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A study of self-concept as it relates to academic achievement and gender in third grade students

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A STUDY OF SELF-CONCEPT AS IT RELATES TO ACADEMIC ACHIEVEMENT AND GENDER IN THIRD GRADE STUDENTS

by
Grace S. Woods

A Thesis

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Professor

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ABSTRACT

Grace S. Woods
A Study of Self-Concept as it Relates
to Academic Achievement and Gender
in Third Grade Students
Dr. John Klanerdman
Masters of Arts Degree In School Psychology
1998

The purpose of this study was to determine if a positive relationship exists between self-concept, academic achievement, and gender. The subject sample consisted of fifty-two students from a suburban public school district in southern New Jersey. Twenty-seven females and twenty-five males participated in the study. The Piers-Harris Children's Self-Concept Scale was used to evaluate self-perception. Academic achievement was evaluated with the use of math and reading grades from the student's report cards. The correlation coefficient results indicated that a significant relationship between self-concept and both reading (.291) and math (.307) achievement exists. Frequency polygons were used to display the distribution of each set of scores. Accordingly, a positive relationship exists between a students self-perception and academic achievement.

MINI ABSTRACT

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The relationship between self-concept, academic achievement, and gender in third grade students was investigated. This study indicated that there was a significant relationship between self-concept and academic achievement.

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I would like to express my gratitude and appreciation to :

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PRESENTATION OF THE PROBLEM

Introduction

The self-concept is the foundation of all the beliefs an individual holds pertaining to who they are and how they perceive life. A person's self concept influences all aspects of an individual's behavior. Therefore, behavior is in accordance with the beliefs' one has about oneself.

A child's self concept is the cornerstone to their overall development socially, emotionally and academically. Assuming the great influence and control one's self concept exercises on a child's growth and development, the need to understand the relationship between self-concept and academic achievement is obvious.

Need for the Study

Self-concept affects every aspect of a child's life. A positive self concept is critical to the healthy development of any child. Therefore, it is important that educators foster a positive, non-threatening environment for children to grow academically and socially. Educators can achieve this by providing opportunities and lessons that increase student's success academically and socially in the classroom.

The achievement students experience in school will have a direct impact on their level of positive self-concept. Children who are at risk academically will have a negative impact on their self-concept. Therefore, it is important that we research the relationship between academic success and self-concept.

Purpose

The purpose of this study is to investigate the relationship between self-concept and academic achievement, and to analyze gender differences of the self-concept in third grade students.

Hypotheses

Two hypotheses are examined in this study:

1. There is a significant positive relationship between self-concept and academic achievement in third grade students.
2. There is a significant positive relationship between self-concept and gender.

Theory

Over the years a person's thought process was believed to be directly related to one's level of intelligence. However, recent research has shown that several factors such as motivation and attitude can have a significant impact on a person's achievement level. One theory that has been found to explain the differences in a person's level of achievement level is Alder's achievement motivation theory.

Achievement motivation theory is a cognitive theory used to explain why some people achieve more than others. Many times, it is easy to see why achievement levels differ between people based on their intellectual level or their physical abilities. However, persons with similar attributes many times have significantly different levels of achievement. Many psychologists explain these differences among individuals with

similar potential because some people simply have a stronger desire to succeed more than others (Good and Trophy 1986). Success and achievement become a major part of their lives. These individuals structure their time around pursuing achievement goals versus satisfying other needs and goals.

Alfred Alder theorized that all current behavior is directed by future goals. He believed that a person's purpose in life is to reach perfection or completion. This purpose is what motivates individuals towards fulfillment of their unique potential. Alder believed that all actions are guided by a person's attitude toward life. He also theorized that all human beings experience some sort of inferiority, either psychological or social. From these inadequate feelings come the need for superiority; or overcompensation (Reckon, 1993). He felt that people who felt inferior in some way would try to compensate for their weakness by intense training. According to Alder, it is not the defect itself that motivates the individual to overcome their weakness, it is their attitude towards it. He felt that how a person perceived his/her weakness could be destructive or constructive to one's life.

Another theory used to explain a child's lack motivation is called Learned Helplessness. Theorist, Martin Seligman, discovered a type of personality response that was typical to handicapped students. These students typically learn to appear helpless. They exhibit external cues that give an impression that they are not competent. These behaviors (tears, refusal to try) have been learned. Studies have shown that parent's attitudes and feelings of guilt have often times impeded the child's ability to grow (Sprinthall, 1987).. The child's ability to become competent is lost .

However, the child becomes competent in getting others to accomplish his/her needs and wants. This theory may be used to explain the differences between children who are willing to try and believe that they are capable of succeeding and a child who believes that he or she will fail from the start.

Definitions

For the purpose of this study the following definitions apply:

1. self-concept: The composite of all traits, attributes, and limitations the individual assigns to oneself; the individual's evaluation of oneself and how the individual perceives what others think of oneself as measured on the Piers-Harris Children's self-concept Scale.

2. Positive self-concept: Belief that the self is adequate, likable, valued and intrinsically worthy, (Leeds, 1971).

3. Negative self-concept- Belief that the self is inadequate, unlikable, not valued (Leeds, 1971)

Overview

Literature will be reviewed in Chapter Two on the subject of self-concept and its relationship to academic achievement. The literature will be broken down into five parts: preschool, elementary, high school and college. The literature will also review how gender differences impact achievement levels and one's self-concept.

In Chapter Three the research design will be presented. The sample will be explained and the instruments and measures used to obtain the results of the study will be summarized. The process and procedures by which the study was conducted will be explained in great detail.

Chapter Four will be devoted to the analysis of the results of this study. The results will be interpreted and any statistical significance of this research will be described.

Chapter II

REVIEW OF THE LITERATURE

Introduction

This chapter briefly reviews the large body of research conducted within the last twenty years on the relationship between self-concept and academic ability. The research indicates that not only is there consistent and moderately strong relationship between these two variables but that they are also reciprocal. Although, the achievement side of this relationship is easily seen, the self-concept element is not. The self-concept is difficult to assess because it involves personal perceptions and hidden feelings. There are no clear cut answer or guidelines to fostering a healthy self-concept. For this reason it is important for educators to understand the general nature of a student's self-concept dynamics.

Self-concept in Preschool Children

Mark Rubenstien states that the foundation for a healthy level of confidence is formed by the child's parents within the first year of life. Feelings of pride are a basic element of self-esteem. A new baby experiences feelings of pride through the reactions and feedback they receive from their parents; through facial expressions and verbal responses. Rubenstien believes that the most important thing a parent can do is

cultivate a stronger sense of self-esteem, especially at the three to five year old levels . Maslow's hierarchy of needs states that once the basic needs of food, water, air and shelter are met then the child's social needs can be addresses. According to Maslow's theory a human being can not reach his or her full potential until their need for self-esteem is satisfied. This final step is referred to as self-actualization. Bloom states that intervention within the first five years of life can increase a child's intelligence. He views this time as a "critical period". If research shows that a positive environment can result in developing a strong sense of self in children then; it is only logical that educators and parents try to understand what a positive environment should include. In early childhood education, there has been limited research focusing on creating a positive environment that assists the child in developing a positive self-concept. Lorton and Walley, in Introduction to Early Childhood Education, stress that "The deep and lasting joys and pleasures from childhood come from being secure and loved and being allowed the freedom for self expressions and new accomplishments." Havigurst (1955, p. 24) has identified certain developmental tasks for growing up, which includes developing a positive self-concept. In an article written by Victor Denenberg, research indicates that the environment can be manipulated through enrichment resulting in higher self concept. Research conducted by Tuta and Baker found that students who attended preschool had a significantly higher self-concept over students who did not attend.

Self-concept in Elementary Students

In elementary grade levels research indicate that a student's attitudes and social acceptance play a major role in developing a positive self-concept. Newhouse (1975), states that a child's attitude towards others is partly determined by their attitudes towards themselves. This research supports Shantz and Hobart (1989) findings that the relationship between self definition and interpersonal experiences is likely to be bi-directional. Research by Dodge, Schundt, Schocken and Delugach (1983) found that popularity in childhood is related to interpersonal behaviors and personnel factors such as, feelings of belongingness, physical attractiveness and levels of extroversion. Burns and Farina (1984) concluded that self-concept is related to friendship patterns and peer- acceptance ratings. Bradley and Newhouse (1975) conducted a study using student's scores on the Piers-Harris Children's Self Concept Scale. The results indicated that a student's self-concept is highly related to the way the student was perceived and accepted by their peers. Research conducted by Susan Glazer indicates that direct praise can be used as a way of reaching the hard-to-reach. Using critical or punitive language, gestures and methods of assessment can affect their self-respect. William Purkey (1970), lists six factors that affect classroom climate and as a result affect student's self-concept: challenge, freedom, respect, warmth, control and success. "If students can make their way through the middle level years with a positive attitude, they will have set the stage for themselves to conquer many worlds." (Stone and Rottier 1996) Margie Stone and Jerry Rottier took this list and developed suggestions for creating a positive classroom environment. They also developed a questionnaire

for teachers to assess the climate in their classroom (see appendix a). Lilian Katx, in her article, "Do You Bolster Children's Self-esteem or Promote Selfishness", states that many of the current practices intended to enhance self-esteem are more likely to foster preoccupation with oneself and the way one appears to others. She takes common classroom practices used to build self-esteem and offers practices that engage children in investigating real environments. She feels that one of the primary goals of building a student's self-esteem is helping them deal with failure.

Over the past fifteen years, research has shown that cooperative-learning groups enhance student achievement. Lampe and Rooze's (1996) research reveals that cooperative-learning groups equalize the status and respect of all group members. Students who normally "tune out" in a traditional setting become actively involved in the learning process through group interaction.

Don Hamachek points out that there is a consistent and solid relationship between academic achievement and self-concept, moreover, these two variables are highly interactive and reciprocal. The achievement side of this relationship is easily seen. However, it is difficult to see the self-concept side because it involves hidden feelings and personnel perceptions. Hamachek developed an informal self-concept inventory reflecting behaviors that pervious research has identified as positive and negative feelings about the self. This assessment tool can be useful in identifying and understanding the general nature of a student's self-concept dynamics. Hamachek's inventory lists fourteen items. Each item reflects a different behavioral dynamic, and when looked at as a package of behaviors reflecting inner feelings, what emerges can

serve as a starting point for assessing the student's general; self-concept status. (see appendix b.)

Research conducted by Necessary and Parish in 1991 reported that second graders' self-concepts were successfully enhanced and sustained through the implementation of the "Let's Get Excited About Life" program. These results support the idea that self-concept enhancement programs have lasting effects on the student's self-concept and subsequently on their social, emotional and academic abilities as well. Necessary and Parish repeated this study in 1994 to find out if this program would have the same positive effect on inner-city African-American students from mostly single-parent families. The results showed that the program worked well for students in grades one and two; showing an increase in their self-concept. However, only a slight increase resulted in student's self-concept in grades three, four and five after viewing the program (Necessary and Parish, 1994)

Sharon Neuman writes in her article, "The Negative Consequences of the Self-Esteem Movement," that the self-esteem movement is rooted in political correctness whose educational manifestation is censorship. This attitude of never offending anyone and having everyone feel good about themselves is educationally dishonest and unsound. Many educators feel that the students must have a positive attitude before they can be academically successful. The question is how do students achieve a positive self-concept? "Many proponents of the self-esteem movement seem to believe that it is something that can be doled out on the first day of school along with pencils and name tags."(Neuman, 1992). Others believe that self-esteem must follow

not precede achievement. That protecting students from failure is under estimating their resilience. Deceiving our students by telling them they are great without any real proof is under estimating their ability.

D. W. Dewhurst reviewed past research and reported that self-esteem is a commodity that is not equally distributed among students. Self-esteem is of a comparative nature and depends on doing well in regard to how well others can perform a certain task. Susan Black states, in her article, that self-esteem is a rather fixed and stable psychological state, not too responsive to change. Black also states that a child's self-esteem is formed by the age of five and is developed from the child's family and home environment. Black feels that the best way for schools to foster a positive self-esteem is to create an environment where students are valued and respected. She feels that most self-esteem enhancing programs are gimmicks that do little to help the students. (Black, 1991). Sears (1970) found that parents who were warm and accepting when their children were between the ages of three to five had children with high self-esteem measured at age twelve. Parents who used an authoritative approach are also more likely to have children with high self-esteem. These parents make reasonable demands without making unreasonable restrictions and they allow their children to have some control and to make some of their own choices.

Self-concept in High School Students

Research conducted on high school students' self-concept reveals that students who are at risk of dropping out of high school can be identified through the use of the

Tennessee Self-Concept Scale. Mary Jackson and Kimberly Reddick used the thirteen items scales to identify forty-three ninth grade students who were identified as being at risk of dropping out of high school and forty-seven students who were thought to show endurance in completing high school. Their investigation revealed that nearly 77% of the students were correctly identified.

David Watkins and Sally Kemp's research using high school students found that responses to the Self-description Questionnaire by non-anonymous groups and anonymous groups differed according to the academic ability of the students. The higher the ability group the stronger the inclination to report high self-esteem in the anonymous setting. In another study conducted by Watkins and Kemp, on the effects of ability grouping, found that higher-ability students have a tendency to have a lower self-esteem but lower-ability students have a tendency to have a higher self-esteem. These findings were interpreted by Marsh as the "big fish little pond" effect. This means that the group that the individual uses as a reference has a strong influence on their self-esteem.

Students Serving Students is a community service program used as a component to a dropout prevention program. This program was used to heighten students academic self-concept by helping others. High school students were paired with handicapped students having multiple, severe disabilities. The services that the students performed helped them see how they can positively affect the quality of life of the people they help and at the same time, find reasons to stay in school and better their academic performance (Delaney and Corbett, 1994).

An interesting study conducted by McDonald and McKinney focused on the relationship between steady dating and self-esteem in high school students. The results showed that girls who had steady partners had lower self-esteem than girls who were not presently going steady. However, the boys' dating practices did not have an affect on their self-esteem (Mcdonald and McKinney 1994).

Self-concept and College Students

The research available for college students focuses on the many facets that influence academic success. In an article written by J. Daniel House he states that achievement expectancy, academic self-concept and student attitudes are better predictors of performance than subsequent academic accomplishment. Robert Wheeler and Philip Magaletta used the General Well-being Questionnaire on sixty-two college students and found that growth environment, effectiveness and medical condition significantly predicted student's final course grade. Similarity, Charles Anazonwu found that students who showed effort and were attentive in class performed better than students with task or luck ascriptions. These same students also had higher academic self-concepts.

Gender

Research conducted on the relationship between academic success and gender differences show that as girls grow up they lose confidence in their academic abilities and lower their career aspirations. There has been an increase focus on gender

differences in math and science since 1973 when Sells reported that mathematics acts as a "critical filter" for many women in acquiring careers requiring science. One explanation for the decline in success and interest in science for girls is the test itself. Most achievement tests are multiple choice. Females tend to perform more poorly than males on this type of test because females are reluctant to guess and males are willing to take risks. Females are also more willing than males to choose an "I don't know" response; which is not rewarded on standardized tests (Jovanovic and others 1994).

Many investigators have tried to explain why men have an edge in math and science. Researchers have tried to find a biological or intellectual cause for the differences between male and female ability in math and science, but none have been discovered to date. However, cultural biases have been found to have an impact on how females view their ability to perform in these areas (Peltz, 1990). Boys are more likely to have more informal experiences in math and science than girls do. Parents of boys are more likely to buy their sons science toys such as microscopes and are more likely to subscribe to science magazines than parents of girls. Boys are also exposed to mathematical concepts earlier than girls through the toys they play with. For example, boys experience spatial relationships through building blocks and model building. However, Peltz's study showed that young children are all curious about the world and boys rarely differ from girls during the pre-school years. However, by the time a student reaches the age of eleven attitudes change and create a clear distinction between girls' and boys' interest in science. Furthermore, girls are not likely to believe that these subjects have utility in their lives. Even if they persist in taking these courses

they are apt to find that they really do not like them. The key to succeeding in a subject depends on liking what you are doing (Lockhead and others, 1985). Science and math are viewed by society to be "masculine", according to recent research. Adolescent girls are very interested in conforming to what society views as feminine. Therefore, girls tend to shy away from these subjects. Textbooks also covey the message that science and math are masculine through their illustrations. Textbooks show males as "doing" and females as "posing". (Klein, 1989).

A great deal of research on education shows that schools do not serve girls well. In an article from the American Association of University Women titled "How Schools Shortchange Girls" reveals that 1) girls get less praise, attention and fewer constructive comments than boys 2) teachers listen when boys call out answers, but when girls do it they are told to raise their hand 3) females that Appear in textbooks are generally passive and sex-role stereotyped 4) SAT scores are poor indicators for college grades for girls 5) sexual harassment reports are increasing (McDaniel, 1994).

To correct the situation and begin to provide girls with an equal balance in the classroom teacher should review their own classroom practices and attitudes to determine any bias that might work against the education of female students. McDaniel provides a quiz to help teachers assess any tendencies they may have towards sexism. Sally Blake provides teachers with guidelines for structuring science activities that are geared toward engaging all of the students' interests.

Summary

Research has indicated that a definite relationship exist between self-concept and academic achievement. Studies have shown that a positive self-concept can be enhanced through the use of structuring the environment and providing positive experiences in the home and school settings. Research strongly indicates that early influences were determined to play a critical role in the development of a healthy self-concept. Although it continues to develop and change throughout life, it appears to mature in the direction in which it started. Self-concept seems to be a rather fixed and stable psychological state. Several researchers felt that self-esteem enhancing programs were politically rooted and under estimated the students abilities. However, the majority of research shows that a positive environment can result in the development of a strong self-concept. Therefore, it is only logical for teachers and parents to continue their search to find the determining factors of developing a healthy self-concept.

Chapter III

PROCEDURE AND DESIGN OF STUDY

Introduction

This study examined the relationship between self-concept, academic achievement, and gender. All of the variables in this experiment were found in an educational setting. This setting limited the sample size, therefore, limiting randomization.

The researcher conducted the study using three third grade classes. The students' self-concepts were assessed with the Piers- Harris Children's Self-Concept Scale. Academic achievement was collected by obtaining the grades from the previous marking period for each student in mathematics and reading.

Population and Sample

The subjects tested in this study were 52 third grade students from a public elementary school in a suburban school district in southern New Jersey. The sample consisted of 27 girls and 25 boys. The subjects were eight to ten years of age. Of the

52 students 6 were enrolled in the Chapter I Basic Skills Program for reading and math and 8 were selected to participate in the AIM program. The Aim program is for gifted and talented students who excel in the subjects of reading and math. Boys and girls were equally represented in the sample.

Research Design and Procedure

Before assessing the students the researcher received permission from the school district and the parents. This was accomplished by writing a letter to the parents explaining the researchers intent (see appendix c). Once this was accomplished, consent was obtained from the parents.

Once the researcher gained approval, the Piers-Harris Children's Self-Concept Scale was administered. Each of the three classes took the test separately. The students' classroom was selected as the testing site to reduce distraction. Time consumed by distributing materials, giving directions, and completing the test totaled approximately forty minutes. Each class took the test in the afternoon following their lunch break during the first week of February, 1998. The researcher administered the test to each class to avoid differences in teaching style. The students were guided through the test by the researcher. The test was administered orally and the directions were read aloud by the researcher. The students were told that the questionnaire was a set of statements that tell how some students feel about themselves. The researcher explained to the students that there were no right or wrong answers. The researcher explained the directions and told the students that they were to circle yes if the

statement describes the way they feel and no if the statement does not describe the way they feel. Each statement was read aloud to avoid any misunderstandings and reading difficulties. If the students required help during the test they were instructed to raise their hand and the researcher assisted by giving the child a word or a group of words that made it easier for the child to comprehend the statement. Most importantly, the students were instructed to answer all of the items on the questionnaire leaving no omissions.

Instrument Used

The Piers-Harris Children's Self-Concept Scale is an eighty item inventory of declarative statements regarding how a child views him or herself in terms of behavior, intellectual and school status, physical appearance and attributes, anxiety, popularity, and happiness and satisfaction. It provides a direct measure of self-concept. It was developed for students on a third grade reading level through grade twelve. The scale can be completed in fifteen to twenty minutes, however, there are no time limits when administering the scale. It can be administered and scored easily by educated non-psychologist. However, the scores should be interpreted by someone with a background in statistics. It can be used in the classroom, in a clinical setting as well as in research. However, it was originally designed for research purposes. When administered to a whole class the results are used to identify children who are in need of psychological counseling. When the scale is used in a clinical or counseling setting it is usually included as part of a battery of tests.

The test consists of eighty yes or no statements. The items on the test reflect the child's attitude about how they feel about themselves. The scale measures six items of self-concept. The following are sample items from each area: 1) behavior: I do many bad things. 2) intellectual and school status: I am good in my school work. 3) physical appearance and attributes: I am good looking. 4) anxiety: I cry easily. 5) popularity: People pick on me. 6) happiness and satisfaction: I am a happy person. The student is to mark yes or no in response to each question indicating if the statement is true most of the time.

The test can be scored by hand or by computer. Templates are provided by the publisher when hand scoring the test; which takes about thirty minutes. Computerized scoring is available through Western Psychological Services; which includes and interpretive score as well. Both methods are considered highly reliable, however, a problem arises when using the templates. The templates do not clearly identify which subsets of items are used to calculate each cluster score. A student's score is determined by the number of items indicating a positive self-concept.

The test was normed in 1956 of 1,183 Pennsylvania students in grades three through twelve. An independent sample of 485 students were used to norm six cluster areas. There were no significant differences found between sex or grade levels, therefore, the scores were pooled for norming purposes. The scale was normed on a limited demographic sample of students. The manual encourages test users to develop their own local norms for this reason. The scale has not been normed for use with

younger students or racial groups. Therefore, caution is advised when explaining scores from unnormed groups.

Scoring The Piers-Harris Children's Self-Concept Scale

All instruments employed in this study were scored by hand, according to the directions given in the accompanying administrator's manual. Academic achievement scores were obtained from the teachers. Academic ability was realized by averaging the mathematics and reading scores from the previous marking period. The school system uses a numerical grading system which assigns percentages to each subject. The highest percentage being one hundred. The percentages are reached by adding all of the scores earned throughout the semester and then dividing the total by the number of grades recorded.

Gender differences were established by scoring the test and using the six separate clusters to identify which areas had significant differences between boys and girls. An overall correlation between the total score and gender was also established using the scores from the Piers-Harris Children's Self-Concept Scale and the students' academic record.

Reliability

The internal reliability of the Piers-Harris CSCS is high. Male and female populations have an alpha coefficient of .90 and .91. The Kuder-Richardson formula reports reliability of .88 and .93 for males and females.

The

Test retest intervals ranging from two weeks to six months reports reliability between .62 to . 96. These reliability have been established in several populations: normal, learning disabled, African American, Mexican American children and migrant workers, and American Indians. Psychological Testing and Assessment (1992), reports the Piers-Harris CSCS retest reliability coefficient to be in the 70's range.

Validity

A study exploring the validity of the Piers-Harris CSCS in comparison to the Self-Esteem Inventory is cited in the manual. The correlation coefficient of the two instruments of .78 was obtained. Which indicates a moderate correlation between the two scales. A correlation of .32 was obtained on the Personal Attribute Inventory for Children and a correlation of .85 on the Coopersmith Self-Esteem Inventory.

The interpretation of the Piers-Harris test scores are based on the total overall score and the cluster scores. There are two areas of concern that need to be clarified before the scale can be interpreted accurately 1) whether the subjects respond honestly about how they feel about themselves and 2) whether or not the child can be effectively compared with the existing norms.

Face validity should not be used to interpret scores on the Piers-Harris CSCS. Scores in the direction of the positive are not necessarily an indication of a positive self-image. A child "faking" positive responses may be indicative of underlying issues. Such as an attempt to hide problems or a desire to look good in front of others. Scores

over 1.5 standard deviations over the mean should be reviewed for these false positives. However, the manual notes that high scores may in fact be a reflection of a healthy high self-image. On the other hand, low scores should always be viewed as an indication of low self-esteem and possible intervention.

The Piers-Harris CSCS has satisfactorily demonstrated concurrent validity in comparison to other tests measuring self-concept. The following is a list of tests which obtained correlations using the Pearson r. Coopersmith - .85, Pictorial Self-Concept Scale for both male and female - .42, Tennessee Self-Concept Scale for males - .51, Tennessee Self-Concept Scale for Females - .61, Bills IVA for Males - .40. The results may reflect the differences in the format of each test. It is important to note that the Pictorial Self-Concept Scale was designed for children younger than the Piers-Harris CSCS. Also, the Bills IAV Scale includes adults whereas the Piers-Harris does not.

The Piers-Harris CSCS has been used to predict a child's self evaluation. Such as, expectations and academic performance. The Piers-Harris CSCS was also found to accurately predict a child's self-esteem and how he/she interacts with their peers. There is also considerable agreement between a child's self rating and teacher ratings. Low self-concept has also been associated with introversion as; high self-concept with extroversion. Personality characteristics such as: belief in internal control over one's environment has been associated with having a high self-concept. Whereas, children with a low self-concept believe in external controls in their lives. Anxiety and self-concept has also been found, not surprisingly, to be significantly related as well.

Coopersmith conducted a study in 1967 to determine the correlation between self-concept and intelligence. The correlation was found to be positive but low

Hypotheses

Two hypotheses were examined in this study:

1. There is a significant positive relationship between self-concept and academic achievement in third grade students.
2. There is a significant positive relationship between self-concept and gender.

Both hypothesis were analyzed using two-tailed independent t-test. Results of the two-tailed independent t-tests expressed a significant relationship between self-concept and academic achievement. The null hypothesis of hypothesis one was therefore rejected. However, the results of the two-tailed independent t-test of hypothesis two indicated no significant relationship between gender and self-concept. These results prevented the rejection of the null hypothesis of hypothesis two.

Chapter IV

ANALYSIS OF FINDINGS

Introduction

The purpose of this study was to determine if there was a significant relationship between self-concept, academic achievement and gender. The study was conducted in a suburban public school district in southern New Jersey. The sample consist of 52 subjects (n=52).

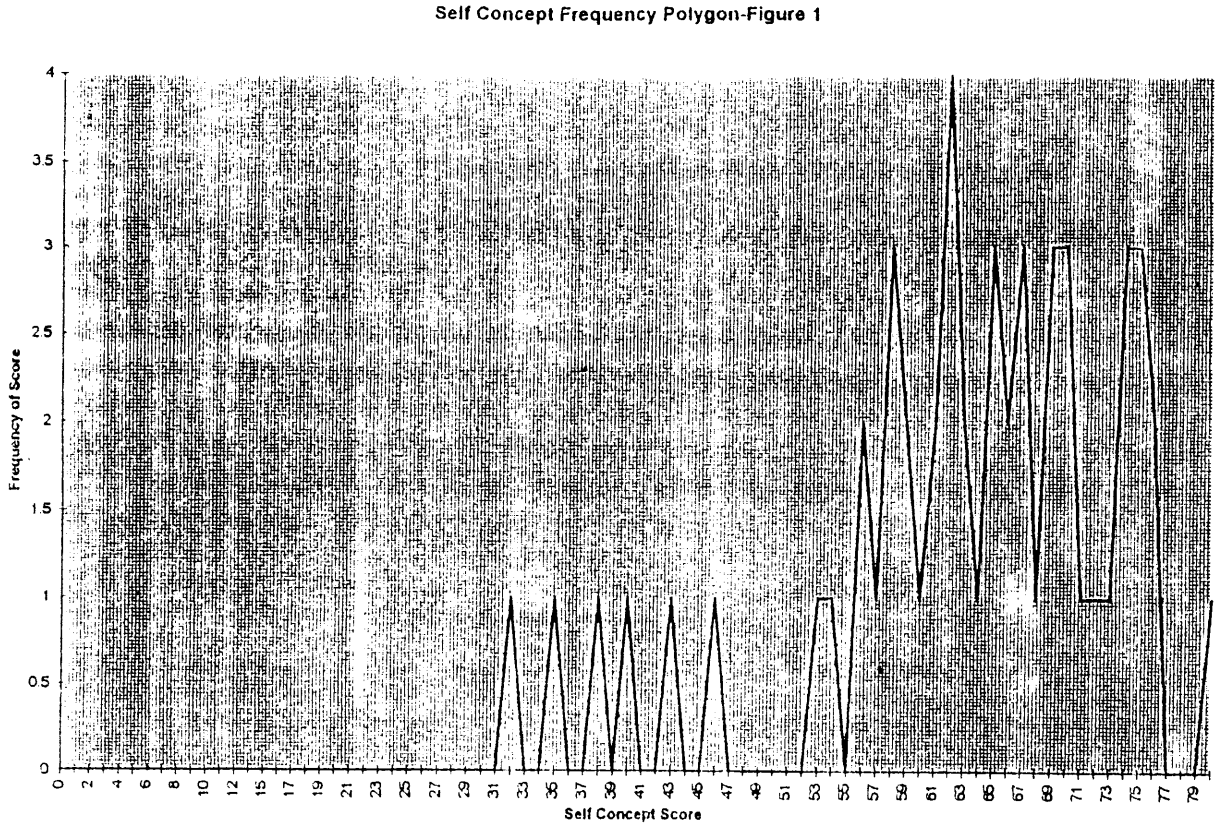
Data collection was achieved by administering the Piers-Harris Self-concept Scale to the students. The scores on the CSCS were compared to their math and reading grades on their report cards.

Self-Concept

The raw scores for self-concept were obtained from the Piers-Harris Children's Self-concept Scale and analyzed for statistical information. The distribution for each raw score is displayed in a frequency polygon (see figure 1). The distribution has a mean value of 62.6 and a standard deviation of 1.48.

A comparison was made between the scores obtained on the CSCS and their reading scores using a t-test for paired samples. The findings indicate that there is a significant relationship between the two variables of t (df)=_ p< .000. Therefore, the

two variables are related and have a positive relationship. A similar finding was found when a comparison was made between self-concept scores and math achievement scores.

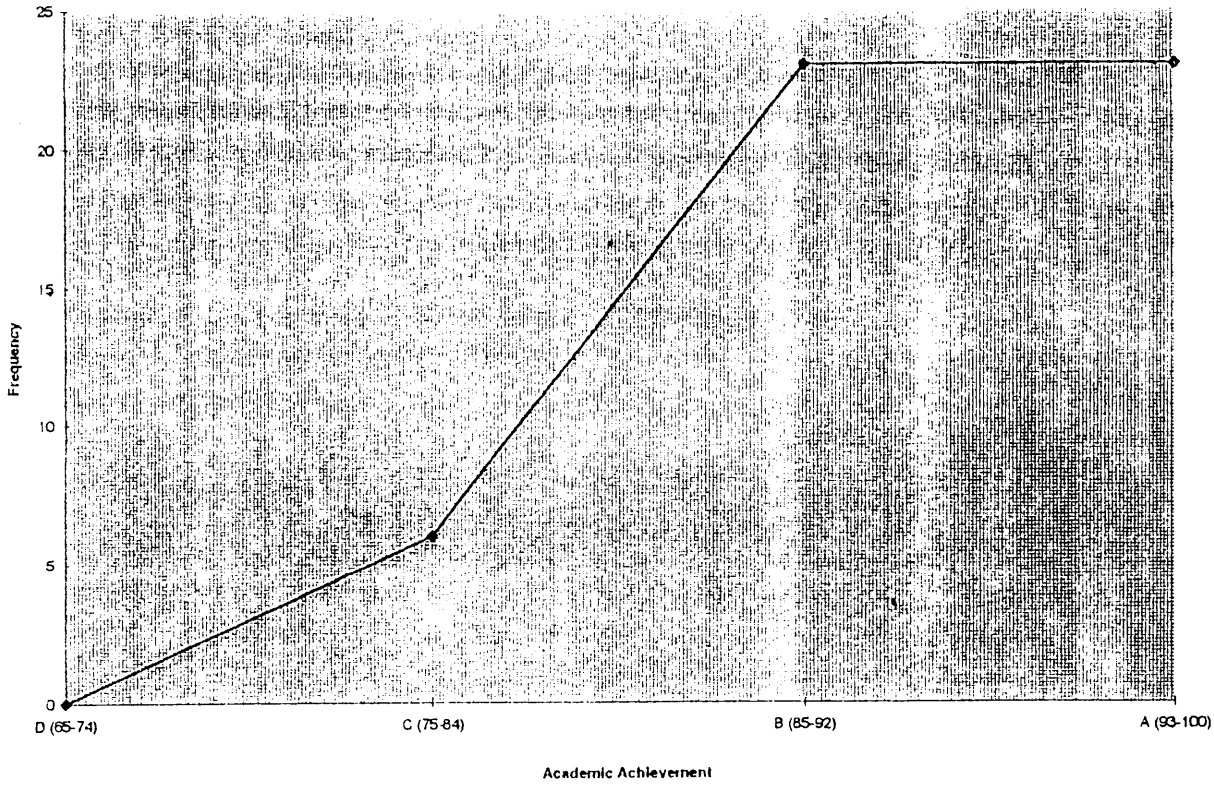


Academic Achievement

Academic achievement was obtained by using the students reading and math scores. These scores are already in numerical value on the subjects reports cards. Frequency polygons were created to display the distribution of reading (see figure 2) and math grades (see figure 3). The distribution of grades is displayed as percentages and letter grades. As previously mentioned, there was a significant relationship between self-concept and both reading and math achievement. The comparison of self-

concept and reading yielded a Pearson correlation of r = .291 with a two-tail significance of .036. The comparison of self-concept and math scores revealed a Pearson correlation of r = .307 with a two-tailed significance of .027.

Reading Achievement Frequency Polygon Figure 2



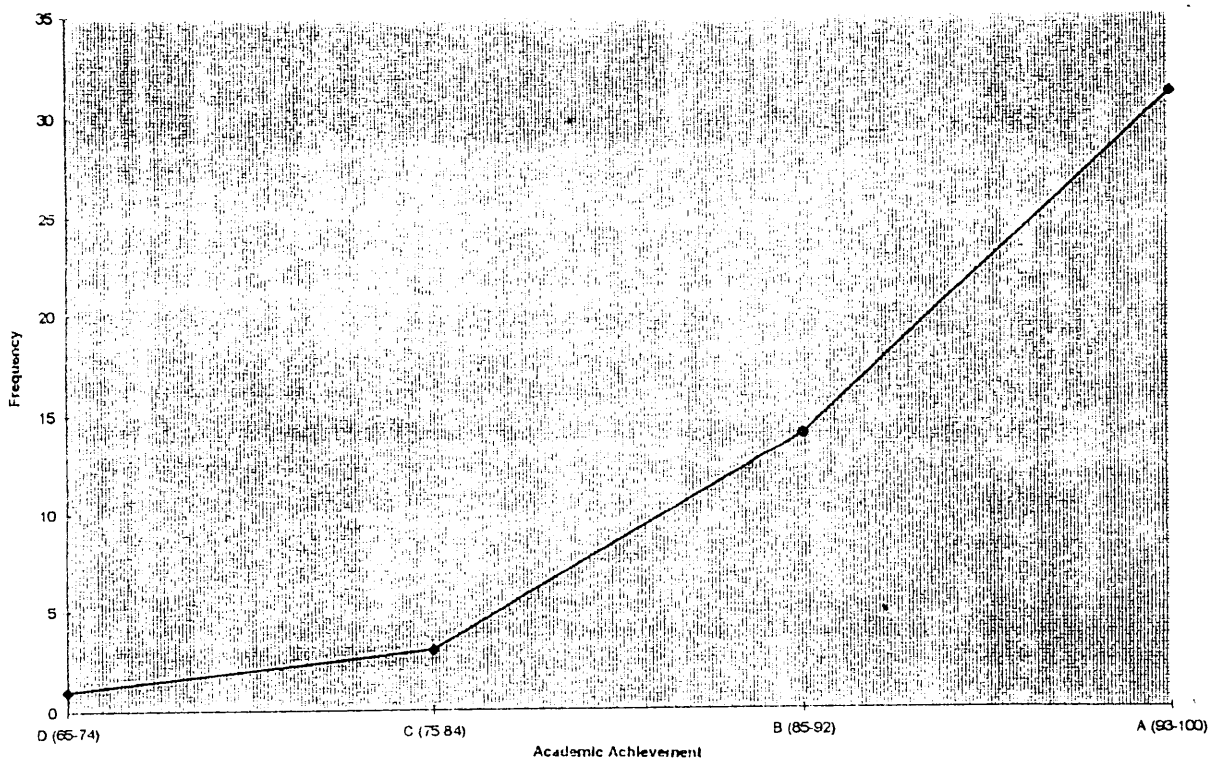
Gender

The second hypothesis stated that a significant difference in level of self-concept will occur based upon gender. This hypothesis was not accepted based on Levene's Test for Equality of Variances. The F-value for self-concept versus gender was .386, with a probability of .537, indicating that no significant difference occurs on self-esteem based on gender. These results were based on the total population of girls

versus boys in the third grade. Twenty-seven girls and twenty-five boys participated in the study.

In conclusion, the only significant relationship that can be found in regard to the findings is between academic achievement and self-concept in third grade students.

Math Achievement Frequency Polygon-Figure 3



Chapter V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The purpose of this study was to determine if a positive relationship exists between self-concept, academic achievement, and gender. The subject sample consisted of fifty-two students from a suburban public school district in southern New Jersey. Twenty-sever females and twenty-five males participated in the study. The Piers-Harris Children's Self-Concept Scale was used to evaluate self-perception. Academic achievement was evaluated with the use of math and reading grades from the student's report cards. The correlation coefficient results indicated that a significant relationship between self-concept and both reading (.291) and math (.307) achievement exists. Frequency polygons were used to display the distribution of each set of scores. Accordingly, a positive relationship exists between a student's self-perception and academic achievement..

Principal Findings and Conclusions

It was hypothesized that there would be a significant positive relationship between self-concept and academic achievement. The results of the study revealed that a significant correlation between self-concept and academic achievement exists. The

level of a student's academic achievement seems to be the main factor relating to the student's level of self-concept. The higher the student's grades, the stronger their self-concept.

It was also hypothesized that a significant difference between boys and girls self-concept measure would be found. This study found that there was no correlation between self-concept and gender. Furthermore, there was no correlation found to exist between gender and subject area achievement.

Implications and Recommendations

A review of the literature reveals that a child's self-concept is developed at a early age. Many researchers feel that the first five years of life are considered a "critical period" for developing a strong sense of self and that a positive environment can contribute to this development. These finding should encourage researcher, educators and, parents to further investigate what a positive environment should include. Presently, there has been very little research in this area. Susan Black (1991) feels that a child's self-concept is a fixed and stable psychological state that is developed by five years of age. At the elementary level research indicates that a child's self-concept plays a major role in how the child interacts and feels about others. This greatly effects the child's friendship patterns and feelings of belongingness.

Presently, all of the students are tested for basic skills proficiencies in reading, math, and language. If a student falls below a certain criteria then they will receive help in those areas to improve their academic achievement. Perhaps we should also be

evaluating each student's self-concept as well. Necessary and Parish (1991) used a program called "Let's Get Excited About Life". This research found that not only were the students' self-concept enhanced but they were sustained over a period of time. Perhaps this could be a new role for the School Psychologist to fill in the future.

This study did not find a significant difference between male and female self-esteem scores. However, recent studies have shown that a bias may exist in the school setting that favors the success of boys academically over girls. More studies need to be completed in this area so that teaching style and attitudes benefit girls as well.

This research investigated self-concept, academic achievement, and gender. The only significant relationship found in the study was between self-concept and academic achievement.. This study may only be insufficiently significant for several reasons. One reason being that the randomization was extremely limited and the sample size was too small to secure a true correlation. Also, the questionnaire used to measure self-concept may have been inappropriate for third grade students. Other influences affecting the results of this study may include geographical location, family life and, socioeconomic status.

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APPENDIX A

Positive Self-Concept

School and Classroom assessment

Topics	Ratings		
	Always	Sometimes	Never
CHALLENGE			
Differentiating goals for students	--------	-------	-------
Specifying requirements for students	-------	-------	-------
Establishing a reasonable time frame for completing requirements	-------	-------	-------
Varying teaching methods	-------	-------	-------
FREEDOM			
Teaching decision making skills	-------	-------	-------
Providing opportunities for students to make decisions	-------	-------	-------
Providing a forum for venting ideas and opinions	-------	-------	-------
Allowing for movement in the classroom	-------	-------	-------
RESPECT			
Learning students' names quickly	-------	-------	-------
Learning students' interests	-------	-------	-------
Being a good listener	-------	-------	-------
Having respect for students' privacy	-------	-------	-------
Warmth			
Communicating with students	-------	-------	-------
Establishing physical contact	-------	-------	-------
Allowing the students to make mistakes	-------	-------	-------
Showing a human side	-------	-------	-------
CONTROL			
Spelling out the rules and expectations	------	-------	-------
Involve the students in the setting of rules	------	-------	-------
Keeping consistent enforcement	-------	-------	-------
SUCCESS			
Teaching in small steps	-------	-------	-------
Providing positive reinforcement for trying	-------	-------	-------
Acknowledging success	-------	-------	-------
Spotlighting all students	-------	-------	-------

APPENDIX B

Behaviors and Experiences Associated With a Positive Self-Concept and Doing Well Academically

___1. Tends to feel upbeat and positive about talents and abilities.
___2. Is popular with peers, friends made relatively easily.
___3. Seems generally happy and motivated to achieve.
___4. Tends to attribute success to ability and failures to lack of effort or bad luck.
___5. Is able to be assertive and hold his/her own in interpersonal relationships.
___6. Tends to set realistic, reachable goals, thereby making success more possible.
___7. Has had few, if any, school-related failure experiences.
___8. Is task persistent, usually finishes what is started.
___9. Takes school work seriously, strives to do well.
___10. Is able to work independently on self-chosen activities.
___11. Exhibits a high degree of curiosity about the world around him/her.
___12. Shows a preference for activities or school work that are somewhat more difficult and challenging.
___13. Seems to be intrinsically motivated to do well in school, to be academically competent.
___14. Has parents who are supportive; expectations are reasonable and reachable.

Behaviors and Experiences Associated With a Negative Self-Concept and Doing Poorly Academically

___1. Tends to be self-disparaging talents and abilities.
___2. Not very popular with peers, has trouble making friends.
___3. Seems generally unhappy and unmotivated to achieve.
___4. Tends to attribute success to good luck and failure to lack of ability.
___5. Gives in fairly easily to the demands of others.
___6. Tends to set unrealistic, unreachable goals, thereby making success more difficult.
___7. Has had numerous school-related failure experiences.
___8. Is not very task persistent, has trouble finishing work.
___9. Does not take school work very seriously, tends to goof off.
___10. Has trouble working independently, needs supervision and direction.
___11. Exhibits little curiosity when it comes to learning about new things.
___12. Tends to loose interests when activities or school work are too difficult or challenging.
___13. Appears to need a lot of extrinsic motivation to do school work, being academically competent does not seem important.
___14. Has parents who are not very supportive, expectations tend to be unrealistic.

APPENDIX C

January 30, 1998

Dear Parents,

I am presently a graduate student at Rowan University of New Jersey. In order to complete my program I am required to conduct a research project. The topic I have chosen is self-concept. I chose this topic because I feel that self-concept affects every aspects of a child's life. A positive self-concept is critical to the healthy development of any child. Therefore it is important that educators foster a positive, non-threatening environment for children to grow academically and socially.

The third grade teachers have agreed to kindly assist me with the completion of my graduate thesis. The purpose of my study is to determine weather there is a significant relationship between self-concept and academic achievement in third grade students. Scores from the Pierse-Harris Children's Self-Concept Scale will be compared to the children's grades in Reading and Math . Student's names will not be used in the study and the test scores will be kept confidential . Each class will be given instructions on how to fill out the questionnaire by Mrs. Woods.

If you have any questions or concerns about this project, please contact the principal's office. Thank you in advance for your cooperation.

Sincerely,

Grace S. Woods,
Third Grade Teacher

BIOGRAPHICAL DATA

Name:	Grace S. Woods
Date & Place of Birth:	April 17, 1963 Camden, New Jersey
Elementary School:	Saint Mary's Elementary School Gloucester City, New Jersey
High School:	Gloucester Catholic High School Gloucester, New Jersey
College:	Camden County College Blackwood, New Jersey
	Glassboro State College Glassboro, New Jersey
Graduate:	Rowan University Glassboro, New Jersey