The effect of a drug use prevention curriculum on a measure of self-esteem

Irven E. Simpkins Jr.
Rowan College of New Jersey

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THE EFFECT OF A DRUG USE PREVENTION CURRICULUM ON A MEASURE OF SELF-ESTEEM

by
Irven E. Simpkins, Jr.

A Thesis
Submitted in partial fulfillment of the requirements of the Master of Arts Degree in the Graduate Division of Rowan College in School Psychology (6-30-95)

Approved by

Date Approved: 7/31/95
ABSTRACT

Irven E. Simpkins, Jr

The Effect of a Drug Use Prevention Curriculum on a Measure of Self-Esteem

1995

Thesis Advisor: John Klanderman, Ph.D

School Psychology

Longitudinal studies have indicated that drug use prevention curricula are effective in increasing students' knowledge of the harmful effects of drugs, improving their social skills, and developing healthier interpersonal relationships. The purpose of this quasi-experimental study was to evaluate the effect of a drug use prevention curriculum on students' self-esteem over a short time span. Sixty-seven students were pretested with a measure of self-esteem after being divided into a target and a control group. Five lessons were taught to the target group over a period of five weeks. All students were then posttested and the results were analyzed using a repeated measures t statistic. The findings indicated that the drug use prevention curriculum had a significant and positive effect on the target group's measure of self-esteem. The control group showed no significant change from pretest to posttest on their measure of self-esteem. These findings indicate that a consistent use of a drug use prevention curriculum can provide short term benefits as well as long term benefits for students and their school systems.
Mini-ABSTRACT

Irven E. Simpkins, Jr

The Effect of a Drug Use Prevention Curriculum on a Measure of Self-Esteem

1995

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ACKNOWLEDGEMENTS

I would like to express my gratitude to those that made this endeavor possible. I would like to thank Dr. John Klanderman for his patience and encouragement, without which this thesis would never have been completed. I would also like to thank my wife Debra, my son Elex, and my daughter Nicole again, for surrendering that block of time from our life to allow me to pursue a dream.
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Chapter Five

Summary

Discussion

Implications for further research

References
In 1975 the National Institute of Drug Abuse (NIDA) issued their recommendations for drug abuse prevention. Their findings indicated that primary prevention efforts should deal with the development and reinforcement of positive personal and social skills that would increase protective factors and reduce the risk factors associated with drug abuse. These findings were responsible, in part for the development of a multitude of school-based prevention programs throughout the country. Programs such as Here's Looking at You, 2000 (HLAY2000), Counseling Leadership Against Smoking Pressure (CLASP) Project, Alcohol Misuse Prevention Study (AMPS) Program, Choosing For Yourself, and Life Skills Program, are compatible with the principles of drug abuse prevention identified by NIDA. Longitudinal studies have indicated that consistent use of these curricula will promote an increase in knowledge of drugs and the consequences of their use, improved social skills, and the development of healthier interpersonal relationships, leading to reduced drug abuse by juveniles (Beaulieu
& Jason, 1988; Green & Kelly, 1989; Kreutter, Gewirtz, Davenny & Love, 1991; Kim, 1988; Shope, Dielman, Butchart, Campanelli & Kloska, 1992). Statistical information has supported and shown that these programs and approaches have been effective in reducing drug abuse. However, after several years of declines in drug incidents the new figures are showing indications of an increase in drug use and related problems. Some of the potential reasons for this change could be due to a public change of focus brought on by the reductions in drug use, complacency, reductions in funding for drug prevention, desensitization to the problems of drug use, and/or conflicts in the implementation of the drug prevention curricula. In an informal survey of prevention specialists and teachers in several school districts in New Jersey, it was believed that many schools have not been able to take full advantage of their drug abuse prevention curriculum and the goals to implement all lesson plans have not been completely met. Time constraints were identified as a reason, as well as, conflicts with other curricula, availability of materials, lack of trained personnel, and short term effectiveness of the programs. Unfortunately, the continued inability to attain goals in this area, will ultimately be detrimental to the effectiveness of the programs and could remove a barrier that has been shown to inhibit substance abuse by adolescents.
PURPOSE

The purpose of this study is to explore the potential gains in self-esteem that may be possible for adolescents through a consistent use of a prevention curriculum in a classroom setting. The Here's Looking At You, 2000 (HLAY, 2000) curriculum was chosen for this study. Though the curriculum's focus is on long term increases, the emphasis of this study is on the short term gains that may be possible. Should this study indicate that short term gains are available, it is hoped that this will encourage an increased use of the HLAY2000 and other prevention programs, thereby maintaining an effective barrier in the ongoing effort at drug use prevention.

HYPOTHESIS

Teaching five specific skill and bonding lessons from the Here's Looking At You 2000 curriculum will cause the students in the target group to show an increase in self-esteem greater than those students in the control group.

THEORY

The National Institute of Drug Abuse findings emphasize the social and personal skills that are critical to drug prevention efforts. These skills are often taught vicariously as founded in Bandura's social learning theory (Bandura, 1977). Social learning theory emphasizes the importance of observational learning or
modeling for the acquisition of skills and knowledge. Modeling becomes a major socializing factor when the effect of family, peer, and community values and attitudes are considered. School provides numerous instances of modeling, as does television, containing many messages to conform, to fit in, to possess, or to be what society or the advertiser says the individual should be. While correctly modeling the desired behaviors will result in rewards and lower levels of anxiety, failure to measure up to these "exemplary models" can produce increased levels of anxiety and self administered punishment (Bandura and Walters, 1963).

Unfortunately, few people would appear to meet the demanding standards of physical perfection, wealth, or knowledge as expressed in many of the advertisements and values that are modeled. This failure becomes a vicariously learned attack on the individual’s self image and can foster the need to conform or modify behavior to reduce the levels of anxiety.

Mcguire's cognitive inoculation theory (McGuire, 1964) expanded upon Bandura's work and included the element of prevention by the use of mental events. According to Mcguire's analogy by providing an individual with a weakened version of an opposing view they can be inoculated to produce immunization to the full opposing argument (Mcguire & Papageorgis, 1961). Evans' social inoculation theory (Evans, 1976) was an extension of Bandura's and Mcguire's work. Evans added the social element to the premise of inoculation and used his work in drug specific areas. Evans work has supported the idea of providing adolescence refusal skills before they are exposed to influences to use drugs. This work was the basis for the social skills prevention approach and has been expanded by
others to include socio-psychological factors important in drug use prevention programs (Botvin & Eng, 1982; Battjes, 1985). These factors include positive self-esteem, effective decision making skills, accurate knowledge, and successful interpersonal relationships.

Positive self-esteem has been shown to enhance the ability of adolescents to resist peer pressure to use drugs (Carlisle-Frank, 1991; Diekman, Campanelli, Shope, Butchart, 1987; Kaplan, 1975; Steffenhagen, 1980). This becomes an important aspect of prevention as the child's sphere of influence shifts from their parents to their peers during early adolescence.

DEFINITIONS

1. Self-esteem - the way individuals perceive and value themselves.
2. Inoculation - to introduce something into the mind to treat or prevent.
3. Decision making skills - the ability to decide on appropriate course of action with available information.
4. Interpersonal relationships - interactions with significant or influential others.
5. Peer pressure - influence either negative or positive exerted by others considered to be your equal.
6. Sphere of influence - people with whom an individual comes into contact that have an effect on the individual's decisions or values.
ASSUMPTIONS

1. All students backgrounds are sufficiently similar.
2. Students will receive the same level of instruction.
3. Language barriers are not present.
4. Race and gender are not major factors due to test design.
5. Lessons are capable of increasing measurements of self-esteem.
6. Tests of self-esteem will have both reliability and validity at acceptable levels.

LIMITATIONS

1. The study does not account for other life experiences that may affect self-esteem.
2. Only one aspect of the Here’s Looking At You 2000 curriculum is addressed.
3. The applicability of this study is limited to similar populations.
4. The study uses only one measure of self-esteem.

SUMMARY

Chapter one is an explanation of the need, purpose, and theoretical background that is the basis for the research involved in this study. Chapter one also includes the definitions, assumptions and limitations that have been identified as being relevant to this study. Chapter two will look at the literature pertinent to providing a background on the curriculum that has been
chosen. Chapter three contains the methodology and procedures used in the gathering of data. Chapter four will provide the analysis of the data and will interpret and draw conclusions based on the analysis of the data. Chapter five will provide a summary of this work and implications for further study.
CHAPTER TWO

LITERATURE REVIEW

INTRODUCTION

This chapter will review the findings of several studies to investigate the past performance and the indications of school based drug prevention curricula and their ability to act as tools in the drug use prevention effort. The initial focus will be on school based drug use prevention in general. This will be followed by a review of the pertinent literature specific to the curriculum, Here's Looking At You, 2000, chosen for this study.
Resistance skills drug use prevention curricula began to appear in school systems in the mid to late 1970's in response to the growing drug use problems among adolescents. These programs have focused on increasing student knowledge of the harmful effects of drug use and the potential consequences that may be incurred due to drug use. The drug use prevention curricula also look at helping students learn to develop successful interpersonal relationships by teaching the students how to choose and make new friends, how to better relate to parents, and by looking at healthful drug free activities. Additionally, the programs have focused on improving the students' social skills. The social skills that are most frequently addressed are decision making, coping abilities, refusal skills and self-esteem. Social skills training curriculum began as far back as 1976 with Evan's social inoculation theory, which emphasized using resistance skills. Botvin (1981) developed his life skills training curriculum based upon the social skills approach. This curriculum was based on work by Botvin et al. (1980) in delaying the onset of cigarette use in adolescents. The findings were reinforced by additional work by Botvin and Eng (1982) with 7th grade students. In this study the students showed an increase in knowledge of the harms of cigarette smoking and an increased ability to resist peer pressure to smoke. Botvin et al. (1984) used the life skills approach with 7th grade students on substance abuse issues, specifically alcohol and marijuana, and the findings were supportive of school based interventions. Botvin's life skills curriculum was part of a study conducted by Kreutter et
al. (1991) with 6th grade students in several school systems in Connecticut. This study used a pre/posttest design with a control population and had over 200 students participating. The results were analyzed using t tests and were found to show significant increases in knowledge about drugs and alcohol, as well as, increases in self-esteem.

Shope, et al. (1992) designed and then implemented a drug and alcohol curriculum based upon the correlates found by Dielman et al. (1987). Dielman et al's work identified the need to address the students susceptibility to peer pressure as part of any school based curriculum. This study indicated that self-esteem was a less central construct to prevention than resistance to peer pressure, however other studies have indicated that self-esteem is an integral part of a student's ability to resist peer pressure (Dignan, Block, Steckler, & Cosby, 1986, Kaplan, 1980, Steffenhagen, 1980). Shope et al. in an evaluation of the Alcohol Misuse Prevention (AMPS) program in Southern Michigan, found significant treatment effects on internal health locus of control, knowledge of curriculum material and in subgroup analysis, on alcohol misuse. This study occurred over a 26 month period and evaluated over 5,000 fifth and sixth grade students. This group was the subject of an additional follow-up study when they reached the tenth grade (Shope, et al., 1993). In this study, the tenth grade students received reinforcement of the original instructions, with special emphasis on the effects of alcohol. Refusal skills for the use of alcohol was significantly and positively correlated with internal health locus of control, application of knowledge, and higher self-esteem. The study included 3207 students and
strongly supported the use of school based approaches in drug use prevention.

SPECIFIC REVIEW

Here's Looking At You, 2000, (HLAY,2000) is the drug use prevention curriculum chosen for this study. This curriculum promotes a no use philosophy as the best way for children to avoid the problems associated with drug use. The HLAY, 2000 is composed of lessons for kindergarten through grade twelve. The curriculum is divided into three basic types of lessons, which are information lessons, skill lessons, and bonding lessons. The information lessons give students specific information on drugs, chemical dependency, and the consequences of drug use. The skill lessons provide students with training in assertiveness, self-control, refusal skills, and decision making, while emphasizing a polite, friendly, staying out of trouble approach. The bonding lessons help students develop a positive self image, healthy relationships with other students, improved relationships at home and stronger attachments to their community. The lessons are divided into grade level kits that contain lesson plans and support materials to teach each of these types of lessons in a recommended sequential manner. HLAY, 2000's emphasis on school, family and community in a multiyear approach is consistent with other drug use prevention curricula's realization that prevention is a commitment to long term goals. The following reviews are specific to the HLAY, 2000 curriculum and are for the most part unpublished and are made available to the interested readers by Comprehensive Health.
Education Foundation, the developers of the HLAY, 2000 curriculum.

An evaluation conducted by Janet E. Bubl for the Marion county, Oregon school district in 1987-1988 school year used a pre/posttest design with a control group. This study involved 268 students in the program group and 103 students in the control group from grades 4 through 12. This study found increases in knowledge of alcohol and other drugs for grades 4, 5, 6, 10, 11, and 12. The study also found an increase in knowledge for social skills for grades 4 through 6. Another important finding for this study was that the increases in knowledge and social skills were directly related to the extent with which the curriculum was implemented.

Arlene Walton conducted a study using a pre/posttest design for the Tacoma Public School system in 1989. This study tested over 600 students in the eighth grade. The findings indicated a significant increase in knowledge of drugs and the consequences of their use and expressed satisfaction with the ease of implementation of the program.

Corporate Alliance for Drug Education sponsored an evaluation of the Philadelphia, Pennsylvania elementary school prevention program that included the HLAY, 2000 curriculum. The evaluation is a longitudinal study conducted by John Swisher, Ph.D. involving over 1300 students in grades 1 through 6 that started in 1988-1989 school year. Initial findings show an increase in self-esteem for the 1st through 3rd graders and an overall increase in resistance to peer pressure. As has been consistently reported, the students showed an increase in knowledge for alcohol and other drugs.

ETR Associates conducted an evaluation of the HLAY, 2000 curriculum as part of an overall evaluation of the Drug-Free
Schools and Community Program in San Francisco, California in the 1989-1990 school year. The evaluation pre/posttested over 550 fourth and fifth grade students. Their findings indicated an increase in knowledge and a greater understanding of the effects of alcohol and other drugs.

Richard G. Landry and Mary Jo Morgan compared several health curricula in 1990 for the North Dakota Department of Public Instruction. Their studies included over 35,000 students in the seventh through twelfth grade. In the findings relevant to the HLAV, 2000 curriculum, students scored higher in self-esteem than other students using other curricula.

SUMMARY

Studies have uniformly indicated an increase in knowledge of alcohol and other drugs and the consequences of their use. The social skills portion of the curricula have had somewhat less uniformity in the results of the testing. This could be due to the sensitivity of the instruments used for testing or one of several other possibilities. However, there is a strong indication of the success of these curricula in increasing self-esteem through a consistent use of the lessons over an extended period of time.
CHAPTER THREE

METHOD

SUBJECTS

A total of 67 students in the sixth grade from two southern New Jersey school districts participated in this study. The two school districts are believed to be socio-economically equivalent. The sample for this quasi-experimental design was composed of 26 boys and 41 girls. The students are part of a multicultural mix with representation from the Afro-American, Latin-American, and Euro-American communities. The students selected to participate in this evaluation had been previously separated into three classes as part of their normal school year. The placement into either the target or control group was accomplished by designating the first two class names drawn as target and the remaining class as control. The target group contained 18 boys and 25 girls for a total of 43 students. The control group was made up of twenty-four students, including 8 boys and 16 girls.
MEASURES

All subjects were pretested and posttested using the Self-Esteem Index (SEI) authored by Linda Brown and Jacquelyn Alexander, and copyrighted by PRO-ED, Inc. The SEI is a measure of self-esteem that has a global score that is composed of four scales that represent varying aspects of the students' self-esteem. This measure was found to have internal consistency reliability with 10 of the 11 coefficients exceeding .90 when using Cronbach's (1951) coefficient Alpha procedure. Test validity was reported as correlation coefficients with statistically significant coefficients of .35 and higher using the guidelines from A Consumer’s Guide to Tests in Print, Hammill et al. (1989).

PROCEDURES

Five lessons from the Here's Looking At You, 2000 (HLAY, 2000) curriculum were presented to the target group over a period of five weeks. The lessons were #1 Coat of Arms, #14 Letter From an Admirer, #15 You're Okay, #16 Read All About Me, and #17 Part of the Group. These lessons were selected since they were identified as promoting bonding and self-esteem by the authors of the HLAY, 2000 curriculum. All students were administered the pretest using the proper administration procedures, as indicated by the directions supplied by the authors, in this quasi-experimental design. This was followed one week later by the target group receiving the first lesson as part of their regular health curriculum. The remaining four lessons were given over a period of
four weeks with one lesson taught each week. All of the lessons were given by the same instructor following the lesson plans and using the materials supplied for the HLAY, 2000 curriculum. The instructor was familiar with the materials and the lessons being taught. All classes were held during regular school hours in the assigned classrooms. The subjects were all given the posttest one week after the conclusion of the lessons.

DESIGN

A quasi-experimental design was used for this study with a statistical comparison of the mean scores of the pre- and posttests for the target group and the control group. These scores were then compared to each other to limit the potential for confounding variables by helping to provide environmental indications effecting statistically significant findings in the pre/posttest comparison.

TESTABLE HYPOTHESIS

The target group means will show a statistically significant change on a self-esteem measure from pretest to posttest that will be greater than any change shown by the control group.

ANALYSIS

Data was analyzed using a repeated measures t statistic. The pretest and the posttest results of the target group were analyzed to see if any statistically significant gains were made in a
measure of self-esteem. The pre- and posttest results of the control group were also analyzed for any gains in self-esteem that may have occurred from variables outside of this study that could contaminate or have a confounding effect on the validity of the findings of this study.
The analysis of the results is based upon the testable hypothesis that states that "the target group means will show a statistically significant change on a self-esteem measure from pretest to posttest that will be greater than any change shown by the control group". The results were analyzed using a repeated measures t test on the pre- and posttest scores for the target and the control groups. The results indicated a significant effect for the target group with $t(28) = 2.939, p < .05$, two tails. These findings indicate that the procedure or lessons had a positive impact on the self-esteem of the students in the target group and caused them to show a gain in the measure of self-esteem that was used in this study. No significant effect was found for the control group with $t(18) = 0.178, p < .05$, two tails.

Table 4.1 shows the data for the pre- and posttest scores of the target and the control groups. The scores indicated the loss of 19 students due partially to a flu outbreak between the pretest and the posttest. Fourteen students were lost from the target group.
group and five students from the control group. The raw scores indicated that 10 of the 19 students in the control group showed a decrease in their self-esteem measure, while only 7 of the 29 students in the target group showed a decrease in their self-esteem measure.

Table 4.1

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Pretest Mean</th>
<th>Posttest Mean</th>
<th>t score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target</td>
<td>29</td>
<td>249</td>
<td>256</td>
<td>2.939 *</td>
</tr>
<tr>
<td>Control</td>
<td>19</td>
<td>239</td>
<td>260</td>
<td>0.178</td>
</tr>
</tbody>
</table>

Significant at p < .05

Table 4.2 presents the means, the self-esteem quotient, and the percentile rank of the two groups for the pre- and posttests. The self-esteem quotient (SEQ) which ranges from <55 to >99.9 and the percentile rank which has a range of <.1 to >99.9 are taken from the normative information tables of the Self-Esteem Index. The self-esteem quotient is based on a mean of 100 with a standard deviation of 15. The self-esteem quotient is interval data and is readily converted to t or z scores as needed. The range of 90-110 is labeled as "Average" and includes 49.48% of the population. The range of 111-120 is labeled as "Above Average" and includes 16.09%
of the population. The "Above Average" range contains the score of 115, which represents the plus one standard deviation mark and scores above this would be considered deviant enough to justify further attention. Scores that range from 80-89 are labeled as "Below Average" and contain 16.09% of the population. Included in this range is the score of 85 which represents the minus one standard deviation mark. Scores below minus one standard deviation would also warrant further attention. No scores were found below one standard deviation. The standard error of measurement used for the SEQ is + 4.0 and represents a 68% confidence level that the

<table>
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<th>TABLE 4.2</th>
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<tr>
<td><strong>Target Group</strong></td>
</tr>
<tr>
<td>Mean Quotient</td>
</tr>
<tr>
<td>249</td>
</tr>
</tbody>
</table>

| Control Group | Pretest | Posttest |
| Mean Quotient | % Rank | Mean Quotient | % Rank |
| 259 | 112 | 79 | 260 | 112 | 79 |
subjects true score will fall within that range (Brown & Alexander, 1991).

The percentile rank has a mean of 50 and corresponds to the middle of the distribution with an equal number of scores above and below this point. The percentile rank is not interval data and as such does not have equidistant points on the scale that permits any arithmetic operations. The percentile rank does allow for a rapid evaluation of the scores in relation to other scores from the normative population and is useful in enhancing the understanding of the individual scores (Brown & Alexander, 1991).

The target group's mean score increased by seven points from pretest to posttest. This caused the self-esteem quotient to move up 4 points with a corresponding increase of 10 percentage points in the percentile ranking. The control group's mean score increased by one point. This nominal increase resulted in the same self-esteem quotient and percentile ranking from pretest to posttest.

The Self-Esteem Index is divided into four scales. The Perception of Familial Acceptance Scale evaluates the individuals self-esteem in relation to their home and family. This measure is affected by the individual's belief of their worth at home, the atmosphere of trust, discipline methods, perceived affection, and parenting styles. Extreme scores at either end of the scale could be indicative of problems at home such as anger at a parent, neglect, or abuse as perceived by the individual. The Perception of Academic Competence Scale evaluates self-esteem in relation to the school and/or academics in general. Teachers, school work, interests, environment, and learning disabilities are some of the
possible influences on this measure. The Perception of Peer Popularity is the third scale of the Self-Esteem Index. This scale is a measure of the way the individual feels they relate to their peers. Social skills, relationships with peers, leadership abilities, and self-confidence will be some of the influencing factors on this scale. The final scale is the Perception of Personal Security Scale. This scale is a measure of the individual's belief in their physical and psychological health. Some factors that could effect this scale are physical health, guilt, shame, fear, anxiety, and phobias (Brown & Alexander, 1991).

The control group showed no statistical significance between the pre- and posttests on any of these scales. This is consistent with the results of the global pre- and posttest scores. The target group did not show any statistically significant effect on the Perception of Familial Acceptance (FA) Scale with $t(28) = 0.379$, $p < .05$, two tails or on the Perception of Academic Confidence (AC) Scale with $t(28) = 1.579$, $p < .05$, two tails. On the Perception of Peer Popularity (PP) Scale the target group showed a statistically significant effect with $t(28) = 3.806$, $p < .05$, two tails. The Perception of Personal Security (PS) Scale also had a significant effect with $t(28) = 2.072$, $p < .05$, two tails. This is consistent with the global scores of the pre- and posttests. Table 4.3 shows the data for the FA, AC, PP, and PS scales. The apparent disparity between the mean scores and the $t$ score is due to the direction and variation of the difference ($D$) and its relationship with the sum of the squares ($D^2$) and their effect on the estimated standard error when calculating the $t$ statistic.
### Table 4.3

<table>
<thead>
<tr>
<th>Scale</th>
<th>Pretest Mean</th>
<th>Posttest Mean</th>
<th>t score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Familial Acceptance</td>
<td>65</td>
<td>66</td>
<td>0.379</td>
</tr>
<tr>
<td>Academic Competence</td>
<td>60</td>
<td>62</td>
<td>1.579</td>
</tr>
<tr>
<td>Peer Popularity</td>
<td>60</td>
<td>62</td>
<td>3.806*</td>
</tr>
<tr>
<td>Personal Security</td>
<td>64</td>
<td>66</td>
<td>2.072*</td>
</tr>
</tbody>
</table>

Significant at p < .05

Table 4.4 gives the mean, the percentile rank, and the standard score for each of the scales. The standard score has a mean of 10.

### Table 4.4

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>% Rank</th>
<th>Standard Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Familial Acceptance</td>
<td>66</td>
<td>63</td>
<td>11</td>
</tr>
<tr>
<td>Academic Competence</td>
<td>62</td>
<td>75</td>
<td>12</td>
</tr>
<tr>
<td>Peer Popularity</td>
<td>62</td>
<td>63</td>
<td>11</td>
</tr>
<tr>
<td>Personal Security</td>
<td>66</td>
<td>75</td>
<td>12</td>
</tr>
</tbody>
</table>
and a standard deviation of 3. Like the self-esteem quotient, the standard score is interval data and readily allows for conversion to other standard scores.

When the global self-esteem scores were analyzed for any variations that may have been due to gender, the findings were consistent with the information previously presented. No statistical significance was found between pre- and posttest scores for the control group for either males or females. The target group showed a statistically significant increase for both males \(t(11) = 1.886, p < .05\), two tailed and females \(t(18) = 2.180, p < .05\), two tailed, indicating that the treatment or lessons were effective for each gender group. This information is represented in Table 4.5 showing the pretest and the posttest means and the corresponding self-esteem quotients (SEQ) and percentile ranks. The results show that the female members of the target group raised their mean score on the measure of self-esteem by 7 points which corresponded to a 4 point increase in their SEQ scores and a 9 point increase in their percentile ranking. This moved the SEQ scores for the female members from the "Average" range to the "Above Average" range. The male members of the target group had a lower measure of self-esteem than the female members on the pretest and the posttest. The male posttest measure of self-esteem remained lower than the female pretest measure despite a 7 point increase in the male members mean scores. This increase resulted in a 4 point increase in the SEQ score and a 10 point increase in the percentile ranking. Both the pretest and the posttest SEQ scores for the males were in the "Average" range.
TABLE 4.5

Females

<table>
<thead>
<tr>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Quotient % Rank</td>
<td>Mean Quotient % Rank</td>
</tr>
<tr>
<td>252 108 70</td>
<td>259 112 79</td>
</tr>
</tbody>
</table>

Males

<table>
<thead>
<tr>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Quotient % Rank</td>
<td>Mean Quotient % Rank</td>
</tr>
<tr>
<td>244 103 58</td>
<td>251 107 68</td>
</tr>
</tbody>
</table>

SUMMARY

The analysis of the data showed a statistically significant increase in the posttest score for the target group on a measure of self-esteem. This increase would indicate that the treatment, in this case the lessons, had an effect on the target population's measure of self-esteem. This assumption is further supported by the lack of any significant change in the control group's measure of self-esteem. This implies that there were no major changes or factors in the environment that affected the control group's
measure of self-esteem and correspondingly would have affected the target group's measure of self-esteem. This quasi-experimental design which uses a pre/posttest with a control group is effective in helping to gauge the impact of any environmental confounding variables that may be present.

The increase in the target group's measure of self-esteem was apparent in 2 of the 4 scales in which the global measure of self-esteem is divided. These scales, the Perception of Peer Popularity and the Perception of Personal Security, are the ones that would be the most likely to be affected by the lessons that were used in this evaluation. The Perception of Peer Popularity scale measures how the student perceives themselves in peer relationships and is very relevant to the school environment, since this would be the most likely location for large scale peer exposure. The Perception of Personal Security is a measure of how the student evaluates their health. If the student perceives that they are more accepted by their peers, as expressed by higher scores on the Perception of Peer Popularity scale, then it follows that they would experience lower levels of fear and anxiety in the school environment and thus score higher on the Perception of Personal Security scale.

The increase in the target group's measure of self-esteem was significant for both males and females. Though the pretest showed a difference in the levels of self-esteem between males and females, the posttest indicated that both genders experienced a 7 point increase in their mean scores. This finding reinforces the indication that the treatment was responsible for the increase in the measure of self-esteem, since gender was not a factor.
CHAPTER FIVE

SUMMARY

Drug abuse prevention curricula that meet the goals established by the National Institute of Drug Abuse have been shown in many longitudinal studies to help reduce drug abuse among adolescents. Unfortunately, recent reports indicate a rise in drug use among young people. An informal survey indicated that the lack of implementation of drug use prevention curricula may be a contributing factor in this increase. Several of the reasons cited were time constraints, lack of trained personal, and short term effectiveness of the curricula involved. In the review of pertinent literature, it was found that self-esteem is an integral part of an adolescent's ability to withstand peer pressure. Social skills training was found to be an effective means of increasing self-esteem, as well as providing adolescents with other knowledge and skills necessary to withstand the pressure to use drugs. The purpose of this study was to evaluate the potential gain in self-esteem in the short term that may be possible using one of these curricula. The drug abuse prevention curriculum chosen for
this study, Here's Looking At You, 2000, was shown in several longitudinal studies to be an effective vehicle for the transmission of these social skills.

Sixth grade students from two schools in southern New Jersey participated in this evaluation. This quasi-experimental design used a pretest/posttest format with a control group. Five lessons were taught from the selected curriculum and the results were analyzed using a repeated measures t statistic. The results of the analysis indicated a significant treatment effect for the target group in their measure of self-esteem. No significant effects were found for the control group.

DISCUSSION

Since 1992, there has been an indication that drug use among adolescents has increased. This reversal of past trends that are associated with the use of drugs is alarming when we consider the cost in human life and misery. There are many possibilities for the cause of this increase in drug use. Some of the potential reasons for this increase are a public change of focus brought on by the reduction in drug use, complacency, reductions in funding and less emphasis on the implementation of drug use prevention curricula. It is imperative, if we value our culture and way of life, that we immediately readdress the problem of drug use in our society.

One of the most effective tools that we have in our arsenal of weapons in what is truly a war, is the drug use prevention curricula. Many studies have shown its long term effectiveness.
when used consistently in educating students on the hazards of drug use, on improving their social skills and helping them develop healthier interpersonal relationships. This study has shown the availability of improvements in the students' self-esteem in a relatively short time frame. Besides being already prepared lesson plans, these lessons are fun to do and provide the teacher with an opportunity to interact in a more relaxed atmosphere that does not have to be grade focused. This relationship could generalize to the classroom, improving the overall environment and reducing possible discipline problems. The curricula can be readily adapted to use with peer educators and can teach the younger students, while reinforcing and providing the older students with meaningful opportunities to use the knowledge and skills they have obtained.

It becomes paramount for all communities, school boards, administrations, parents, and teachers to rededicate themselves to the support of the drug use prevention curricula. Necessary funding, both for materials and trained personnel, should be made available, as well as the time to implement the lessons in the course of the normal school day. We must realize as a society that the drug use problem is an ongoing battle that will exist until we can provide all our citizens with hope and meaningful goals. It is important that our politicians realize the importance of their role in providing funding and setting national goals, such as the space program, to provide our children with a future.

Our children are our future leaders and need to be protected from the greedy, unscrupulous adults that are preying upon them and profiting from their misery. If our children were dying from being poisoned we would not tolerate it for a moment. Our wrath would be
terrible to behold and justice would come quickly to those responsible. Why then do we debate as children die and their lives are ruined from a slower and more devastating form of poison? Why do we tolerate those that destroy our children by selling them drugs and turning them into drug dealers? It is time to renew the fight and refocus our energies on protecting our greatest national resource, our children.

**IMPLICATIONS FOR FURTHER RESEARCH**

Future studies may be able to use a larger sample size to avoid the problems of loss of subjects due to environmental factors. These studies may also want to review the relationship of gender to self-esteem and how the curricula respond to the needs identified. It would also be suggested that multiple measures of the selected constructs be used to add weight to the findings. In a larger study it may also be possible to measure other significant social skills that could be improved through the use of drug use prevention curricula. Another area of study would be the relationship between the implementation of drug use prevention curricula, self-esteem, and the corresponding levels of violence in the school setting.

Finally, another area of study that may be indicated would be the relationship between drug use and the perception of a meaningful future to which the students may aspire.
REFERENCES


