The effect of sports on self-concept: a comparison of students in a special education resource room who participate in sports and students in a special education resource room who do not participate in sports

Meredith Fiori
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THE EFFECT OF SPORTS ON SELF-CONCEPT: A COMPARISON OF STUDENTS IN A SPECIAL EDUCATION RESOURCE ROOM WHO PARTICIPATE IN SPORTS AND STUDENTS IN A SPECIAL EDUCATION RESOURCE ROOM WHO DO NOT PARTICIPATE IN SPORTS

by
Meredith Fiori

A Thesis
Submitted in partial fulfillment of the requirements of the Master of Arts Degree of The Graduate School at Rowan University
May 6, 2002

Approved by

Date Approved May 6, 2002
ABSTRACT

Meredith Fiori
The Effect of Sports on Self-Concept: A Comparison of Students in a Special Education Resource Room Who Participate in Sports and Students in a Special Education Resource Room Who do not Participate in Sports
2001/2002
Dr. Stanley Urban
Learning Disabilities/Teacher Consultant

Research indicates that students in special education have a lower self-concept than their non-disabled peers (Manhattan College, 1998). Manhattan College also states that students with disabilities who play sports have a self-concept equal to or higher than individuals without disabilities. Identifying the degree to which participation in sports may raise the self-concepts of students in special education is an important strategy in educational programming. Discovering techniques to improve the self-concepts of students in special education has been a difficult task for both teachers and parents.

The purpose of this study was to determine if a difference exists between the self-concepts of students in a special education resource room who play sports compared to students in a special education resource room who do not play sports. The data reveals that there are no significant differences between students in a special education resource room who play sports compared to students in a special education resource room who do not play sports.
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The author would like to thank her parents for all of their support. Their guidance, motivation, and patience have provided the foundation for success in this project. In addition, the author expresses sincere appreciation to Dr. Stanley Urban for his assistance in the preparation of this thesis.
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CHAPTER ONE
INTRODUCTION

BACKGROUND

Research indicates that students in special education have a lower self-concept than their non-disabled peers (Manhattan College, 1998). Reasons for the discrepancy in self-concept between these two groups vary. Although identifying factors that cause lowered self-concepts is important, it is much more important to identify methods of raising self-concepts. Raising the self-concepts of students in special education has been a constant struggle for both teachers and parents.

Students with disabilities that play sports have a self-concept equal to or higher than individuals without disabilities (Manhattan College, 1998). Again, several explanations exist on why there is a difference. When considering these differences, it can be hypothesized that being involved in sports has a significant impact on the self-concepts of students in special education. This finding provides teachers and parents with insight on how to help increase the self-concepts of students in special education.

VALUE OF THE STUDY

The effects of sports on the self-concepts of students placed in special education has not received the attention that it so greatly deserves. In isolation each part has been studied, for example, the self-concepts of students in regular education or special education has been studied, and so has the self-concepts of athletes, but very little
research has been done on the self-concepts of special education students in athletics. If this study can demonstrate that the self-concepts of those students that play sports is more desirable or positive than those students not in sports, then it would be desirable to increase the involvement of special education students in sports. Participation in sports may provide a means to improve the self-concepts of students placed in special education.

**RESEARCH QUESTIONS**

The major research question of this study follows here: Is there a difference between the self-concepts of students in a special education resource room that play sports compared to students in a special education resource room that do not play sports? In the process of answering this question, additional data will be gathered to answer the following sub questions:

1. Does any sport indicate a more positive self-concept compared to another sport? Does one sport indicate a more negative self-concept compared to another sport?

2. Is there a difference between the self-concepts of boys and girls in a special education resource room that play sports? Is there a difference between the self-concepts of boys and girls in a special education resource room that do not play sports?

3. Is there a difference between the self-concepts of boys in a special education resource room that do not play sports and boys in a special education resource room that do play sports? Is there a difference between the self-concepts of girls in a special education resource room who play sports compared to students in a
special education resource room who do not play sports?

4. Is there a difference in the self-concepts of students in special education that play team sports compared to sports requiring one on one competition?

5. Does any cluster indicate a more positive or negative self-concept of students participating in athletics in a special education resource room compared to non-athletes in a special education resource room?

**DEFINITIONS**

The following terms may require clarification and therefore are defined below:

1. Organized Sports – Constrained and directed playing in competitive games that involve physical activity. These may entail individual or team sports, however, both have fixed rules and time limits. Athletes attend regularly scheduled practices under adult supervision. In the case of this study, the organized sports referred to are high school athletics (Jenkins and Micheli, 1990).

2. Cross-Categorical Resource Room – A special education classroom designed to educate students functioning at about the same gross achievement levels. This classroom is comprised of an array of classifications usually including, but not limited to students labeled learning disabled, mildly mentally cognitively impaired, and behaviorally disordered (Bender, 1998). Generally, there is only one teacher in the classroom. If the number of students enrolled rises above nine, paraprofessionals are brought into the classroom with the maximum number of students allowed in the classroom being 12. (Harris and
Schutz, 1986). The cross-categorical resource room referred to in this study will include students with learning disabilities and emotional and behavioral problems.

3. Paraprofessionals – Classroom assistants to the regular education teacher.

4. Learning Disability – A wide range of disorders that affect the way a person processes and stores information. It is also known as “specific learning disability.” These children have a disorder in one or more of the basic psychological processes involved in understanding or using language, spoken or written. An imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations is also a characteristic. Such disorders include such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Such terms do not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, mental retardation, emotional disturbance, or environmental, cultural, or economic disadvantage (Public Law 94-142). A severe discrepancy between a student’s potential, such as an intelligence quotient, and a student’s achievement, such as performance in the classroom, is also representative of a learning disability (Lerner, 1993).

5. Behavioral Disturbance – Also known as emotionally disturbed or serious emotional disturbance is an umbrella term for such varied conditions as schizophrenia, autism, psychosomotic disorders, phobias, withdrawal, depression, anxiety, elective mutism, aggression, antisocial behavior, etc. (Coleman, 1996). According to Public Law 94-142, the definition is “a
condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree, which adversely affects educational performance: An inability to learn which cannot be explained by intellectual, sensory, or health factors. An inability to build or maintain satisfactory interpersonal relationships with peers and teachers. Inappropriate types of behavior or feelings under normal circumstances. A general pervasive mood of unhappiness or depression. A tendency to develop physical symptoms or fears associated with personal or school problems.” (Public Law 94-142, IDEA, Coleman, 1996).

6. Self-concept – The totality of a complex, organized, and dynamic system of learned beliefs, attitudes and opinions that each person holds to be true about his or her personal existence (Purkey, 1988). It is the way one feels about or views oneself, and the degree to which one possesses self respect and a sense of personal worth (Corsini, 1984). Self-concept is referred to in many different ways, for example, self-esteem, self-image, self-perception, etc. (Strein, 1995). For the purpose of this study, a definition encompassing some parts of each of the above references will be used.

LIMITATIONS

When generalizing the results of this study, the following limitations should be taken into account. Although this tests norms are based on 1,183 public school children in grades four through twelve, all of the students were from only one Pennsylvania school district (Piers, 1984). In addition, collection of information for this study has been
limited to only eleventh and twelfth grade students in a single special education resource room. Therefore, the number of students in special education included in this study will be approximately fifty. The number of athletes in special education will be limited to approximately ten to fifteen students. In addition, there are several ways of gathering data on an individual’s self concept, such as rating scales, checklists, Q-sorts, and free response methods (Strein, 1995). However, only one method, the Piers-Harris Children’s Self-Concept Scale will be utilized. As with any measurement tool, this scale has its own limitations, therefore not yielding as much information as an “ideal administration” of a combination of several measurements would. Another limitation to be taken into consideration is that students will provide a self-report. Some of the students will answer reflectively, taking their time on each question. Other students may think some items are “stupid” and will answer hastily without giving any thought to the questions. There is also the possibility that some students will answer the questions the way they think they should be answered, not based on the way they really feel.
CHAPTER TWO
REVIEW OF THE LITERATURE

The three major components of this study, sports, special education, and self-concepts, have been given a great deal of attention in isolation. The self-concept of athletes has been researched, the self-concepts of students in special education have been researched, but the self-concepts of students in special education that play sports have received very little attention. An overview of research on these components will be provided.

Special education, the first major component in the study, is a field that has undergone a great deal of change and development. At one point in time, people with mental retardation were seen as offspring of the devil or evil. They were put into institutions, treated inhumanly, and ignored. People would visit institutions, as if they were zoos, pointing and commenting on the “animals in the cages.” In addition to these individuals being viewed and treated horrifically, an education was not even considered (Coleman, 1996). As years passed, with the development of technology and acknowledgement of these individuals as human beings, systems of treatment, identification, and rights evolved. In 1975, the first special education law known as the Education for All Handicapped Children Act (Public Law 94-142) was passed. It gave students with disabilities and their parents’ rights and entitled them to services. Among the components of this law were a free and public education for all students with disabilities ages three to twenty-one, educational environments like those provided
for nonspecial education students, programs tailored to meet the individual needs of the students, etc. (Algozzine and Ysseldyke, 1990). What is implemented today is believed to be the most beneficial and productive means of educating and treating these individuals. One placement that has developed over the years is the resource classroom. Typically, five types of resource rooms exist, categorical, cross-categorical, noncategorical, specific-skills, and itinerant (D’Alonzo, D’Alonzo, and Mauser, 1979). This study will be limited only to kids in a cross-categorical resource room consisting of students with learning disabilities and behavioral disturbances.

SPORTS IN AMERICAN CULTURE

Before proceeding further it is useful to discuss the role of sports in American culture. Sports play a huge role in today’s society, from a way for children to socialize or develop a healthy lifestyle, to a revenue maker and creator of many jobs. Sports may be split into two forms, free play and organized sports. Free play, which focuses on having fun, is restrained, undirected playing, often in competitive games that involve physical activity. The children themselves pick the teams and make up the rules. Organized sports, where children participate in specific individual or team sports, have fixed rules and playing times. High school sports and sports at the community level such, as Little League baseball, are examples of organized sports (Michell, 1990). This study will focus on organized sports, as occurs in, high school athletics.

Team sports involve only 10-15 percent of the school population, despite the fact that about 90 percent of all parents want their children to participate in sports (Michell, 1990). The reasoning behind this desire for participation may be that parents are aware
of the benefits of playing sports and hope to generalize them to their children. Fifty percent of children do not get enough exercise to develop healthy cardiorespiratory systems. The improvement of an individual’s physical condition leading to an improvement in general health and increased resistance to illnesses is one of the benefits of involvement with sports. In addition, children that play sports are less tempted to use their spare time negatively in activities such as taking drugs, drinking alcohol, having unsafe sexual experiences, and watching an abundance of television (Micheli, 1990). Regular exercise helps youngsters’ academic performance according to recent evidence. This follows the concept from the ancient Greeks “healthly mind in a healthly body” (Micheli, 1990).

In addition to the health benefits, involvement in sports may lead to academic gains. According to Benz, author of *Do Sports Help Students Do Better in School?*, research has consistently found that participation in athletics increases students’ educational aspirations. A study in 1989 showed that black males from an urban high school were four times more likely to work towards a bachelor degree than their non-athletic peers (Miracle and Rees, 1994). Another benefit of sports is that it may lead to the development of a positive self-concept. Self-concept may be learned by a child feeling as if he or she has contributed to a team effort (Micheli, 1990). In 1996, Dr. Maureen Weiss stated “Physical activity and sports have tremendous potential to enhance children’s self-esteem and motivation.” One reason stated for developing quality physical education programs was the need to increase the self-concepts of students (Seefeldt and Vogel, 1986). Two of the above benefits discussed are brought together when Miracle and Rees reported, in 1994, that athletic affiliation may result in an
increased self-concept which is likely to enhance students’ abilities in the classroom. Research also indicates that athletes with disabilities have higher self-concepts than non-athletes with disabilities (Manhattan College, 1998).

**SELF-CONCEPT**

In 1644, Rene Descartes made great strides in the development of the self-concept theory, with the acknowledgement of the non-physical inner self when he wrote the *Principles of Philosophy*. He stated that doubting something led an individual to acquire more knowledge about it, yet he could not doubt that he doubted. He believed that if he was able to doubt, then he was thinking, and therefore, he must exist. In turn, he developed the idea that existence depended upon perception. Sigmund Freud, in the year 1900, also played a significant role in the development of the term self-concept. He shed new light on the importance of internal mental processes. In addition, in 1946, Freud’s daughter Anna gave central importance to ego development and self-interpretation (Purkey, 1988). Carl Rogers was known to be the most influential individual in the development of the self-concept theory. In 1947, he developed an entire system to help individuals based on the importance of the self. Rogers’ believed that the self was the main component in human personality and personal adjustment. His theory proposed that an individual’s self concept was formed through his or her social interactions such interpersonal relationships and striving for consistency. He stressed that individuals have a need to feel positively about themselves and to have others regard them in the same manner (Purkey and Schmidt, 1987).

Self-concept generally refers to the way people think or feel about themselves; it
is how people value themselves (Purkey, 1988). An individual's self-concept is not
innate; it is learned, dynamic, and organized. Its development occurs through
interactions in the environment and reflections that occur as a result of those interactions
(Huitt, 1998). Self-concept is shaped and reshaped through repeated perceived
experiences, particularly with significant others (Purkey, 1988).

According to Franken, a great deal of research exists which supports a
relationship between self-concept and motivation. In 1994 he stated “the self-concept,
perhaps, is the basis for all motivated behavior. It is the self-concept that gives rise to
possible selves, and it is possible selves that create the motivation for behavior.” Self-
concept is comprised of several different components: physical, academic, social, and
transpersonal. The physical aspect entails how we look, our weight, height, sex, the car
we drive, etc. It is related to things that are concrete. The academic self-concept can be
broken down into two parts: how successful one is overall and how successful one is in
particular academic domains such as math, science, history, etc. How an individual
relates to other people refers to the social self-concept and how an individual relates to
the world beyond themselves refers to the transpersonal self-concept (Huitt, 1998).

A relationship between self-concept and school achievement exists (Hamachek,
1995). In his research to find out exactly how these two intertwine, he found that success
in general and specific academic areas over a period of time predicts the level of regard
of self-concept. In contrast, he found that the level of self-concept does not predict level
of school achievement (Bridgeman and Shipman, 1978; Kifer, 1975).

Students with learning disabilities are vulnerable to having a low self-concept.
Research suggests that individuals with learning disabilities have lower self-concepts
than their non-disabled peers. The draining academic experiences that they encounter may be one of the causes. A study was done to determine the extent to which school based interventions enhance the self-concept of students with learning disabilities. This meta-analysis looked at 36 interventions used in 31 separate studies. All of the interventions involved the self-enhancement approach or the skill development approach in isolation or in conjunction of each other. The self-enhancement approach attempts to change students’ self-perceptions by focusing on eliminating self-defeating thoughts and behaviors that are believed to interfere with academic success. The skill development approach focuses on improving individual academic domains. The theory behind this is that a students’ self-concept will improve in that area and the student will anticipate future academic success. Results showed that beneficial changes in the self-concepts of students with learning disabilities can occur as a result of school-based interventions. The average intervention implemented lasted less than 12 weeks with sessions held only two to three times per week. Interventions that combined both approaches were found to be the most successful for students with learning disabilities (Elbaum and Vaughn, 1999).

A study was conducted to determine if a correlation existed between extracurricular activities, G.P.A., and self-esteem. The participants in the study consisted of thirty-four college students. The participants were administered the Rosenberg’s Self-Esteem Scale and asked questions pertaining to their extracurricular activities and their G.P.A. No significant relationship was found between extracurricular activities and their G.P.A. No significant relationship was found between extracurricular activities and G.P.A. In addition, all of the tests showed no significant correlation between extracurricula activities and self-esteem, or any correlation between self-esteem and
A meta-analysis consisting of 73 studies focused on the magnitude of change that may be expected for self-concept as a result of participating in physical activity. The study found that on average individuals experience a small increase in global self-concept when they participate in physical activity or exercise. It appears that males experience greater changes in self-concept than females as a result of physical activity. Also, self-concepts were increased more when individuals participated in strength-based programs or aerobic and strength-based programs than when they participated in only aerobic-based programs. The meta-analysis also found that improvement in fitness led to a gain in self-concept (Spence and Poon, 1997).

Self-concept generally refers to how people view themselves (Purkey, 1988). Individuals develop their self-concepts through interactions in the environment. Students with learning disabilities are vulnerable to having a low self-concept and have a lower self-concept than their non-disabled peers. Research continually shows that sports do have a positive affect on the development of self-concepts. Both students in regular education and special education who play sports generally have higher self-concepts than their peers who do not participate in sports.
CHAPTER THREE
DESIGN OF THE STUDY

POPULATION

This study will be conducted in a large comprehensive high school located in Cumberland County. The school district is designated as a special needs, urban district. It is one of 28 school districts in the state that is currently receiving the so-called “Abbott funding.” As a multi-cultural community of nearly 60,000 people, it is represented by 40% Caucasians, 19% African-Americans, 40% Hispanics, and 1% Asians.

The high school where the study was conducted consists of one 9-to-12 high school that is currently educating approximately 2,500 students. The high school, which is housed in two buildings, each has their own administration, faculty and counseling staff. One building educates students mainly in ninth and tenth grade, while the other building educates students mainly in eleventh and twelfth grade. Students in the high school receive their education in nine, 40-minute periods. The district also houses four middle schools and 18 elementary schools.

METHOD OF SAMPLE SELECTION

A convenience sample was used for the selection of the subjects in the study. The students in the study were made up of juniors and seniors in special education with learning disabilities and emotional problems. All of the students attend the high school mentioned above. The Piers-Harris Children’s Self-Concept Scale will be administered
to approximately 50 students, 15 of which, approximately, participate in athletics, while they are in a resource room English class.

**INSTRUMENTATION**

A letter was sent out to all of the parents requesting permission to have the Piers-Harris Self-Concept Scale administered to their child. The test-retest method was used to measure reliability. The reliability coefficients ranged from .42 to .96, with a median test-retest reliability of .73. The internal consistency ranged from .88 to .93. Content validity was built into the scale by asking children to identify qualities that they liked and disliked about themselves (Jersild, 1952). Items with low discriminatory power were dropped during an item analysis. As a result, this scale does not cover each area equally.

**COLLECTION OF DATA**

In January, the students will be given this scale while they are in their resource room English class. The number of students in each class is very low and therefore this scale will be administered to an entire class at the same time. The average time of completion is 15-20 minutes, although respondents are allocated as much time as necessary.

**RESEARCH DESIGN AND ANALYSIS OF DATA**

After completion of the survey, the mean self-concept of students in special education that play sports will be compared to the mean self-concept of students in special education that do not play sports. The mean self-concepts will also be analyzed to
determine if a particular sport indicates a more positive or negative self-concept over another sport. The results will be utilized to identify if a difference exists between the mean self-concepts of boys and girls in a special education resource room that play sports. The same comparison will be made with students who do not play sports. The mean self-concepts of boys in a special education resource room that do not play sports will be compared to the mean self-concepts of boys in a special education resource room that do participate in sports. The mean self-concepts of girls will also be studied in this manner. Lastly, the mean self-concepts will be examined to identify if a difference exists between the self-concepts of students in special education that play team sports compared to sports requiring one on one competition?
The Piers-Harris Children's Self-Concept Scale individual profile form consists of six clusters: behavior, intellectual and school status, physical appearance and attributes, anxiety, popularity, and happiness and satisfaction. Each cluster, in addition to a total self-concept score, is given a raw score, T-score, and percentile rank. An inconsistency index and response bias index are also given.

The inconsistency index helps to determine whether students' responses are valid. It assesses if each response really indicates the way the child feels about herself or himself. Ultimately, the inconsistency index determines if the student is "faking." Students may be "faking good," where he or she gives answers in a positive direction and "faking bad" is the tendency to present oneself in a negative light. The average inconsistency index in athletes was .92 and 1.13 in nonathletes.

A total score may range from zero to eighty; this represents the number of items that were responded to in the direction of a positive self-concept. The mean total raw score is 51.84 and the standard deviation is 13.87. A high score would reflect a high degree of self-esteem and lower scores would indicate a lower self-concept. Average scores are usually between the 31st and 70th percentiles. T-scores have a mean of 50 and a standard deviation of 10. An indicator of a low self-concept would be a T-score of one or more standard deviation below the mean.
RESULTS

This study was based on forty-three eleventh and twelfth grade students, twelve of which were athletes, who completed the Piers-Harris Children's Self-Concept Scale. The results of this study are presented below in a format that answers the major research question and sub questions presented in Chapter One. Each question is listed individually followed by the pertaining information being stated in a table and then discussed.

- **Question One:** Is there a difference between the self-concepts of students in a special education resource room that play sports compared to students in a special education resource room that do not play sports?

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Interval</th>
<th>Test Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Athletes (31)</td>
<td>54.68</td>
<td>12.6</td>
<td>50.97&lt;μ&gt;58.39</td>
<td>3.71</td>
</tr>
<tr>
<td>Athletes (12)</td>
<td>63</td>
<td>12.6</td>
<td>57.1&lt;μ&gt;68.9</td>
<td>5.9</td>
</tr>
</tbody>
</table>

*No significant difference at the .10 level

Although the difference between the athletes and nonathletes is not significant, the trend of the data shows that the athletes scored 8.32 more points than the non-athletes. These results may indicate that sports do have a positive effect on self-concepts of students in a special education resource room.

- **Question Two:** Does any sport indicate a more positive self-concept compared to another sport? Does one sport indicate a more negative self-concept compared to another sport?

Of the twelve students who participated in athletics, five of them played more than one sport. Of the remaining seven athletes, two played softball, two played baseball,
and the rest participated in one of the following: basketball, football, or wrestling. As a result of five students playing more than one sport and the variety of sports among the remaining athletes, conclusions could not be drawn about any sport indicating a more positive or negative self-concept compared to another sport.

- **Question Three:** Is there a difference between the self-concepts of boys and girls in a special education resource room that play sports? Is there a difference between the self-concepts of boys and girls in a special education resource room that do not play sports?

**Table 2**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Interval</th>
<th>Test Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonathlete Boys</td>
<td>60.06</td>
<td>13</td>
<td>54.55&lt;u&gt;65.57</td>
<td>5.51</td>
</tr>
<tr>
<td>Nonathlete Girls</td>
<td>49.62</td>
<td>13.7</td>
<td>43.99&lt;u&gt;55.25</td>
<td>5.63</td>
</tr>
</tbody>
</table>

* No significant difference exists at the .10 level

**Table 3**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Interval</th>
<th>Test Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athlete Boys</td>
<td>63.55</td>
<td>13</td>
<td>56.45&lt;u&gt;70.65</td>
<td>7.1</td>
</tr>
<tr>
<td>Athlete Girls</td>
<td>61.33</td>
<td>13.7</td>
<td>53.84&lt;u&gt;68.82</td>
<td>7.49</td>
</tr>
</tbody>
</table>

* No significant difference exists at the .10 level

When looking at the effects of sports upon gender, no significant differences existed in either comparison. However, although the boys had a higher self-concept than the girls when looking at athletes compared to athletes and non-athletes compared to non-athletes, girls who participated in sports had a higher self-concept than the boys that did not participate in sports. This indicates that sports may positively influence self-concept.
• **Question Four:** Is there a difference between the self-concepts of boys in a special education resource room that do not play sports and boys in a special education resource room that do play sports? Is there a difference between the self-concepts of girls in a special education resource room that do not play sports and girls in a special education resource room that do play sports?

| Table 4 |
|-----------------|-----------------|-----------------|-----------------|-----------------|
|                | **Mean** | **Standard Deviation** | **Interval** | **Test Statistic** |
| Non-athlete Boys (15) | 60.06 | 13 | $54.55 < x < 65.57$ | 5.51 |
| Athlete Boys | 63.55 | 13 | $56.45 < x < 70.65$ | 7.1 |

* No significant difference exists at the .10 level.

| Table 5 |
|-----------------|-----------------|-----------------|-----------------|-----------------|
|                | **Mean** | **Standard Deviation** | **Interval** | **Test Statistic** |
| Non-athlete Girls (16) | 49.62 | 13.7 | $43.99 < x < 55.25$ | 5.63 |
| Athlete Girls (3) | 61.33 | 13.7 | $53.84 < x < 68.82$ | 7.49 |

* No significant difference exists at the .10 level.

According to the results in Table 4 and Table 5, no significant difference exists between either set of comparison groups. Despite this finding, the trend of data indicates that the athletes scored higher. These results may be indicative of the positive effect sports have on self-concept.

• **Question Five:** Is there a difference in the self-concepts of student in a special education resource room who play team sports compared to sports requiring one on one competition?

As a result of only one student playing a sport requiring one on one competition,
conclusions could not be drawn whether a difference exists on the self-concepts of students playing team sports versus one on one competition.

- **Question Six:** Does any cluster indicate a more positive or negative self-concept of students participating in athletics in a special education resource room compared to non-athletes in a special education resource room?

Table 6

<table>
<thead>
<tr>
<th></th>
<th>Athletes Mean</th>
<th>Nonathletes Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior</td>
<td>13</td>
<td>13.09</td>
</tr>
<tr>
<td>Physical Appearance &amp; Attributes</td>
<td>10.75</td>
<td>8.77</td>
</tr>
<tr>
<td>Popularity</td>
<td>9.5</td>
<td>7.9</td>
</tr>
<tr>
<td>Intellectual &amp; School Status</td>
<td>13</td>
<td>11.45</td>
</tr>
<tr>
<td>Anxiety</td>
<td>10.92</td>
<td>9.39</td>
</tr>
<tr>
<td>Happiness &amp; Satisfaction</td>
<td>8.83</td>
<td>7.45</td>
</tr>
</tbody>
</table>

Table 5 individually lists the six cluster scales mean self-concepts for athletes and nonathletes. After intraocular inspection of Table 5, it is evident that no meaningful difference exists across the cluster scales. The athletes scored higher in all of the cluster scales except for "behavior," where a .09, although minute, difference existed. This scale measured the degree to which the child admits or denies problematic behaviors. Behavioral difficulties are acknowledged by a low or moderately low score in this area. An attempt to deny behavioral problems or a lack of behavioral problems may be indicated by high scores.

The biggest difference in self-concepts existed in “Physical Appearance and
Attributes” with the athletes scoring 1.98 points higher. This scale measures the child’s attitude concerning his or her physical characteristics, ability to express ideas, and leadership skills. “Popularity” ranked as the second highest scale with the athletes scoring 1.6 points higher. This scale reflects how the child feels he or she is perceived by friends such as popularity with classmates. Bashfulness, personality traits that tend to isolate a child from others, and inadequate skills may be indicated by a low score on this scale.

The athletes scored 1.55 points higher in “Intellectual and School Status.” This scale measures student’s perceptions on how they feel they do on intellectual and academic tasks. Difficulties with school-related tasks may be identified with a low score. General emotional disturbance, dysphoric mood, and the identification of specific emotions such as bashfulness, fear, sadness, worry, and the feeling of being left out are reflected on the “Anxiety” cluster scale. The athletes scored 1.53 points higher than the non-athletes on this cluster scale. The “Happiness and Satisfaction” cluster scale reflects the extent to which the child feels that he or she is generally happy, satisfied with life, and easy to get along with. A low score on this cluster scale may be indicative of the child wanting to change, unhappiness, and feelings of negative self-worth. The athletes scored 1.38 points higher than the non-athletes on this cluster scale.
CHAPTER FIVE
SUMMARY, FINDINGS, AND DISCUSSION

SUMMARY

Research indicates that students in special education have a lower self-concept than their non-disabled peers (Manhattan College, 1998). Manhattan College also states that students with disabilities who play sports have a self-concept equal to or higher than individuals without disabilities. Identifying the degree to which participation in sports may raise the self-concepts of students in special education is an important strategy in educational programming. Discovering techniques to improve the self-concepts of students in special education has been a difficult task for both teachers and parents.

The purpose of this study was to determine if there is a difference between the self-concepts of students in a special education resource room who play sports compared to students in a special education resource room who do not play sports. The data reveals that there are no significant differences between students in a special education resource room who play sports compared to students in a special education resource room who do not play sports.

CONCLUSION

The results of this study show that participation in sports did not significantly increase the self-concepts of students in a special education resource room. Statistically, the self-concepts of students who play sports were not high enough to indicate that they
have a positive impact on self-concepts. However, the overall trend of data, although not statistically significant, did indicate that students in a special education resource room who play sports had slightly higher self-concepts than students in a special education resource room who did not play sports. In addition, the trend of data reveals that boys who participate in sports have a higher self-concept than girls who play sports and boys and girls who do not participate in sports.

DISCUSSION AND IMPLICATIONS

Although the statistical findings in this study did not show that students in a special education resource room have a higher self-concept than their peers who do not play sports, many factors contribute to self-concept. This study did not indicate that sports have a negative effect on self-concept.

This study did not look at the length of time students participated in sports, the degree of success or enjoyment, or parental support; all factors that may potentially affect overall self-concept. Although the statistical results of this study did not turn out as hoped, it did yield useful information. Sports do positively influence the self-concepts of students in a special education resource room, regardless of statistical difference. Parents and teachers constantly search for ways to help raise self-concepts and may see this as a bit of hope.

A push to include students enrolled in special education to become involved in sports should take place. Sports allow for socialization and the improvement of health. Children who play sports are less tempted to use their spare time negatively in activities such as taking drugs and drinking alcohol (Micheli, 1990). With all of these reasons
supporting participation in sports, why would attempts not be made to get children involved?

**RECOMMENDATIONS**

The following recommendations are offered for consideration:

1. The use of a larger sample size would yield more reliable results.

2. Take into consideration factors such as:
   
   a. How long has the student participated in sports?
   
   b. What is the degree of enjoyment toward the sport?
   
   c. How successful is he or she at the sport?
   
   d. What is the degree of parental support in terms of participation in sports?

3. The use of more than one method of measuring self-concept such as additional scales, checklists, students interviews, etc.
REFERENCES


