A study of the relationship between self-esteem, academic achievement, and popularity on fourth and fifth grade students

Carolyn M. Arata

Rowan University

Follow this and additional works at: http://rdw.rowan.edu/etd

Part of the Elementary Education and Teaching Commons

Recommended Citation


http://rdw.rowan.edu/etd/1627
A STUDY OF THE RELATIONSHIP BETWEEN SELF-ESTEEM, ACADEMIC ACHIEVEMENT, AND POPULARITY ON FOURTH AND FIFTH GRADE STUDENTS

By
Carolyn M. Arata

A Thesis
Submitted in partial fulfillment of the requirements of the Master of Science in Teaching Degree of The Graduate School at Rowan University. June 2000.

Approved Professor

Date Approved: June 28, 2000
ABSTRACT


The purpose of this study is to find two relationships. The first relationship is between academic achievement and self-esteem and the second relationship is between self-esteem and popularity among fourth and fifth grade students.

The population used for the purpose of this study was a multiage classroom consisting of both fourth and fifth grades. The classroom was located in southern New Jersey. The population consisted of both male and female students. The students were given a questionnaire to measure personality and the Nonsexist Personal Attribute Inventory for Children which measured self-esteem. Academic achievement was measured by averaging grades, from mathematics, social studies, science, and literacy, from the first three marking periods of the school year. T-tests were used to find relationships between academic achievement, self-esteem, and popularity.

Results of the t-tests showed that there was a relationship between self-esteem and popularity. High self-esteem in students showed that they were popular among their peers socially, academically, and athletically. A t-test comparing academic achievement and self-esteem concluded that there was no relationship between the two areas.
The purpose of this study was to find a relationship between academic achievement and self-esteem and self-esteem and popularity among fourth and fifth grade students.

T-Tests were used in the study to find positive correlations. The results showed that there was a relationship between self-esteem and popularity. High self-esteem in students showed that they were desirable partners in academic work, as teammates in team sports, and in social circles among friends.
ACKNOWLEDGEMENTS

The writer is indebted to the following people who played an invaluable role in the completion of this thesis:

Dr. Randall S. Robinson, Graduate Advisor, Rowan University, whose expert guidance, sound advice, patience, and time brought about the final and successful completion of this thesis.

My parents and brother for their unbelievable support in everything I do and their incredible patience over the past fourteen months and the past twenty-four years.

My family and friends for their belief, encouragement, and support through my graduate studies.

Chuck Hensel for his time, patience, and assistance in the calculations of data and to all of the other graduate students in my program.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>ii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>v</td>
</tr>
<tr>
<td>1. SCOPE OF STUDY</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Statement of Problem</td>
<td>2</td>
</tr>
<tr>
<td>Statement of Hypotheses</td>
<td>2</td>
</tr>
<tr>
<td>Limitations of Study</td>
<td>2</td>
</tr>
<tr>
<td>Definitions of Terms</td>
<td>4</td>
</tr>
<tr>
<td>2. RELATED LITERATURE</td>
<td>5</td>
</tr>
<tr>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td>Influences of Self-Esteem</td>
<td>5</td>
</tr>
<tr>
<td>Popularity, Socialization, and Achievement</td>
<td>6</td>
</tr>
<tr>
<td>Boys vs. Girls</td>
<td>8</td>
</tr>
<tr>
<td>Promoting Self-Esteem</td>
<td>9</td>
</tr>
<tr>
<td>Suicide Consideration Among Elementary Students</td>
<td>11</td>
</tr>
<tr>
<td>3. METHOD</td>
<td>13</td>
</tr>
<tr>
<td>Introduction</td>
<td>13</td>
</tr>
<tr>
<td>Population</td>
<td>13</td>
</tr>
<tr>
<td>Procedure</td>
<td>14</td>
</tr>
<tr>
<td>Description of Instruments</td>
<td>15</td>
</tr>
<tr>
<td>4. ANALYSIS OF FINDINGS</td>
<td>16</td>
</tr>
<tr>
<td>Introduction</td>
<td>16</td>
</tr>
<tr>
<td>Tabulation of Raw Scores</td>
<td>16</td>
</tr>
<tr>
<td>Analysis of Data</td>
<td>18</td>
</tr>
<tr>
<td>5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS</td>
<td>20</td>
</tr>
<tr>
<td>Introduction</td>
<td>20</td>
</tr>
<tr>
<td>Summary of Problem</td>
<td>20</td>
</tr>
<tr>
<td>Summary of Hypothesis</td>
<td>20</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Summary of Findings</td>
<td>21</td>
</tr>
<tr>
<td>Conclusion</td>
<td>21</td>
</tr>
<tr>
<td>Recommendations and Implications</td>
<td>22</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>23</td>
</tr>
<tr>
<td>APPENDIX A</td>
<td>26</td>
</tr>
<tr>
<td>APPENDIX B</td>
<td>28</td>
</tr>
<tr>
<td>APPENDIX C</td>
<td>30</td>
</tr>
<tr>
<td>APPENDIX D</td>
<td>32</td>
</tr>
<tr>
<td>VITA</td>
<td>34</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. T-test for academic achievement and self-esteem</td>
<td>17</td>
</tr>
<tr>
<td>2. T-test for self-esteem and popularity</td>
<td>18</td>
</tr>
</tbody>
</table>
Chapter 1

Scope of the Study

Introduction

Aspects of the self and the self-image have been discussed in a wide variety of theoretical perspectives over the last century. There are a number of different definitions and uses of the terms self, self-image, self-concept, and self-esteem. However, these theoretical perspectives have tended to be imprecise and even contradictory in their use of various self-terms (Purkey, 1970). One consequence of this multitude of perspectives and lack of agreement on definitions has been the tendency for the terms to enter into everyday usage, leading to an even further imprecision in the way the words are used. Often, people think they know what is meant but no one means the same thing (Purkey, 1970).

A distinction between self-concept and self-esteem has been made, not on a descriptive/evaluative basis but on the basis that self-concept focuses on the beliefs that people have about specific characteristics associated with themselves. Self-esteem relates to the global beliefs and feelings that people have about themselves as people, for example, being satisfied with and liking oneself (Burnett, 1994). A child’s self-esteem can have an impact on the way they perform academically in school and also towards the social relationships they develop with their peers of the same age/grade level. For generations, wise teachers have sensed the significant and positive relationship between a student’s self-concept of himself and his performance in school (Purkey, 1970).

With observations like these, that have been apparent for many generations, something needs to be recognized in order to help children. Their academic success
should not be so deeply rooted in the concepts of the self and should not limit their ability to succeed in education and the formation of healthy peer relationships (Burnett, 1994).

Statement of the Problem

Students today are faced with many problems in their lives. How are students coping with these problems? How are they addressing these obstacles and whom are they going to for advice, help, etc.? How are students being viewed by themselves and peers?

Statement of Hypotheses

There were two hypotheses for this study. The first hypothesis was to show that there is a positive correlation between academic achievement and self esteem in 4th and 5th grade students. Students who do well in subjects, such as literacy, mathematics, science, and social studies, should have had a positive image of themselves.

The second hypothesis was that there is a positive correlation between self-esteem and unpopularity in fourth and fifth grade students. Students, in the study, who had low self-esteem, are viewed by their peers as being unpopular. Peers view these students as undesirable with which to socialize or to pick for academic partners, teammates, and attendees at social activities.

It was hypothesized that a child's self-esteem, popularity, and academic achievement can impact the success level in all of these three areas - self esteem, popularity, and academic achievement.

Limitations of the Study

Many outside factors did influence results of this study. The first factor was the grades students received during the year. Some students could have had problems at home that could have affected their academic success. Some examples of problems at home could be parental divorce, abuse (mental and/or physical), and/or death of a family member. These problems encountered in the home could have affected the success of students academically.
A difficult topic in a certain subject area could have affected the student’s comprehension of subject matter. A learning disability could have affected a student’s success on their report cards. Some of the students in this study had modified programs in certain subject areas. Modified programs were programs such as resource room and/or basic skills. Students who received modified programs either left the classroom to receive instruction or were assisted by a teacher while completing school tasks. Other students had Individual Educational Plans (IEPS) for mathematics, literacy, and speech. IEPS are plans in which students are studied by a child study team and are classified. Students who are classified receive instruction differently from their peers and are graded according to their problem area.

Student’s social circles could have affected popularity of students at the time of the study. A factor that could influence popularity could be arguments between peers throughout the school year. One week two students could be friends and the next week they can be rivals.

Another limitation could be that the study was only conducted over a short time period. The study was conducted over four and a half months. Conducting the study over an entire school year could have yielded better results.

The sample used could have impacted the results of the study. The sample is not exactly random and consists of a small number of subjects, the number of subjects being thirty-six. The sample could have been too small to formulate any hypothesis on how self-esteem, academic achievement, and popularity affected one another.

Daily moods of students, at the time the personal attribute inventory was taken, could have affected the way they viewed themselves.
Definitions of Terms

For the purpose of this study, these terms were defined as follows:

**Academic achievement**-grades of an 80% or higher (B or higher); taken from the first three marking periods of the school year being studied

**IEPS**-individual educational plans

**Mood**-a person’s emotional state or outlook at a particular time

**Multiage classroom**-a classroom combining two grades where all students (different abilities and ages) receive the same instruction

**Popularity**-the quality or fact of being regarded with approval or affection by people in general
Chapter 2
Related Literature

Introduction

Academic achievement can be impacted by the way children view themselves. Social relationships can be influenced because of a child's self-esteem thus leading to an unpopular status among peers inside the classroom. This study was conducted in order to find relationships between academic achievement, self-esteem, and popularity of students in grades four and five. Previous research has been conducted in many areas yielding results that have found positive relationships between popularity, self-esteem, and academic success. The conclusion that the successful student is one who is likely to see him in essentially positive ways has been verified by a host of studies. Achievers are characterized by self-confidence, self-acceptance, and a positive self-concept. Research has also confirmed that the unsuccessful student sees continuous failure academically and socially which lead to both the cause and effect of their negative self-esteem (Burnett, 1994).

Influences of Self-Esteem

According to research completed over the past two decades, the importance of self-esteem related to school achievement cannot be overemphasized (Bloom, 1977; Clemes & Beam, 1981; Wiggins et. al., 1978, 1987). Many studies have recognized the positive correlation between the two factors of self-esteem and academic success. Bloom (1997) found that achievement and self-esteem were generally correlated (Wiggins, et. al., 1994). In another study, (Wiggins, 1987), self-esteem scores were found to be the only factor significantly correlated with earned grades for 483 students in grades four to
twelve. Kifer (1973) found a correlation of .50 between self-esteem scores and grades for seventh graders (Wiggins, et. al., 1994)

There is probably a bi-directional relationship between social self-concept and peer status; students with peer problems develop a poor self-concept, and students with poor self-concepts are at a disadvantage in making friends (Cornell, 1990). The same study yielded results that displayed four out of five scales rating academic self-esteem, unpopular students were rated lower than their peers. Based on these scales, unpopular students can be characterized as lacking initiative, especially when it comes to working independently, making decisions, and undertaking new tasks or challenges (Cornell, 1990). This study conducted by Cornell et al., also observed that unpopular students do not assume leadership roles with their peers and generally do not refer to themselves in positive terms.

Popularity, Socialization, and Achievement

Other studies have looked at the incredible impact that popularity has on socialization and achievement of elementary school children. In a study performed by Adler, Kless, and Adler, research on the relationship between popularity and academic performance was conducted. Findings show that at all ages, boys who were skewed toward either end of the academic continuum suffered socially (Adler, et al., 1992). Meaning excelling or doing poorly academically affected their popularity status with their peers. Boys with serious academic problems were liable to be labeled “dummies” whereas boys who were exceedingly smart but lacked other status enhancing traits, such as coolness, toughness, or athletic ability, were often stigmatized as “brainy” or “nerdy” (Simon, et. al., 1992). Boys who were achieving academically tried to hide their academic efforts in order to avoid being stigmatized by boys thus making the educational environment one for social success and not academic success (Simon, et. al, 1991).
In a study conducted by MacDonald (1991), children, in grades one through six, were asked to rate themselves on two scales involving how they think their peers liked them and how they liked their peers. Findings showed that children were either grouped as popular, average, or rejected. Both ratings and nominations were underestimated by popular children, accurately estimated by average children, and overestimated by rejected children (MacDonald, 1991). The findings showed that a child's self-esteem levels could effect their belief on how their peers view them. Another study found that unpopular students were distinguished by lower self-concepts and lower self-esteem (Cornell, 1990). This study examined student academic achievement and ability and self-report measurements of student self-concept and teacher ratings of self-esteem. Results were found from MANOVA of personality measures and SRA Estimated Ability Scores.

Many studies have also researched and found that concerns of students such as appearance, self-esteem, academic failure, and/or learning disabilities, which could impair academic success, could lead to suicide (Nelson & Crawford, 1990).

One study examined the effects of the Child Development Project, an elementary school program designed to enhance prosocial development on children's peer relations and social adjustment (Battistich, 1990). Overall, 236 comparison and 285 program students participated in the research. Data revealed that program students were more accepting of (and more accepted by) their classmates, were less lonely, and were lower in social anxiety than were students at comparison schools (Battistich, 1990). No differences were found between program and comparison students on measures of self-esteem, liking for school, perceived social competence, or perceived popularity (Battistich, 1990).

The observed positive effects on peer relation and social adjustment support and extend earlier findings indicating that the program has had positive effects on students' interpersonal behavior in the classroom, social problem solving skills, and commitment.
to democratic values (Battistich, 1990). The consistent positive effects the program has had on children’s social development throughout the elementary school years was proven by these studies (Battistich, 1990).

Another study observing learning disabled children and low achieving elementary children compared social competencies. Results indicated that the two groups were comparable on most social competence measures, although learning disabled children reported themselves less lonely than low achieving children, and regular class children rated learning disabled children more likable than low achieving children (Omizo, 1992).

Developing friendships throughout elementary years in a constant cycle. Formation of friendships is influenced by race, sex, and popularity. The friendship choices of 335 elementary school students were examined six times during a school year. Race, sex, popularity status (both as individual characteristics and structural factors of triads) were found to affect transition from stable transitive friendship triplets to unstable intransitive ones (Hallinan, 1990).

In the last twenty years, there has been an increasing amount of interest within psychology in how people think about other people and themselves. Damon and Hart (1982) provide an excellent review of some of the developmental changes in self-perceptions which take place over the first two decades of life (Purkey, 1970). The important point is that the attitudes about one self constantly change throughout the life-course. Evidence suggests that as individuals grow older, there is an increase in the degree of abstraction used to refer to the self as well as an increase in the psychological rather than physical descriptions of the self (Purkey, 1970).

Boys vs. Girls

Sex differences do seem to influence the relationship between the self and achievement, primarily in the area of underachievement. Male underachievers tend to have more negative self-concepts than female underachievers (Purkey, 1970). Different
from boys, girls did not suffer any stigma for performing well scholastically (Adler, et. al., 1992). The only problem, from studies performed, was that homogeneous academic grouping increases in frequency as girls approached the higher grades of elementary school. Girls were then more likely to become friends with others of similar academic levels (Adler, et. al, 1991).

Classical Freudian theory has held that changes associated with pubertal development are quite disruptive and can create serious disturbances in the personality system (Simmons, 1979). Blyth et al. (1981) indicate that there is no significant relationship between self-esteem for girls but there is a slight positive relationship for boys (early development related to higher self-esteem).

Promoting Self-Esteem

Preventing rejection of a student by his/her peers and helping the child to cope with such rejection are ever-present challenges for teachers. Many teachers have successfully dealt with students who were rejected by classmates. Other teachers have gathered together to develop ways to promote wellness to their students (Hodges, 1997).

An example of an action research project that promoted self-esteem was conducted in an elementary school near a large midwestern city (Hodges, 1997). The project implemented and evaluated a program for increasing student self-esteem through caring and positive classroom environment incorporating cooperative learning and the use of praise and rewards (Hodges, 1997). The targeted population consisted of fifth grade physical fitness students and seventh grade life-science students (Hodges, 1997). The impact of low self-esteem on classroom achievement was documented by teacher anecdotal records on class participation, teacher journal entries describing student behavior, student reflections journals that described feeling and self-esteem, and self-concept assessment tools (Hodges, 1997). Three areas of intervention were determined: a positive relationship between student and teacher, positive interaction among peers, and
a positive and caring classroom environment (Hodges, 1997). Cooperative groups were used to increase appropriate social skills and foster peer relationships. Post intervention data indicated an increase in positive self-esteem, greater student engagement in class activities, and increases achievement levels (Hodges, 1997).

A study of the relationship between involvement in an extracurricular drama club and the self-esteem of at-risk preadolescent and elementary students examined 244 fourth and fifth grade students in a rural Missouri school district. Results showed that participation in the drama club had a positive influence on students’ self-esteem and reduced their at-risk behaviors (Williams, 1990).

Parents, teachers, and peers play significant roles in a child’s development of self-esteem. One report describes a program for improving the self-esteem of fourth-grade students in a large, multi-ethnic suburb (Rugen, 1994). Analysis of the probable cause data revealed that most students exhibited deficiencies in emotional security, were intolerant of errors, felt little satisfaction when speaking of feelings, feared for their safety, and lacked role models and significant others who conveyed to them appreciation for their uniqueness (Rugen, 1994). Some solution strategies suggested by experts, combined with analysis of the problem setting, resulted in two major categories of intervention: creation of a learning environment conducive to the enhancement of self-esteem and implementation of daily lessons on various components of self esteem (Rugen, 1994). The data showed the benefits of providing a learning environment conducive to the enhancement of self-esteem (Rugen, 1994).

Another study investigated effects of wellness promotion guidance activities among fifth grade children. The results revealed enhanced self-esteem and higher knowledge of wellness information among children who participated in the wellness promotion activities, as compared to a control group of non-participants (Omizo, 1992).
A study conducted looked at the influence of parent-child perceptions, achievement, and class placement. It examined the relative influence on children's self-esteem of academic achievement, maternal self-esteem, maternal acceptance, and children's perception of their parents' acceptance of them (Morvitz, 1992). The subjects studied were students with learning disabilities in a self-contained class, similarly diagnosed students in resource room, students in compensatory education, and non-disabled students from Grades 3 and 6 (Morvitz, 1992). Results showed that for the self-contained group, a child's perception of maternal and paternal acceptance plus the child's academic achievement score accounted for 58% of the variance in the child's self-esteem. None of the independent variables accounted for a significant proportion of the variance in the compensatory education and regular class groups (Morvitz, 1992). The self-esteem of the regular class students was significantly higher than that of the resource room students and the compensatory education students, but not significantly higher than that of the self-contained students (Morvitz, 1992).

Suicide Consideration Among Elementary Students

Education is the key to the prevention of child suicide. Counselors, teachers, and parents need to be aware of the possibility of child suicide and be willing to intervene when a life is at stake. Most importantly, school personnel must be dedicated and aiding the child who is at risk (Nelson, 1990).

In a study measuring suicide among elementary students, a questionnaire was developed containing questions to gather descriptive information on the schools. The twenty-item questionnaire contained questions obtaining information on students considering, attempting, and completing suicide; and questions on methods used, contributing factors to suicide, and behaviors that were observed in the students before their suicide attempts and completions (Nelson, 1990). The second half of the
questionnaire asked counselors to rank the critical areas of concern for elementary school students (Nelson, 1990).

The questionnaires' results provided a representative sample according to geographic location, size of school, area of state, and estimated parent income. The counselors were used in this study because they provided the most accurate information on critical concerns because of their close contact with students on a day to day basis (Nelson, 1990).

The results of the study indicated that out of ten concerns that counselors ranked of most concern for elementary school children, appearance/self-esteem, peer pressure/popularity, and academic failure were on the list. Appearance/self-esteem was ranked second, peer pressure/popularity was ranked third, and academic failure was ranked fifth (Nelson, 1990).

Of the counselors, 25% marked peer pressure (acceptance) as a contributor to suicide, and 14% marked pressure to achieve academically as a contributing factor. These figures support the assertion that increased stress in children's lives is causing an emotional overload (Nelson, 1990). Overall, the results of this study support the current literature relative to child suicide and needs of elementary school children (Nelson, 1990). The stresses once identified with adolescents are becoming more prevalent in the lives of elementary school children (Nelson, 1990).
Chapter 3
Method
Introduction

The study was conducted in order to find a relationship between self-esteem, popularity, and academic success of students in grades 4 and 5. A positive correlation between academic achievement and self-esteem would be found. Another positive correlation in the study would be between self-esteem and popularity among students and their peers. High academic achievement would give students an optimistic view of themselves. High self-esteem would lead to popularity of the student within their social group.

Population

The study involved a sample of thirty-six fourth and fifth grade students from an elementary school in Gloucester County, New Jersey. The data was taken from one multiage classroom. The multiage classroom was both fourth and fifth grade. All students were used in the study. There were thirteen male students and twenty-three female students in the entire population being studied. The class consisted of six African-American students who were all female. There were thirty Caucasian students in the class. Out of the Caucasian sample, seventeen students were female and thirteen students were male. The numbers of each sex representation are random due to the fact that they are assigned at the beginning of the year to their classroom and not for the
purpose of any study. This study was conducted over a four and a half month period starting at the end of January and finishing in the middle of May.

Procedure

Before the study was conducted, a letter to the school principal asking permission to conduct research was sent (see appendix A). Once permission was granted to use the students of the particular school being studied, permission was asked from each parent/guardian to use their child’s responses (see appendix B). Once permission was granted from the former, the study was conducted towards the end of April.

To measure popularity, students filled out a questionnaire that asked questions about their peers. The questionnaire consisted of students having a first, second, and third choice to the following questions:

- If you had a project to do, who would you invite?
- If you had a party, who would you invite?
- If you were on a sports team, who would you pick to be on it with you?

These three questions were asked to gather information on student responses. Each student answered with three classmates names (see appendix C).

To measure self-esteem, students were given The Nonsexist Personal Attribute Inventory for Children, designed by Dr. Thomas S. Parish, Kansas State University (see appendix D). Students were asked to pick ten words that best described them. Words on the test that had an asterisk were considered to indicate positively evaluated words.

Finally, to evaluate academic achievement, student report cards were examined. Grades received in mathematics, literacy, science, and social studies from the present school year were recorded. The school year is divided into four marking periods but for
the purpose of this study, only the first three marking periods were used. Academic
achievement was based on an 80% or higher in each subject.

Description of Instruments

The instruments used for this study are as follows:

-Report Cards- each student’s individual report card was used to gather information on academic achievement; the grades were taken from the first three marking periods of the 1999-2000 school year; mathematics, literacy, social studies, and science were used for this study

-The Nonsexist Personal Attribute Inventory- this inventory was used to measure self-esteem in students; contained a list of thirty-two words that were either positively evaluated words or negatively evaluated words; words with an asterisk were positively evaluated

-Popularity Questionnaire- questionnaire used to measure student’s popularity; contained a list of three questions asking students for their first, second, and third choices to the following questions: if you had a project to do, who would you invite; if you had a party, who would you invite; and if you were on a sports team, who would you pick to be on it with you
Chapter 4

Analysis of Findings

Introduction

This study was conducted in order to find a relationship between academic achievement and self-esteem and to find a relationship between self-esteem and popularity. Success in the subject areas of mathematics, literacy, social studies, and science would be related to high self-images in fourth and fifth grade students. High self-esteem would also be related to the popularity status of the students being studied.

Tabulation of Raw Scores

Two t-tests were performed for this study. One test was done between academic achievement and self-esteem and the other t-test was used to compare self-esteem and popularity. In order to perform t-tests on academic achievement, self-esteem, and popularity, which were all independent samples, each area had to be broken down to get one set of numbers.

In order to get one single grade to be compared to the self-esteem variable, each individual student’s grades were averaged together. There were four subjects (mathematics, literacy, science, and social studies), with three grades from each subject (first, second, and third marking periods). Each grade was added together and then divided by twelve. A grade of an 80% or higher was considered to be high academic achievement.
To arrive at a numerical value for the student's self-esteem, the self-esteem inventory was used. A word that was positively evaluated received a value of 2 and a negatively evaluated word received a value of 1. A completely happy child with high self-esteem would receive a score of 20. A child with low self-esteem would receive a value of 10. For the purpose of this study, a score of 15 or higher was considered to be high self-esteem. A score of 14 and below was considered to be low self-esteem.

Both variables were used in a t-test to see if there was any correlation between the two areas. For the purpose of the following t-test, $x =$ academic achievement and $y =$ self-esteem.

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of scores in group $x$</td>
<td>36</td>
</tr>
<tr>
<td>Sum of scores in group $x$</td>
<td>3121.800</td>
</tr>
<tr>
<td>Mean of group $x$</td>
<td>86.72</td>
</tr>
<tr>
<td>Sum of squared scores in group $x$</td>
<td>272486.72</td>
</tr>
<tr>
<td>SS of group $x$</td>
<td>1774.63</td>
</tr>
<tr>
<td>Number of scores in group $y$</td>
<td>36</td>
</tr>
<tr>
<td>Sum of scores in group $y$</td>
<td>629.00</td>
</tr>
<tr>
<td>Mean of group $y$</td>
<td>17.47</td>
</tr>
<tr>
<td>Sum of squared scores in group $y$</td>
<td>11207.0</td>
</tr>
<tr>
<td>SS of group $y$</td>
<td>216.97</td>
</tr>
<tr>
<td>$t$ -Value</td>
<td>55.08</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>70</td>
</tr>
</tbody>
</table>

To compare self-esteem and popularity, a second t-test was conducted. A numerical value was given to a student's popularity also. After receiving answers to the popularity questionnaire, a first choice received a value of 3, second choice a value of 2,
and a third choice received a value of 1. All choices were added together to get a total popularity score. The mean for the data was an 18. Any score that was 18 or higher was considered to be a score that represented popularity and a score of a 17 or lower represented unpopularity. For the purpose of the following t-test, self-esteem = x and popularity = y.

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of scores in group x</td>
<td>35</td>
</tr>
<tr>
<td>Sum of scores in group x</td>
<td>610.00</td>
</tr>
<tr>
<td>Mean of group x</td>
<td>17.43</td>
</tr>
<tr>
<td>Sum of squared scores in group x</td>
<td>10846.0</td>
</tr>
<tr>
<td>SS of group x</td>
<td>214.57</td>
</tr>
<tr>
<td>Number of scores in group y</td>
<td>35</td>
</tr>
<tr>
<td>Sum of scores in group y</td>
<td>650.00</td>
</tr>
<tr>
<td>Mean of group y</td>
<td>18.57</td>
</tr>
<tr>
<td>Sum of squared scores in group y</td>
<td>18082.0</td>
</tr>
<tr>
<td>SS of group y</td>
<td>6010.57</td>
</tr>
<tr>
<td>t -Value</td>
<td>-0.50</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>68</td>
</tr>
</tbody>
</table>

Analysis of Data

After tabulating the data and conducting t-tests on both academic achievement and self-esteem and self-esteem and popularity, results were different between the two tests. A table, taken from Table III of Fisher and Yates, was used to find the distribution of t. For the first t-test, between academic achievement and self-esteem, there was a significant difference between the two sets of data; p<.05. This concluded that self-esteem and academic achievement has no correlation: one did not relate to the other.
The second t-test yielded different results than the first test. Self-esteem and popularity had no significant difference when the t-test was conducted. It could be assumed that there is a correlation between self-esteem and popularity because $p>0.05$. 
Chapter 5

Summary, Conclusions, and Recommendations

Introduction

This study was conducted in order to find two relationships. The first relationship was between academic achievement and self-esteem in fourth and fifth grade students. The second relationship was between self-esteem and popularity in fourth and fifth grade students. Positive correlations were expected between the three areas researched in this study.

Summary of Problem

In today’s society, many students are faced with different problems in their daily lives. What problems are these students facing? How are students addressing problems such as peer pressure/popularity, low self-esteem, and poor academic achievement?

Summary of Hypothesis

It was hypothesized that a child’s self-esteem, popularity, and academic achievement can impact the success level in all of three areas of self-esteem, academic achievement, and popularity. The first hypothesis was to show that there was a positive correlation between academic achievement and self-esteem in fourth and fifth grade students. Students who do well in school think highly of themselves. The second hypothesis was that students who had low self-esteem were unpopular among their peers. Peers would view students with low self-esteem as undesirable socially, academically, and athletically.
Summary of Findings

The t-tests that were conducted yielded results that agreed and disagreed with the two hypotheses. The first t-test, that compared academic achievement and self-esteem, resulted in a significant difference between the two areas. A positive correlation was not found between the two areas. High academic achievement in the subjects of mathematics, literacy, social studies, and science did not show high self-esteem in fourth and fifth grade students.

In the second part of the study, the t-test conducted for self-esteem and popularity showed that there was no significant difference between self-esteem and popularity. It could be concluded that fourth and fifth grade students with high self-esteem were popular among their classmates socially, athletically, and academically. A correlation between these two areas was found in this study comparing self-esteem and popularity.

Conclusion

This study concluded that there is a relationship between self-esteem and popularity. Students, in fourth and fifth grade, find it desirable to surround themselves with classmates that have positive self-images. Students who have high self-esteem are chosen by others to be partners in school projects, teammates on sports teams, and attendees at social gatherings.

Success in the subjects of mathematics, literacy, social studies, and science had no impact on the view students have of themselves. Results of the study showed that self-esteem is not affected by how well a student does in school. Further research needs to be done in order to find any correlation between self-esteem and academic achievement.
This study will hopefully influence research in the future. Many areas need to be addressed that will help students succeed academically and view themselves positively. Obstacles that students face, in the elementary school years, should be addressed so students' success socially, mentally, and academically will not inhibit their well-being.

Recommendations and Implications

If this study were to be conducted again, some recommendations for different results should be taken into consideration. First recommendation is the size of the population of this study. The population used in this study was a small number. To yield better results, a larger number should be used.

Academic achievement should be reviewed by using more than three marking periods. Having a larger number to work with to tabulate data could result in a more accurate scale of success in school. A child's academic history could be influenced many times throughout the school year. Using different grades from different times of the year can be more accurate as to how they are succeeding in school.

The questionnaire used in this study to measure popularity only had three questions. Studies conducted in the future should have a more detailed questionnaire to get accurate findings on students' views of each other.

The last recommendation concerns measuring self-esteem. The mood of a child can affect the outcome of a self-esteem inventory. The inventory should be taken by the students more than one time to see if there is consistency day to day on how students view themselves.
BIBLIOGRAPHY


APPENDIX A

Letter to School Principal
March 2000

92 Goodwin Parkway
Sewell, NJ

Dear Principal,

I am currently enrolled in the graduate program at Rowan University. I am conducting a research project for my Master of Science in Teaching Degree. It will be a correlational study on the effects of self esteem, academic achievement, and popularity among peers. My plans are to survey students from grades four and five. This research will be conducted before my internship is complete in May.

With your permission, and permission from parents, I would like to include the fourth and fifth grade children from your school. The individual student responses to the surveys will be kept completely confidential. Should you decide to allow your students to be a part of this study, I will be happy to provide your school with a copy of my findings upon completion of this research.

If you have any questions, feel free to contact me at home or by email at Arata17357@aol.com. Thank you for your assistance. I look forward to hearing from you.

Sincerely,

Carolyn M. Arata

Carolyn M. Arata
Student Teacher
Elementary School
New Jersey
APPENDIX B

Permission Slip to Parent/Guardian
March 2000

Dear Parent/Guardian,

I am currently enrolled in the graduate program at Rowan University. I am conducting a research project for my Master of Science in Teaching Degree. It will be a correlational study on the effects of self-esteem, academic achievement, and popularity. My plans are to survey students from grades four and five. This research will be conducted before my internship is complete in May.

With your permission, I would like to include your child’s responses for my project. Each individual student response will be kept entirely confidential. Each response will also be kept confidential between classmates.

If you have any questions, feel free to contact me at school. I greatly appreciate your assistance, and your child’s, with this project. I look forward to hearing from you.

Sincerely,

Carolyn Arata
Student Teacher
Elementary School
New Jersey

______________________________

I __________________ for my child’s responses to be used in this research project.

_____ give permission

_____ do not give permission

Signature____________________
APPENDIX C

Popularity Questionnaire
1. If you had a project to do, who would you invite?

   a.                     b.                     c.

2. If you had a party, who would you invite?

   a.                     b.                     c.

3. If you were on a sports team, who would you pick to be on it with you?

   a.                     b.                     c.
APPENDIX D

The Nonsexist Personal Attribute Inventory for Children
The Nonsexist Personal Attribute Inventory for Children

Read through this list of words, then put an X in the box beside the 10 words which best describe you.

- Angry
- Awkward
- Calm*
- Careless
- Complaining
- Cowardly
- Dirty
- Dumb
- Fairminded*
- Foolish
- Friendly*
- Gentle*
- Good*
- Greedy
- Happy*
- Healthy*
- Helpful*
- Honest*
- Jolly*
- Kind*
- Lazy
- Lovely*
- Mean
- Nagging
- Nice*
- Polite*
- Rude
- Ugly
- Unfriendly
- Wise*
- Wonderful*
- Wrongful

* Indicates positively evaluated words.

©1982 Thomas S. Parish
VITA

Name: Carolyn M. Arata
Date and Place of Birth: December 19, 1975 Rockville Center, NY
Elementary School: Wedgwood Elementary Sewell, NJ
High School: Washington Township Sewell, NJ
College: Rutgers College Rutgers University New Brunswick, NJ B.A. Psychology, 1998
Graduate: Rowan University Glassboro, NJ M.S.T. Elementary Education, 2000