are reported in Table 15.

**Hypotheses 2 and 3 Testing**

The second factorial design was constructed to test hypothesis 2, There is no significant difference between the self-concepts of LD students in junior high and middle school settings, and hypothesis 3, There is no significant difference between the self-concept of low and high achieving LD students, whether in a junior high or a middle school. The independent variables were organization—middle school or junior high—and the achievement level of LD students—low or high. This second set of analyses tested the effects of the variables of organization and achievement and their interaction on the dependent variables of the Piers-Harris Children's Self Concept Scale total score and the six cluster scores.

Hypothesis 2—There is no significant difference between the self-concepts of LD students in junior high and middle school settings—was accepted. ANOVA results revealed no significant differences between school organizations, upon the LD student's self-concept, as measured by the dependent variables of the Piers-Harris Children's Self Concept Scale total score and the six cluster scores.

Hypothesis 3—There is no significant difference between the self-concept of low and high achieving LD students, whether in a junior high or a middle school—was rejected. A significant difference was not noted on the total self-concept score at the $p < .05$ level, as
<table>
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<td>Classification (B)</td>
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<td>.48</td>
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<td>A x B</td>
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<td>.97</td>
<td>.25</td>
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<tr>
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<td>3.85</td>
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**TABLE 15**
MEANS FOR ORGANIZATION AND CLASSIFICATION: HAPPINESS AND SATISFACTION CLUSTER

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</thead>
<tbody>
<tr>
<td></td>
<td>Middle School</td>
<td>Junior High</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Regular</td>
<td>7.75</td>
<td>8.11</td>
<td>7.93</td>
<td></td>
</tr>
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<td>Total</td>
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</table>
in Table 16, between high and low achieving LD students. However, significance, at \( p < .10 \), was noted. The high achieving students, in both the middle school and the junior high, had a more positive self-concept in comparison to the lower achieving students, in either organization. The group mean for the high achievers was 50.60 and 46.39 for the low achievers (see Table 17). This difference in group means resulted in \( F(1.32) \) which approached significance at \( p < .05 \) and was significant at \( p < .10 \).

No significant difference was found for Cluster 1 (Behavior) between the low and high achieving LD students in the junior high and the middle school. The ANOVA analysis for this variable is reported in Table 18. The group means are reported in Table 19.

There was no significant difference between the low and high achieving LD students in either the junior high or the middle school for Cluster 2—Intellectual and School Status. ANOVA results are presented in Table 20. The means are reported in Table 21. The reported means are higher for the high achieving LD students (10.05), than for the low achieving LD students (8.33); however, this difference in group means is not statistically significant.

The results for Cluster 3 (Physical Appearance and Attributes) were significant (see Table 22). The high achievers possessed a more positive self-concept of physical appearance as compared to the low achievers. This result was apparent within both school organizations. The mean for the high achievers was 8.54 and the mean for the low achievers was 6.61, as reported in Table 23. This difference in group means resulted in a computed \( F(4.71) \) which was significant, \( p < .05 \).
**TABLE 16**
ANOVA FOR EFFECTS OF ORGANIZATION AND ACHIEVEMENT ON LEARNING DISABLED STUDENT SELF-CONCEPT: TOTAL

<table>
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<td>Achievement (B)</td>
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<td>1.32*</td>
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<td>A x B</td>
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<td>.92</td>
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<td>Error</td>
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<tr>
<td>Total</td>
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</table>

*p < .10

**TABLE 17**
MEANS FOR ORGANIZATION AND ACHIEVEMENT: TOTAL

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<td>High Achievers</td>
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**TABLE 18**
ANOVA FOR EFFECTS OF ORGANIZATION AND ACHIEVEMENT ON LEARNING DISABLED STUDENT SELF-CONCEPT: BEHAVIOR CLUSTER

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<td>Error</td>
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**TABLE 19**
MEANS FOR ORGANIZATION AND ACHIEVEMENT: BEHAVIOR CLUSTER

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<td>High Achievers</td>
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TABLE 20
ANOVA FOR EFFECTS OF ORGANIZATION AND ACHIEVEMENT ON LEARNING DISABLED STUDENT SELF-CONCEPT:
INTELLECTUAL AND SCHOOL STATUS CLUSTER

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TABLE 21
MEANS FOR ORGANIZATION AND ACHIEVEMENT:
INTELLECTUAL AND SCHOOL STATUS CLUSTER

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### TABLE 22
ANOVA FOR EFFECTS OF ORGANIZATION AND ACHIEVEMENT ON LEARNING DISABLED STUDENT SELF-CONCEPT: PHYSICAL APPEARANCE AND ATTRIBUTES CLUSTER

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<tbody>
<tr>
<td>Organization (A)</td>
<td>1</td>
<td>1.81</td>
<td>.21</td>
</tr>
<tr>
<td>Achievement (B)</td>
<td>1</td>
<td>40.33</td>
<td>4.71*</td>
</tr>
<tr>
<td>A x B</td>
<td>1</td>
<td>11.57</td>
<td>1.35</td>
</tr>
<tr>
<td>Error</td>
<td>41</td>
<td>8.56</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>9.18</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05

### TABLE 23
MEANS FOR ORGANIZATION AND ACHIEVEMENT: PHYSICAL APPEARANCE AND ATTRIBUTES CLUSTER

<table>
<thead>
<tr>
<th>Classification</th>
<th>Organization</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Middle School</td>
<td>Junior High</td>
<td>Total</td>
</tr>
<tr>
<td>Low Achievers</td>
<td>7.33</td>
<td>5.88</td>
<td>6.61</td>
</tr>
<tr>
<td>High Achievers</td>
<td>8.23</td>
<td>8.85</td>
<td>8.54</td>
</tr>
<tr>
<td>Total</td>
<td>7.78</td>
<td>7.37</td>
<td>7.58</td>
</tr>
</tbody>
</table>
The results for Cluster 4 (Anxiety) were not significant for the low achieving and high achieving LD students. The ANOVA results are presented in Table 24, the means in Table 25.

The results for Cluster 5 (Popularity) were not significant for low and high achieving LD students. ANOVA results are reported in Table 26, the means in Table 27.

The results for Cluster 6 (Happiness and Satisfaction) were not significant for low and high achieving LD students. The ANOVA analysis is presented in Table 28, the means in Table 29.

Correlations Between Cluster Scores for the Piers-Harris Self Concept Measure

Pearson product moment correlation coefficients were computed between the six clusters of the Piers-Harris Children's Self Concept Scale. The results of this analysis is presented in Table 30. The number of cases were 79.

Cluster 1--Behavior--showed positive correlation with Cluster 2--Intellectual and School Status $r = .55$ and Cluster 4--Anxiety $r = .39$. A linear correlation was not evidenced between Cluster 1 and Cluster 3--Physical Appearance and Attributes, $r = .08$. Cluster 1 did not correlate with Cluster 5--Popularity $r = .21$. No data is reported between Cluster 1 and Cluster 6--Happiness and Satisfaction. This correlation signifies that Cluster 1 exhibited a linear relationship with Clusters 2 and 4. An independent relationship was evidenced between Cluster 1 and Clusters 3 and 5.
### TABLE 24
ANOVA FOR EFFECTS OF ORGANIZATION AND ACHIEVEMENT ON LEARNING DISABLED STUDENT SELF-CONCEPT: ANXIETY CLUSTER

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization (A)</td>
<td>1</td>
<td>15.22</td>
<td>1.16</td>
</tr>
<tr>
<td>Achievement (B)</td>
<td>1</td>
<td>7.41</td>
<td>.56</td>
</tr>
<tr>
<td>A x B</td>
<td>1</td>
<td>12.50</td>
<td>.95</td>
</tr>
<tr>
<td>Error</td>
<td>41</td>
<td>13.18</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>13.26</td>
<td></td>
</tr>
</tbody>
</table>

### TABLE 25
MEANS FOR ORGANIZATION AND ACHIEVEMENT: ANXIETY CLUSTER

<table>
<thead>
<tr>
<th>Classification</th>
<th>Organization</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Middle School</td>
<td>Junior High</td>
<td>Total</td>
</tr>
<tr>
<td>Low Achievers</td>
<td>8.55</td>
<td>8.66</td>
<td>8.61</td>
</tr>
<tr>
<td>High Achievers</td>
<td>8.30</td>
<td>10.57</td>
<td>9.44</td>
</tr>
<tr>
<td>Total</td>
<td>8.43</td>
<td>9.62</td>
<td>9.03</td>
</tr>
<tr>
<td>Source</td>
<td>df</td>
<td>MS</td>
<td>F</td>
</tr>
<tr>
<td>------------------------</td>
<td>----</td>
<td>------</td>
<td>-----</td>
</tr>
<tr>
<td>Organization (A)</td>
<td>1</td>
<td>1.13</td>
<td>.24</td>
</tr>
<tr>
<td>Achievement (B)</td>
<td>1</td>
<td>11.34</td>
<td>2.38</td>
</tr>
<tr>
<td>A x B</td>
<td>1</td>
<td>1.13</td>
<td>.24</td>
</tr>
<tr>
<td>Error</td>
<td>41</td>
<td>4.77</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>4.77</td>
<td></td>
</tr>
</tbody>
</table>

**Table 26**
ANOVA FOR EFFECTS OF ORGANIZATION AND ACHIEVEMENT ON LEARNING DISABLED STUDENT SELF-CONCEPT: POPULARITY CLUSTER

<table>
<thead>
<tr>
<th>Classification</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Middle School</td>
</tr>
<tr>
<td>Low Achievers</td>
<td>7.22</td>
</tr>
<tr>
<td>High Achievers</td>
<td>7.92</td>
</tr>
<tr>
<td>Total</td>
<td>7.57</td>
</tr>
</tbody>
</table>

**Table 27**
MEANS FOR ORGANIZATION AND ACHIEVEMENT: POPULARITY CLUSTER
<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization (A)</td>
<td>1</td>
<td>6.36</td>
<td>1.12</td>
</tr>
<tr>
<td>Achievement (B)</td>
<td>1</td>
<td>12.08</td>
<td>2.12</td>
</tr>
<tr>
<td>A x B</td>
<td>1</td>
<td>.11</td>
<td>.02</td>
</tr>
<tr>
<td>Error</td>
<td>41</td>
<td>5.70</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>5.76</td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 29**

MEANS FOR ORGANIZATION AND ACHIEVEMENT:
HAPPINESS AND SATISFACTION CLUSTER

<table>
<thead>
<tr>
<th>Classification</th>
<th>Organization</th>
<th>Middle School</th>
<th>Junior High</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Achievers</td>
<td></td>
<td>6.88</td>
<td>7.55</td>
<td>7.22</td>
</tr>
<tr>
<td>High Achievers</td>
<td></td>
<td>7.85</td>
<td>8.71</td>
<td>8.28</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>7.37</td>
<td>8.13</td>
<td>7.75</td>
</tr>
</tbody>
</table>
### TABLE 30
CORRELATIONS BETWEEN CLUSTER SCORES FOR THE
PIERS-HARRIS CHILDREN’S SELF CONCEPT SCALE

<table>
<thead>
<tr>
<th>Clusters</th>
<th>Cluster 2</th>
<th>Cluster 3</th>
<th>Cluster 4</th>
<th>Cluster 5</th>
<th>Cluster 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior</td>
<td>.55**</td>
<td>.08</td>
<td>.39**</td>
<td>.21</td>
<td>--</td>
</tr>
<tr>
<td>Intellectual</td>
<td>1.00</td>
<td>.55**</td>
<td>.38**</td>
<td>.46**</td>
<td>.41**</td>
</tr>
<tr>
<td>Appearance</td>
<td>1.00</td>
<td>1.00</td>
<td>.38**</td>
<td>.61**</td>
<td>.57**</td>
</tr>
<tr>
<td>Anxiety</td>
<td>1.00</td>
<td>1.00</td>
<td>.55**</td>
<td>.76**</td>
<td></td>
</tr>
<tr>
<td>Popularity</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>.57**</td>
<td></td>
</tr>
<tr>
<td>Happiness</td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>

**r > .28 significant at .01 level
Cluster 2—Intellectual and School Status—possessed a high positive correlation with all the other clusters. The correlation with Cluster 3 was $r = .55$, with Cluster 4 was $r = .38$, with Cluster 5 was $r = .46$, and with Cluster 6 was $r = .41$. A linear relationship exists between Cluster 2 and the other clusters.

Cluster 3—Physical Appearance and Attributes—positively correlated with the other clusters. The correlation with Cluster 4 was $r = .38$, with Cluster 5 was $r = .61$, and with Cluster 6 was $r = .57$. A high positive correlation exists between Cluster 3 and the other clusters.

Cluster 4—Anxiety—positively correlated with the other clusters. The correlation with Cluster 5 was $r = .55$ and with Cluster 6 was $r = .76$. A linear relationship is implied between Cluster 4 and the other clusters.

Cluster 5—Popularity—exhibited a high positive correlation with the other clusters. Cluster 5 correlated with Cluster 6 at $r = .57$. A linear relationship exists between Cluster 5 and the other clusters.

Cluster 6—Happiness and Satisfaction—exhibited a high positive correlation with the other clusters. A linear relationship is, therefore, implied between Cluster 6 and the other clusters. Data are not available on a correlation between Cluster 6 and Cluster 1—Behavior.

A high degree of positive correlation was exhibited between the six clusters of the Piers-Harris Children's Self Concept Scale. The clusters of Behavior, Intellectual and School Status, Anxiety, and Popularity showed significant correlation. A linear relationship is implied between these clusters. A significant relationship was not apparent between the clusters of Behavior and Physical Appearance and Attributes, and Behavior and Popularity.
Summary

This chapter served to report the data analyses results and acceptance or rejection of the three null hypotheses. Data analyses utilized an ANOVA procedure for the two 2 x 2 factorial designs.

Data analyses revealed rejection of hypothesis 1 and the alternative hypothesis was accepted:
1. There is a significant difference between the self-concepts of regular class students and part-time resource class LD students, whether in a junior high or a middle school. The LD students possess a lower self-concept than the regular class students in either instructional arrangement.

Data analyses revealed acceptance of hypothesis 2:
2. There is no significant difference between the self-concepts of LD students in junior high and middle school settings.

This result was apparent when a comparison was made of low and high achieving LD students within the two different school organizations.

Data analyses led to rejection of hypothesis 3 and the alternative hypothesis was accepted:
3. There is a significant difference between the self-concept of low and high achieving LD students, whether in a junior high or a middle school.

Significance was noted in the main effect of achievement. The higher achieving LD students possessed a more positive self-concept than the low achieving LD students. This result was apparent within either school organization. The high achievers in the junior high possessed
a higher mean self-concept score than the high achievers in the middle school; however, this difference in means was not statistically significant.

The significance, between the high and low achieving LD students, was concentrated on Cluster 3—Physical Appearance and Attributes. The high achievers possessed a more positive self-concept as related to physical appearance and attributes than the low achievers.
Summary of the Study

The purpose of this study was to investigate the self-concept of the LD early adolescent student within the two different instructional arrangements of a junior high and a middle school. The students were classified as either low or high achieving. The LD students were in resource class attendance for a portion of the school day.

The sample included 79 students chosen from a pool of 265 using a stratified random sampling technique based on classification as an LD student or a regular class student, and on the level of achievement as either low or high. Forty-one students were from the junior high, which included grades seven, eight, and nine, and evidenced departmentalization. Thirty-eight students were from the middle school, which included grades six, seven, and eight, and evidenced block scheduling and team teaching. The students had been enrolled in the Dade County Public School System, Miami, Florida, for the 1981-1982 school year. Achievement data were compiled from students' cumulative records at each school site. The Stanford Achievement Test's reading subtest score, was the measure utilized to determine the level of achievement.

The three null hypotheses were tested through the use of analysis of variance:
1. There is no significant difference between the self-concepts of regular class students and part-time resource class LD students, whether in a junior high or a middle school.

2. There is no significant difference between the self-concepts of LD students in junior high and middle school settings.

3. There is no significant difference between the self-concept of low and high achieving LD students, whether in a junior high or a middle school.

The level of significance, set to test the aforementioned hypotheses, was $p < .05$. Two 2 x 2 factorial designs were constructed to test the hypotheses. The first design included the variables of school organization—junior high or middle school, and classification—regular class student or LD student. The response variable was the Piers-Harris Children's Self Concept Scale's total score and the six cluster scores. The second factorial design included the variables of school organization—junior high or middle school, and the achievement level of LD students—low or high. The response variable was the Piers-Harris Children's Self Concept Scale's total score and the six cluster scores. For both designs, the unweighted cell means solution was employed due to the unequal sizes of the groups.

Analysis of variance revealed significance regarding classification as either a mainstreamed LD student or a regular class student upon self-concept, as measured by the Piers-Harris Children's Self Concept Scale's total score. The LD students, in either instructional arrangement of the middle school or the junior high, possessed a lower total self-concept than the regular class students. This significance
led to acceptance of the alternative hypothesis 1: There is a significant difference between the self-concepts of regular class students and part-time resource class LD students, whether in a junior high or a middle school.

Analysis of variance did not reveal significance regarding the comparison of self-concept of LD students in the middle school and in the junior high school. This lack of significance led to acceptance of the null hypothesis 2: There is no significant difference between the junior high and middle school's influence on the LD student's self-concept.

Analysis results noted significance on the dependent variable of Cluster 3—Physical Appearance and Attributes. High achieving LD students possessed a more positive self-concept than low achieving LD students on this variable. This result led to acceptance of the alternative hypothesis 3: There is a significant difference between the self-concept of low and high achieving LD students, whether in a junior high or a middle school.

Conclusions and Implications

There was a significant difference between the mean self-concept of LD early adolescents and regular class students within the instructional arrangements of the junior high and the middle school. Analyses further revealed that the significance was concentrated in the Behavior Cluster and the Intellectual and School Status Cluster. The LD students, in either organization, exhibited a lower self-concept concerning their behavior and intellectual capabilities. The regular class students exhibited more positive self-concepts concerning their behavior and
intellectual capabilities. This result was apparent even though both the high achieving LD students and the regular class students, were academically functioning on basically the same level in reading related subject areas. This similarity of achievement level suggests that the LD student's lower self-concept may be due to classification as learning disabled and consequent participation in a special education resource room for a portion of the school day.

The diminished self-concept of the LD student concerning his behavior may be evidence that his behaviors are actually a deviation from the norm (Bryan, 1978). This deviation in behaviors may also be continually reinforced by teachers and peers. Therefore, appropriate social behaviors may need to be reinforced for the LD student, prior to his being mainstreamed (Kehle, 1979). If early LD adolescents exhibit appropriate social behaviors, an enhancement of their self-concept, in regard to behavior, may occur.

The inadequate self-concept of the LD student, concerning his perceived intellectual capabilities and status in the school, may result from making academic comparisons with relevant others, who possess higher intellectual abilities (Festinger, 1954). This comparison, therefore, may result in the LD student possessing a lower intellectual self-concept. This lower intellectual self-concept may also be reinforced by regular classroom teachers and peers. Further teacher training concerning the intellectual abilities and instructional approaches to the LD student might be warranted. If classroom teachers are aware of the capabilities and characteristics of an LD student, any negative attitudes will be diminished, and appropriate instructional techniques will serve to enhance the LD student's self-concept (Stern & Keislar, 1977).
An interaction which approaches significance does exist between classification and school organization within the Cluster of Physical Appearance and Attributes. This interaction effect is significant at, $p = .10$. The regular class students in the middle school exhibited a more positive self-concept than those in the junior high school.

A significant result was apparent between school organizations on the Anxiety Cluster of the scale. Both the LD students and the regular class students in the middle school exhibited more anxiety than the students in the junior high.

In investigating the instructional practices of the two schools through informal classroom observations and conversations with students, teachers, and administrators, it was noted that the middle school, where team teaching, block scheduling, and a close counselor-student relationship was present, fostered a more humanistic atmosphere for the students than the junior high. The middle school students appeared more vocal than the junior high students. Perhaps the middle school students scored lower on the Anxiety Cluster because they felt freer in expressing their attitudes. The junior high students may have been responding to how they thought their teachers would want them to react. It was interesting to also note that several of the junior high students expressed concern, to this author, as to whether their results on the scale would affect their grades and promotion. They were also concerned as to whether their teachers would find out about their individual responses. The middle school students did not express these concerns.
The more regimented structure of the junior high might be a factor which serves to enhance one's self-concept as compared to the middle school's more flexible structure. Other variables, however, should be considered before a deduction can be made that this regimentation produces less anxiety concerning student self-concept.

A difference in mean age was not apparent as a factor for the increased anxiety among the middle school students. Students at both schools possessed age means of approximately 13.0 years.

Grade differences may not be noted as an explanation of the increased anxiety for the middle school students. The middle school students were either in grades six or seven, and the junior high school students were either in grades seven or eight. Within both schools, the students were either at the end of their first year or at the end of their second year of attendance.

A statistically significant difference between low and high achieving LD students' self-concepts was evidenced within both schools. The high achieving LD students possessed a more positive self-concept than the low achieving LD students. This result was evidenced on Cluster 3--Physical Appearance and Attributes. The high achieving LD students possessed a more adequate self-concept concerning their physical appearance. A relationship, therefore, exists between student achievement level and self-concept of physical attributes. Students, who perform academically well, also feel better about their physical appearance. A question posed is whether enhancement of student's physical appearance might also increase student's academic ability?

The results of this study lend support to other studies which picture the LD student possessing a lower self-concept. Resource room
involvement and classification as an LD student appears to affect student self-concept, whether in a junior high or a middle school. Variables such as teacher attitudes, and peer pressure, may also have an impact upon the LD student's self-concept.

The effect of school organization does have an influence on student self-concept in the Anxiety Cluster of the Piers-Harris Children's Self Concept Scale. This effect upon student self-concept is apparent for both the LD students and the regular class students. The students, within the junior high, possessed a more positive self-concept than those in the middle school, on the Anxiety Cluster.

A relationship exists between an LD student's achievement level and self-concept concerning physical appearance and attributes. High achieving LD students, in either organization, possessed a more positive self-concept concerning physical appearance than the low achieving LD students.

**Suggestions for Further Study**

Membership in the LD group appears to be related to a lower self-concept. This result was apparent whether attendance was in a junior high or a middle school. Future research should seek to further identify the influences of teacher attitudes and peer pressure, and special education classification, upon the LD student's self-concept. Since claims are made in the literature that LD students are different from regular class students, alternative means of instruction and socialization are warranted for the student to develop an enhanced self-concept.
Resource room attendance identifies a student as exceptional when that student is in a mainstreamed classroom. Teacher attitudes and those of peers may be reinforcing the LD student's self-concept when within these mainstreamed settings. The resource room is beneficial to the LD student's academic development, but perhaps instructional practices can incorporate the area of social development.

It is apparent that instructional approaches between the junior high and middle school are different. These approaches have an influence on the regular class student's self-concept, as well as upon the LD student's self-concept. Further investigation of the junior high and middle schools' instructional practices may seek to clarify this effect. An investigation of students, who have attended both organizations, might enlighten educators further concerning the effect the two schools may have upon student self-concept.

An interaction exists between achievement and LD student's self-concept concerning physical appearance and attributes. Further study should seek to clarify this interaction effect. It is suggested that since achievement affects student self-concept of physical attributes, methods of enhancing student achievement would also enhance the self-concept for the LD student. Perhaps an enhancement of one's physical appearance may also serve to increase one's academic capabilities to a certain extent. It is of interest to note that this interaction is not evidenced for the regular class students. The regular class students may be able to academically achieve without undue concern of their physical appearance. Thus, the physical appearance of a regular class student does not serve to affect his achievement, and his achievement does not serve to influence how he feels about his physical appearance.
The goal of educators is no longer just in the realm of academic
instruction. The current educational movement is towards developing
a total individual. This aim requires that educators consider the
effect school organizations have upon students' social development, as
well as academic development. This social consideration appears
especially significant for the LD early adolescent student who may
require different instructional strategies and additional emotional
support.
APPENDIX 1
DIRECTIONS READ TO STUDENTS

Here are a set of statements. Some of them are true of you and so you will circle the yes. Some are not true of you and so you will circle the no. Please answer every question even if some are hard to decide, but please do not circle both yes and no. Remember, circle the yes if the statement is generally like you, or circle the no if the statement is generally not like you. There are no right or wrong answers because it's how you feel. Only you can tell us how you feel about yourself, so we hope you will mark the way you really feel inside. Please don't read ahead on your own. Wait until the statement is read, and then answer how you feel. Some of the statements will be omitted. Please raise your hand if you don't understand a statement or require more time.
APPENDIX 2
PARENTAL PERMISSION LETTER

UNIVERSITY OF FLORIDA
FLORIDA INTERNATIONAL UNIVERSITY
COOPERATIVE PROGRAM

Andrea Cielesz
Diagnostic Teaching

Dear Parent,

I request your permission to involve your child in an attitude survey concerning his or her feelings towards academics, school, friends, and self. This survey is being conducted as part of a University, Doctoral Level, research project. Results from this project may suggest various ways for your child to achieve continued success in school.

The survey will take approximately thirty minutes, and will be conducted in school within the coming month. If you allow your child to participate, I will also need your permission to obtain your child's previous Stanford Achievement Test results.

Your cooperation and continued interest in your child's education is appreciated. The results of this study will be available upon request.

Sincerely,

Andrea Cielesz

__________________________       ____________________________
Student's Name                Parent Signature

P.O. Box #161042
Miami, FL 33116

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APPENDIX 3
THE PIERS-HARRIS CHILDREN’S SELF CONCEPT SCALE
(THE WAY I FEEL ABOUT MYSELF)

1. My classmates make fun of me.
2. I am a happy person.
3. It is hard for me to make friends.
4. I am often sad.
5. I am smart.
6. I am shy.
7. I get nervous when the teacher calls on me.
8. My looks bother me.
9. When I grow up, I will be an important person.
10. I get worried when we have tests in school.
11. I am unpopular.
12. I am well behaved in school.
13. It is usually my fault when something goes wrong.
15. I am strong.
16. I have good ideas.
17. I am an important member of my family.
18. I usually want my own way.
19. I am good at making things with my hands.
20. I give up easily.
21. I am good in my school work.
22. I do many bad things.
23. I can draw well.
24. I am good in music.
25. I behave badly at home.
26. I am slow in finishing my school work.
27. I am an important member of my class.
28. I am nervous.
29. I have pretty eyes.
30. I can give a good report in front of the class.
31. In school I am a dreamer.
32. I pick on my brother(s) and sister(s).
33. My friends like my ideas.
34. I often get into trouble.
35. I am obedient at home.
36. I am lucky.
37. I worry a lot.
38. My parents expect too much of me.
39. I like being the way I am.
40. I feel left out of things.
41. I have nice hair.
42. I often volunteer in school.
43. I wish I were different.
44. I sleep well at night.
45. I hate school.
46. I among the last to be chosen for games.
47. I am sick a lot.
48. I am often mean to other people.
49. My classmates in school think I have good ideas.
50. I am unhappy.
51. I have many friends.
52. I am cheerful.
53. I am dumb about most things.
54. I am good looking.
55. I have lots of pep.
56. I get into a lot of fights.
57. I am popular with boys.
58. People pick on me.
59. My family is disappointed in me.
60. I have a pleasant face.
61. When I try to make something, everything seems to go wrong.
62. I am picked on at home.
63. I am a leader in games and sports.
64. I am clumsy.
65. In games and sports, I watch instead of play.
66. I forget what I learn.
67. I am easy to get along with.
68. I lose my temper easily.
69. I am popular with girls.
70. I am a good reader.
71. I would rather work alone than with a group.
72. I like my brother (sister).
73. I have a good figure.
74. I am often afraid.
75. I am always dropping or breaking things.
76. I can be trusted.
77. I am different from other people.
78. I think bad thoughts.
79. I cry easily.
80. I am a good person.
REFERENCES


Jones, R. L. Labels and stigma in special education. *Exceptional Children*, 1972, **38**, 553-564.


Lilly, S. M. Improving social acceptance of low sociometric status, low achieving students. Exceptional Children, 1971, 37, 341-347.


BIOGRAPHICAL SKETCH

Andrea Josephine Cielesz currently resides in Miami, Florida. She has lived in south Florida for 25 years. She graduated from Miami Palmetto Senior High School in 1971. She attended Miami-Dade Community College, the University of Florida, and Florida International University. A bachelor's degree was obtained at Florida International University, in the field of special education—learning disabilities, in 1973. A master's degree, in diagnostic teaching, was received from Florida International University in 1978.

Ms. Cielesz's teaching experience has involved working with students classified within a variety of exceptionalities. These exceptionalities have included the learning disabled, educable mentally retarded, autistic, and the speech impaired. Her experience has been in Immokalee, Florida, and Miami, Florida. She is currently employed by the Dade County Public School System as a special education instructor. Ms. Cielesz also serves as a teacher education center representative, exceptional student coordinator, faculty council representative, and student testing committee representative at the school site. These responsibilities have enabled her to work with various parent and teacher groups.

Ms. Cielesz has also been involved in an instructional capacity with Florida International University since 1979. This involvement has included working as a clinical instructor in the psycho-educational department, and as a clinical instructor and adjunct professor in the
instructional leadership department. She is currently involved with
the instruction of prospective teachers in a teaching methods course.

Professional affiliations have included the Council for Exceptional
Children, International Reading Association, Florida International
University Alumni Association, and the Association for Supervision and
Curriculum Development.
I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.

Paul George, Chairman
Professor of General Teacher Education

Stephen Faijf
Associate Professor of Instructional Leadership and Support

Robert Soar
Associate Professor of Foundations of Education
This dissertation was submitted to the Graduate Faculty of the Division of Curriculum and Instruction in the College of Education and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Education.

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