The effect of "Project Adventure" on self-esteem of learning disabled students

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THE EFFECT OF "PROJECT ADVENTURE" ON SELF-ESTEEM OF
LEARNING DISABLED STUDENTS

By
Nava Shaked

A Thesis
Submitted in partial fulfillment of the requirements of
Master of Arts in the Graduate Division
of Rowan College
May 1995

Approved by:

Date approved: Sep. 1995
The purpose of this study was to evaluate the relationship of "Project Adventure," a program of physical activity, and self-esteem on learning disabled children and non-disabled children. The hypothesis was that the "Project Adventure" program would have a positive effect on the self-esteem of all the students, with an especially strong effect on the Learning Disabled students.

The subjects, 22 regular education students and 11 Learning Disabled students participated in a 9 week Project Adventure program in Oakcrest High School (Mays Landing, New Jersey). The Coopersmith Self-Esteem Inventory had been used for assessment as a pretest and a posttest. The quantitative scores were then compared by using a t-test for matched samples. In addition the results were analyzed according to the four subscales of the Coopersmith Self-Esteem Inventory. An analysis of variance (Anova) was used to analyze the differences.

The overall results of the pretest and the posttest of the two groups show no significant improvement nor a decrease in the student's self-esteem after experiencing the
Project Adventure program. But the individual scores show that some students from both groups had a big improvement and some students from both groups had a big decrease.
MINI ABSTRACT

The purpose of this study was to evaluate the relationship of "Project Adventure" and the self-esteem of learning disabled children and non disabled high school children. The hypothesis was that the "Project Adventure" program will have a positive effect on the student's self-esteem, with an especially strong effect on the learning disabled students.

The results showed that "Project Adventure" had no significant effect on the student's self-esteem of any of the groups. But the individual scores show that some students from both groups had a big improvement and some students had a significant decrease.
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CHAPTER 1

We all recognize that the way the child feels about himself will generally influence how successful he will be academically and socially. The child with learning disabilities faces new challenges each day, and the outcome of each challenge affect the child's beliefs about himself. To the learning disabled students who participate in regular classrooms, it is usually a challenge to keep up with the classroom pace, it is a challenge to answer the questions on time or answer out loud clearly because the words don't come out quickly or in the right order. They may be quick to note the difference between themselves and non disabled children. A disabled child is more likely to be greatly aware of his limitations but unaware of his potential. This fact is usually the main reason that students with learning disabilities often show evidence of poor self-esteem and low self-concept.

The important question then becomes: How can we develop a healthy, positive self-esteem in Learning Disabled students?

Since early history, physical activity has been recognized as a helpful adjunct to the improvement of the human condition. The form and the intensity of this activity have changed over the years, but the presence of physical education and recreation program of
medicine remained almost constant. At the present days those programs appear as adaptive physical education, physical therapy, occupational therapy, and recreation therapy.

Present legislation makes it very clear that specially designed programs of physical education are a necessary part of the total educational program of children and adults with special needs. In the Public Law 94-142, physical education is the only curricular area specified. In NJ physical education is required for all students.

Exercises, games, and project adventures which are non-threatening in nature, provide an excellent opportunity for the learning disabled children to prove themselves good. These are programs in which these children can experience success and satisfaction regardless of their disabilities.

Project Adventure programs are geared around ropes courses, which use a series of trust activities and physically challenging exercises to promote a positive self-concept and the use of problem solving skills. The Project Adventure program, is one such program, that has the ability to offer settings that stimulate achievement, enhance personal fitness, allow risks to be taken, and teach children to except responsibility for their actions.

The purpose of this paper is to determine whether participation in Project Adventure improves self-esteem of the learning disabled and non-disabled students to develop a positive self-esteem.

My hypothesis is that Project Adventure can help learning disabled children to develop more positive self-esteem. The non-disabled students will also, benefit from the
Project Adventure program but not as much. My hypothesis is based on my experience as a physical education teacher, working with high school learning disabled students, and on previous research that has been done on related subjects.

The research will be conducted in a class of high school students that participate in 9 weeks project adventure program. They will be protested and posttest with the Coopersmith Self-Esteem Inventories. The class is combined with regular education students and learning disabled students. The test results of the two student populations will be compared. The comparison will help us determine which student population was more effected from the Project Adventure program.

Self-esteem is a very important trait of the individual. It affects the individuals life day by day, minute by minute. It can affect the individual’s achievement, performance, social involvement, and even selection of profession later in life. That is where I see the importance of this research. If Project Adventure can have a positive effect on the students, especially learning disabled students that usually have low self-esteem, it can effect their life positively- from being more socially involved, to better academic achievement.

Positive results from this study may make some principals and members of board of education consider including the Project Adventure program to schools that have a relatively large learning disabled student population.
CHAPTER 2

RESEARCH REVIEW

Many children and adults with learning disabilities report struggling—not always successfully—to feel good about themselves. Being teased, being told their aspirations are unrealistic, seeing themselves as different, are common experiences often leading to feeling of humiliation, frustration, and hopelessness (Gale, 1977). These process leads to low self-esteem.

To discuss the subject of learning disabled children and self esteem we have to define those terms, and understand how self-esteem is developed.

Learning disabled children are children that have normal and above intelligence. However, they have a processing problem which causes a significant deviation from the norm in one or more academic areas. These children often exhibit behavior which separate them from their peers (Womack, 1982). They seem to be at risk for having low self-esteem. In addition, low self-esteem appears to extend into adulthood and is often associated with employment problems (Hoffman et al. 1987; Schmitt 1986).
Self-esteem is how the child is feeling about himself, how much he feels he is worth. High self-esteem means being satisfied with who you are, liking your self, and respecting your self for meeting your own standards and as a human being (Searey, 1988). Often low self esteem is a product of the failure these children has experienced and it may be manifested through withdrawal or inappropriate behavior, and severe self-concept problems (Womack, 1982).

There are a number of components to self-esteem. We must feel that: 1) we are capable, 2) we are significant in that we matter to others; 3) we are powerful and have some say in what we do; and 4) we are unique and worthwhile in our own right (Schilling, 1986). A child must develop in each of these ways in order to have a good feeling about himself.

**How does self-esteem develop?**

Children begin to form a sense of themselves from the time they are born. The relationship between parent and child lays the foundation for self-regard. In their early interactions, the parent loving responses help the infant develop a sense of confidence and worth (Givelber, 1983). The constant attention of the parent reassure the child that he is important and capable. When he asserts his own wishes, he learns the limits of what he is permitted.

The young child takes in what value people say about him and begins to respond towards himself the same way. The value young child assign to himself is a reflection of how he believes others value him.
As the child master new skills, he begins to determine what specific areas of self are valued. He will begin to recognize that there are some areas he excel in and some he is deficient. His overall regard for himself will be depend on the relative value attached to these areas of the self.

When the child grows older, he learns to filter what is said about him in a way that confirm his existing self-image. He learn to value responses from people who are important to him, about things that are important to him.

The young child defines him self by concrete abilities, achievement at school, and physical characteristics. Erik Erickson characterized the school years by “I am what I learn.” The child’s specific and general self-images continue to develop as he discover his strengths and weaknesses according to the external standards (Searey, 1988)

As the child become an adolescent he is more concerned about internal aspects of him-self. In general, young adolescents (12-13 y.o.) appear to have the lowest self-esteem through out their life, as they recognize their own imperfections. At this stage the adolescent’s sense of self-worth is regulated from within himself. He is less vulnerable and rely more on his own opinion, although will need reassurance from others at times. One’s self-esteem will shift up and down throughout life, depending on how he thinks he measures up to his standards (Brennan, 1985).

**How does a learning disability affect self-esteem ?**

Unrecognized disabilities may affect the interaction between the parent and the infant. The infant might not have the ability to localize and respond to his parent voice, or
to attend to the early games parents play with their babies. As they fail or struggle to learn new skills, many children with learning disabilities are insecure in their abilities and overall feeling of self-worth. Some children with learning disabilities may feel "dumb" and suffer ridicule and defeat because of school failure or inability to pick up social cues. Often they believe they cannot perform quite well enough to meet their parent’s or teacher’s expectations. When they fail to master even the most basic skill, their confidence in themselves is greatly lowered (Searcy, 1988).

Most children who have learning problems, whether they arise from a physical or emotional basis (or perhaps a combination of both) are usually plagued by another problem as well. All too often the children have a poor self-concept, a conviction that they are losers and a feeling that somehow, despite their best efforts, things will not go right with them. In addition, many children with learning problems have locked themselves into rigid and often self-destructive behavior and learning patterns. Often they will not or cannot admit they have made a mistake. They cannot or will not check their work for errors. Many children tend to blame others for their mistakes rather than take the responsibility for their own actions. This can apply to both academic and social situations (Furst, 1983).

Doubt, fear, worry, and embarrassment are the words used and the feelings described by most of the learning disabled students. Furthermore, they explain that such negative feelings heightened during periods of transition. Meaning that any change in their environment effect their self-esteem negatively (Chervin, 1986).
The learning disabled children experience tremendous anxiety that comes from realization that they are different, they have not succeeded in conventional school structures, whereas their peers, friend, and playmates have. That difference equates to failure and inferiority (Chervine, 1986).

The lack of self-esteem and self-confidence has to be addressed by the educators, because a successful application of academic skills is difficult without the development of social and emotional skills. There are many theories and methods to improve self-esteem and work with the student on social skills. This paper will present few of the methods.
METHODS TO ENHANCE SELF-ESTEEM THROUGH PHYSICAL ACTIVITIES

Building self-esteem through Physical Education

Physical education experiences can offer a variety of situations for learning a positive self-concept. A positive feeling about one self is priceless and opens up many avenues for personal growth. The ability to offer settings that stimulates achievement, enhance personal fitness, allow risks to be taken, and teach children to except responsibility for their actions, make physical education an effective medium for developing successful lifestyles (Parganzi, 1982).

Bowie, Flater, and O’Shea (1992) developed a program which utilize the physical education curriculum as a vehicle that allowed special education students with poor self-esteem to participate in activities with non-handicapped peers who had demonstrated high self-esteem and had received training in helping others develop improved self-esteem. All students (regular education and special education) participated daily in the physical education activities. All students were evaluated before and after the program. All students involved benefited in some significant ways. The special education students showed improved social skills, increased class participation, development of friendships, all indicating of improved self-esteem.
Increase adolescents self-esteem through Wilderness and Outdoor programs

Adams (1970) reported on a wilderness experience where 19 adolescents inpatients from state hospital participated in a 30 day wilderness program along with non-institutionalized adolescents. The results of the program suggested that the adolescents exhibited decreased symptomatology and reported increased self-esteem following the trip. In addition, approximately 2 years after the trip, 85% of the original inpatients had not been rehospitalized. Unfortunately, there was no control group in this study that can give us baseline for rehospitalization rates.

Kaplan (1974) reported on a wilderness treatment program utilizing an outpatient group of adolescents. Ten male adolescents were involved in a two week outdoor therapeutic program. This program included a matched control group. The results suggested that six months after participation in the program, the treatment group reported more positive self-esteem, concern for others and more realistic view of their own strengths and weaknesses than did the control group.

Improving self-esteem through Wilderness Therapy Program

Berman and Berman (1989), in their study were trying to determine the efficacy of a particular out-of-doors treatment model, the Wilderness Therapy Program, on adolescents in outpatient counseling. This program provides adolescents, in groups of 6 to 8 male and female participants, with an intensive therapeutic experience in the wilderness in which treatment goals are specified and counseling is provided by licensed mental health professionals. It was predicted that positive change would be found at posttest on verity of measures including self-perceptions.
The study included 23 adolescents (15 boys and 8 girls) ranging in age 13 to 18 participated in 4 Wilderness Therapy Program trips. Each trip was 10-13 days. All of the adolescents were involved in outpatient mental health counseling. Group therapy was held on a daily basis, individual therapy was available as needed.

Four instruments were administered to all participants at pretest and posttest.

1. The Internal-External Locus of Control Scale.
2. Perceptions of self-efficacy
3. Piers-Harris self-esteem inventory.
4. Behavioral Symptom Inventory.

Results of this study supported the prediction that the Wilderness Therapy program has beneficial effects on outpatient adolescents participants. One of the areas the effects were more dramatic is self-esteem.

**Building self-concept through outdoor activities**

On the contrary, Duhaime (1982) developed a program of outdoor affective education and implemented it on a sample of Learning Disabled students to determine its effects on self-esteem, social adjustment, classroom behavior, and affective behavior.

Thirty three boys and fifteen girls were randomly selected from a population of Learning Disabled school children. Nine boys and three girls were then randomly assigned to each of the following groups: (1) Outward Bound, (2) Recreation, (3) No Treatment. The subjects were pretested on measures of self-concept, social adjustment, and classroom
behavior. The Outward Bound and Recreation programs commenced and continued for 7 weeks under the directions of the investigator.

Upon completion of three programs, posttest data were collected from all three groups.

The results, using analysis of covariance, indicated no statistically significant posttest differences in self-concept or social adjustment.

Summary and Conclusion of the Literature Review

Self-esteem is a broad term that refers to the individual's perception of himself and the world around him in different areas. Self-Easter is developed from infancy and influenced by significant people (parents, teachers, peers) of the individual. Self-esteem may influence the performance of the individual's achievement in all areas, his relationship with others, his behavior in school or other environments which he may be in, his academic achievement in school, and his achievement later in life.

The studies reviewed above conclude that any kind of physical activity could have a strong impact on enhancing positive self-esteem. It also tells us how important it is for Learning Disabled students as a special group in a non-disabled classroom. They tend to be at risk for having low self-esteem. Their low self-esteem appears to extend to adulthood and it often associated with employment problems.
CHAPTER 3

THE DESIGN OF THE STUDY

Description of the population

The population examined in this study consisted of regular education students and Learning Disabled students with the following disabilities: Perceptually Impaired (6 students), Multiple Handicapped (two students), Neurologically Impaired (one student), Communication Handicapped (one student), Educable Mentally Retarded (one student).

The Learning Disabled students and the regular education students attended the same regular education classrooms. All the students that were tested are 14-15 years of age (grades 9 and 10). All the subjects attended Oakcrest high school in Mays Landing, New Jersey.

Description of the instrument

The Coopersmith Self-Esteem Inventory (SEI) School Form was used for assessing self-esteem.

The SEI School Form consist of a total 58 items. The SEI is designed to measure evaluative attitudes toward the self in social, academic, family and personal areas of
experience. Eight of the items included in the scale items, they suggest defensiveness in the student responses.

Reliability

*Internal Consistency* obtained coefficient that ranged from .87 to .92 for the different grade levels.

*Test-Retest reliability*—5 week test-retest reliability was .88 for grade 5, and .70 for grade 5 in 3 years interval.

Validity

*Construct Validity*—an investigation was designed to observe the comparative importance of the home, peers, and school to the global self-esteem of preadolescents and adolescents. The study confirmed the construct validity of the SEI subscales and measuring sources of self-esteem.

*Concurrent Validity*—correlation of the SEI and SRA Achievement Series scores of fourth grade children obtained a coefficient of .33.

Procedures

The Coopersmith Self-Esteem Inventory was administered to the Project Adventure classes, including the regular education students and the learning disabled students. The students were pretested at the beginning of the 9 week program and
posttested at the end of the 9 week program. They were tested to indicate if the Project Adventure program had any effect on the subjects self-esteem.

The instruction of the test were: "Today you will be filling out a questionnaire. Your answers will help me know you and your likes and dislikes."

The test took approximately 15 minutes to administer.

Project Adventure programs are geared around ropes courses, which use a series of trust activities and the use of problem solving. Project Adventure is a program that has the ability to offer settings that stimulate achievement, enhance personal fitness, allow risks to be taken, and teach children to take responsibilities for their actions. The Project Adventure is a 9 week program that offered daily for 45 minutes.

The 4 aspects of self-esteem were compared as followed:

Pretest social self-esteem was compared with posttest social self-esteem of the student. Pretest academic self-esteem was compared to posttest academic self-esteem. Pretest family self-esteem was compared with posttest family self-esteem. Pretest personal self-esteem was compared to posttest personal self-esteem.

The comparison was done to each student, regular education and learning disabled. Then the results were correlated between the regular education students to the learning disabled students to determine which population was affected more by the Project Adventure program.
CHAPTER 4

RESULTS AND DATA ANALYSIS

The hypothesis (chapter 1) stated that project Adventure will have a positive effect on the students in general and a better effect on the L.D students. Therefore, the scores of the pretest were compared with the scores of the posttest as a class, and as groups of regular education students and Learning Disable students. A t-test for matched samples was used for the comparison. In addition the results were analyzed according to the 4 subscales of the Coopersmith Self-Esteem Inventory.

PRETEST RESULTS

The pretest results of the Coopersmith Self-Esteem Inventory that has been used in this study are reported in table 1.

The results show that the total score of the pretest for the class as one group was 65.3 with S.D of 13.7. The group of regular education students scored 66.17 as a total score of the pretest with S.D of 11. The L.D. students scored 63.3 as a total score with
The pretest results show that the group of the regular education students scored better than the others but the difference is not significant.

The scores for each of the groups on each subscale are also presented in table 1. The most significant difference was in the social self esteem subscale of the pretest because the P value was the lowest 0.07. The regular education group scored the highest score of 6.4 with S.D. of 1.5. The L.D. group scored 5.2 with S.D. of 1.9.

The general self-esteem subscale scores did not show a big difference between the groups at the pretest. The class as a group scored 17.9 with S.D. of 3.8, the regular education students scored 17.7 with S.D. of 3.4 and the L.D students scored 18.3 with S.D of 4.6.

Scores of the home subscale of the pretest was very close the class score was 4.4 with S.D of 2, the regular education students scored 4.5 with S.D. of 1.8 and the L.D. students scored 4 with S.D of 2.4.

Scores of the school subscale was also very close. The class score was 4.3 with S.D of 2, the regular education students scored 4.3 with S.D. of 2 and the L.D students scored 4 with S.D. of 2.

The total scores of the pretest shows a difference between the L.D students that scored 63.3 with S.D of 18.4 and the regular education students that scored 66.17 with S.D of 11.
TABLE 1

PRETEST SCORE FOR THE COOPERSMITH INVENTORY

<table>
<thead>
<tr>
<th></th>
<th>GEN</th>
<th>SOC</th>
<th>HOME</th>
<th>SCH</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>L.D</td>
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<td>5.2</td>
<td>4</td>
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<tr>
<td>S.D</td>
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<td>1.9</td>
<td>2.4</td>
<td>18.4</td>
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<tr>
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<td>6.4</td>
<td>4.5</td>
<td>66.17</td>
</tr>
<tr>
<td>S.D.</td>
<td></td>
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<td>1.8</td>
<td>11</td>
</tr>
<tr>
<td>P</td>
<td>NS</td>
<td>0.07</td>
<td>0.44</td>
<td>0.68</td>
<td>0.58</td>
</tr>
<tr>
<td>CLASS</td>
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<td>6</td>
<td>4.4</td>
<td>65.3</td>
</tr>
<tr>
<td>S.D.</td>
<td></td>
<td>3.8</td>
<td>1.7</td>
<td>2</td>
<td>13.7</td>
</tr>
</tbody>
</table>
Posttest Results

The posttest scores for the Coopersmith Self-Esteem Inventory used in this study are reported in table 2.

The total scores of the posttest show a difference between the two groups. The L.D students scored 60.7 with S.D. of 14.5 and the regular education students scored 67.3 with S.D. of 17. The results show that the regular education students scored slightly higher at the posttest.

The general subscale scores show that the regular education students scored better than the L.D students. Their score was 18.3 with S.D of 4.6 while the L.D students scored 16.6 with S.D of 4. The class score was 17.8 with S.D. of 4.5.

The social subscale scores show a slight difference between the groups. The L.D students scored 5.2 with S.D. of 1.6 and the regular education students scored 5.6 with S.D. of 2.4.

We can see some difference between the groups at the home subscale. The regular education students scored 4.7 with S.D of 2 and the L.D students scored 4.4 with 2.4. The school subscale the difference more significant. The L.D students scored only 4 (S.D. of 2.1) while the regular education students scored 4.9 (S.D. of 1.4).

All the P values were not significant, they ranged between 0.23 to 0.68.
<table>
<thead>
<tr>
<th>CLASS</th>
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<th>HOME</th>
<th>SCH</th>
<th>TOTAL</th>
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<tr>
<td>LD</td>
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<td>5.2</td>
<td>4.4</td>
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<td>60.7</td>
</tr>
<tr>
<td></td>
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<td>1.6</td>
<td>2.4</td>
<td>2.1</td>
<td>14.5</td>
</tr>
<tr>
<td>REG</td>
<td>18.3</td>
<td>5.6</td>
<td>4.7</td>
<td>4.9</td>
<td>67.3</td>
</tr>
<tr>
<td></td>
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<td>2</td>
<td>1.4</td>
<td>17</td>
</tr>
<tr>
<td>P</td>
<td>0.31</td>
<td>0.6</td>
<td>0.68</td>
<td>0.23</td>
<td>0.27</td>
</tr>
<tr>
<td>CLASS</td>
<td>17.8</td>
<td>5.6</td>
<td>4.7</td>
<td>4.6</td>
<td>65.2</td>
</tr>
<tr>
<td></td>
<td>4.5</td>
<td>2.2</td>
<td>2.1</td>
<td>2.1</td>
<td>16.4</td>
</tr>
</tbody>
</table>
Score Differences Between the Pretest and Posttest

Differences between pretest and posttest scores were calculated. The results are presented in table 3. An analysis of variance procedure was used to analyze the differences.

The hypothesis (chapter 1) stated that the L.D. students will benefit more from the Project Adventure program. The results do not confirm the hypothesis, on the contrary the regular education students show improvement in most of the subscales while the L.D. students show no improvement in some subscales and decrease in other subscales scores.

The total scores differences show that the regular education students improved by 1.2 with S.D. of 14.19 while the L.D. students scores show a decrease of 2.6 with S.D. of 15.7. Figure 1 shows how each individual score changed.

The same trend appears in the results for the general and school subscales. The general subscale score shows improvement of 1.13 with S.D. of 4.2 of the regular education students and a decrease of 1.6 with S.D. of 4.7. The P value is 0.09.

The school scores show an improvement of the regular education students of 0.52 with S.D. of 1.9. The L.D. students score decreased by 0.1 with S.D. of 1.7.

The social scores show no difference in the scores of the L.D. students (0) with S.D. of 2, while the regular education students scores show a decrease of 0.7 with S.D. of 1.6. Figure 2 shows individual results for the social subscale.
The home subscale scores show an improvement of the L.D students by 0.45 with S.D. of 1.5 and a smaller improvement by the regular education students of 0.21 with S.D. of 2.
## TABLE 3

### SCORE DIFFERENCES OF PRETEST AND POSTTEST FOR THE COOPERSMITH INVENTORY

<table>
<thead>
<tr>
<th></th>
<th>GEN</th>
<th>SOC</th>
<th>HOME</th>
<th>SCH</th>
<th>TOTAL</th>
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</thead>
<tbody>
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<td><strong>L.D.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>-1.6</td>
<td>0</td>
<td>0.45</td>
<td>-0.1</td>
<td>-2.6</td>
</tr>
<tr>
<td>S.D.</td>
<td>4.7</td>
<td>2</td>
<td>1.5</td>
<td>1.7</td>
<td>15.7</td>
</tr>
<tr>
<td><strong>REG</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>1.13</td>
<td>-0.7</td>
<td>0.21</td>
<td>0.52</td>
<td>1.2</td>
</tr>
<tr>
<td>S.D.</td>
<td>4.2</td>
<td>1.6</td>
<td>2</td>
<td>1.9</td>
<td>14.19</td>
</tr>
<tr>
<td>P</td>
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<td>0.26</td>
<td>0.11</td>
<td>0.38</td>
<td>0.47</td>
</tr>
</tbody>
</table>
FIGURE 1

DIFFERENCES OF THE TOTAL SCORE

SCORE DIFFERENCES

SUBJECTS
FIGURE 2

DIFFERENCES OF SOCIAL SCORES

subjects

score difference

40
30
20
10
0
-10
-20
-30
-40
DISCUSSION AND CONCLUSIONS

The purpose of this study was to find the effect of Project Adventure program on the self-esteem of high school students, and does it effect learning disabled students differently than regular education students.

The hypotheses were:

1. Project Adventure will improve the students self-esteem.
2. The Learning Disabled students will better benefit from the Project Adventure program.

Discussion of the Results

The over all scores show that there was neither a significant improvement nor a significant decrease in the self-esteem of either the Learning Disabled or the non-disabled students, after experiencing the Project Adventure program. When we look at the individual scores we can see that the scores of some of the students changed very little. Their pretest and posttest scores were very similar. But, on the other hand, some of the
students (1 learning disabled student and 2 non-disabled students) had a very big improvement and some (1 disabled student and 1 non-disabled student) had a big decrease in their self-esteem after the program. The scattered diagram (figure 2) of the total scores shows most of the scores clustered close to the horizontal line (x) That reveals that there is no significant effect or non at all of the Project Adventure program on self-esteem. The several dots that above 20 show a significant positive effect, the dots below -20 show a significant negative effect of Project Adventure program on self-esteem.

We can conclude from these scores that some students can significantly improve their self-esteem from a program of physical activity such as Project Adventure Program (as hypothesized). Other students show no improvement or even experience a decrease in their self-esteem after such a program. This may be a result of the individual student characteristics and attitude toward such intensive physical activity. A student whose attitude is not of a favor of physical activity and does not experience success during the activity, but over all has to participate the physical activity every day for 9 weeks, would probably of decrease his self-esteem. This is an area that could be studied in subsequent research.

Limitations of the Study

One of the major limitations of the study was the size of the Learning Disabled group (11 subjects). Therefore, the quantitative relationship should be considered highly preliminary. A larger size sample would improve the study's reliability. This limitation
was due to difficulty in recruiting Learning Disabled students that experience the Project
Adventure program.

2. Determining cause and effect relationship of a study is hard to do. There are many variables (other than the cause) that can effect the results of the study like: home, environment, school programs (other than the specific program), peer group integration, etc. Therefore, the results found provide a basis for characterization only of the Project Adventure program and the students self-esteem.

3. The Coopersmith Self-Esteem Inventory as an instrument that assess self-esteem according to physical activity, might not be sensitive enough.

The Implications of the Study

Developing self-esteem is an important variable in learning for both Learning Disabled and regular students. As Searey (1988) noted, the child's self-esteem reflects how he feels about himself, how much he feels he is worth. Improving the child's self-esteem will improve the child's performance in other areas.

Often low self-esteem is a product of failure the children have experienced. This feeling of failure may be manifested through withdrawal or inappropriate behavior, and sever self-concept problems (Womack, 1982). Therefore, we as educators have to give the children the opportunity to experience success and teach them to their strengths and not their weaknesses.
The preliminary results of the class in this study did not support nor negate the hypotheses that Project Adventure will improve the students self-esteem, and improve the Learning Disable students self-esteem more than the regular education students. The individual results show that some students from the two groups have improved their self-esteem and benefited from the program. However, some showed no improvement or even a decrease in their self-esteem.

Therefore, this program is important to some children, but prior to administration of the program we have to find a way to determine who are the students that will benefit from the program. For students who do not benefit from this program, a different program to improve their self-esteem has to be established.

This study may offer better understanding of the importance of self-esteem, and the important role of the teacher to enhance the students self-esteem.

**Recommendations**

In order to make sure that the students will benefit from the program another research has to be planned to look at the subjects variables and develop an instrument that will determine who is a good candidate for the program. This instrument will be given to the students before administering the program.

Intervention, of any kind, has to be directed at improving self-esteem and should be a part of a curriculum, especially for Learning Disabled students.
REFERENCES


Things usually don't bother me. I find it very hard to talk in front of the class. There are lots of things about myself I'd change if I could. I can make up my mind without too much trouble. I'm a lot of fun to be with. I get upset easily at home. It takes me a long time to get used to anything new. I'm popular with kids my own age. My parents usually consider my feelings. I give in very easily. My parents expect too much of me. It's pretty tough to be me. Things are all mixed up in my life. Kids usually follow my ideas. I have a low opinion of myself. There are many times when I'd like to leave home. I often feel upset in school. If I have something to say, I usually say it. My parents understand me. Most people are better liked than I am. I usually feel as if my parents are pushing me. I often get discouraged at school. I often wish I were someone else. I can't be depended on. I never worry about anything. I'm pretty sure of myself. I'm easy to like. My parents and I have a lot of fun together.

### Appendix 1

<table>
<thead>
<tr>
<th>Like</th>
<th>Unlike</th>
</tr>
</thead>
<tbody>
<tr>
<td>Me</td>
<td>Me</td>
</tr>
<tr>
<td>☐ 1. Things usually don't bother me.</td>
<td>☐ 30. I spend a lot of time daydreaming.</td>
</tr>
<tr>
<td>☐ 2. I find it very hard to talk in front of the class.</td>
<td>☐ 31. I wish I were younger.</td>
</tr>
<tr>
<td>☐ 3. There are lots of things about myself I'd change if I could.</td>
<td>☐ 32. I always do the right thing.</td>
</tr>
<tr>
<td>☐ 4. I can make up my mind without too much trouble.</td>
<td>☐ 33. I'm proud of my school work.</td>
</tr>
<tr>
<td>☐ 5. I'm a lot of fun to be with.</td>
<td>☐ 34. Someone always has to tell me what to do.</td>
</tr>
<tr>
<td>☐ 6. I get upset easily at home.</td>
<td>☐ 35. I'm often sorry for the things I do.</td>
</tr>
<tr>
<td>☐ 7. It takes me a long time to get used to anything new.</td>
<td>☐ 36. I'm never happy.</td>
</tr>
<tr>
<td>☐ 8. I'm popular with kids my own age.</td>
<td>☐ 37. I'm doing the best work I can.</td>
</tr>
<tr>
<td>☐ 9. My parents usually consider my feelings.</td>
<td>☐ 38. I can usually take care of myself.</td>
</tr>
<tr>
<td>☐ 10. I give in very easily.</td>
<td>☐ 39. I'm pretty happy.</td>
</tr>
<tr>
<td>☐ 11. My parents expect too much of me.</td>
<td>☐ 40. I would rather play with children younger than I am.</td>
</tr>
<tr>
<td>☐ 12. It's pretty tough to be me.</td>
<td>☐ 41. I like everyone I know.</td>
</tr>
<tr>
<td>☐ 13. Things are all mixed up in my life.</td>
<td>☐ 42. I like to be called on in class.</td>
</tr>
<tr>
<td>☐ 14. Kids usually follow my ideas.</td>
<td>☐ 43. I understand myself.</td>
</tr>
<tr>
<td>☐ 15. I have a low opinion of myself.</td>
<td>☐ 44. No one pays much attention to me at home.</td>
</tr>
<tr>
<td>☐ 16. There are many times when I'd like to leave home.</td>
<td>☐ 45. I never get scolded.</td>
</tr>
<tr>
<td>☐ 17. I often feel upset in school.</td>
<td>☐ 46. I'm not doing as well in school as I'd like to.</td>
</tr>
<tr>
<td>☐ 18. I'm not as nice looking as most people.</td>
<td>☐ 47. I can make up my mind and stick to it.</td>
</tr>
<tr>
<td>☐ 19. If I have something to say, I usually say it.</td>
<td>☐ 48. I really don't like being a girl.</td>
</tr>
<tr>
<td>☐ 20. My parents understand me.</td>
<td>☐ 49. I don't like to be with other people.</td>
</tr>
<tr>
<td>☐ 21. Most people are better liked than I am.</td>
<td>☐ 50. I'm never shy.</td>
</tr>
<tr>
<td>☐ 22. I usually feel as if my parents are pushing me.</td>
<td>☐ 51. I often feel ashamed of myself.</td>
</tr>
<tr>
<td>☐ 23. I often get discouraged at school.</td>
<td>☐ 52. Kids pick on me very often.</td>
</tr>
<tr>
<td>☐ 24. I often wish I were someone else.</td>
<td>☐ 53. I always tell the truth.</td>
</tr>
<tr>
<td>☐ 25. I can't be depended on.</td>
<td>☐ 54. My teachers make me feel I'm not good enough.</td>
</tr>
<tr>
<td>☐ 26. I never worry about anything.</td>
<td>☐ 55. I don't care what happens to me.</td>
</tr>
<tr>
<td>☐ 27. I'm pretty sure of myself.</td>
<td>☐ 56. I'm a failure.</td>
</tr>
<tr>
<td>☐ 28. I'm easy to like.</td>
<td>☐ 57. I get upset easily when I'm scolded.</td>
</tr>
<tr>
<td>☐ 29. My parents and I have a lot of fun together.</td>
<td>☐ 58. I always know what to say to people.</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Gen</th>
<th>Soc</th>
<th>H</th>
<th>Sch</th>
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