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AFTERSCHOOL INTERVENTION PROGRAMS' IMPACT UPON SELECT VARIABLES AMONG 10TH GRADE STUDENTS IN THE EDUCATION LONGITUDINAL STUDY (ELS) 2002 DATASET

by

Diane Jackson-Chapman

Abstract of a Dissertation Submitted to the Graduate Studies Office of The University of Southern Mississippi in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

May 2006
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ABSTRACT

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by Diane Jackson-Chapman

May 2006

This researcher analyzed data from the database of the National Center for Educational Statistics: Education Longitudinal Studies (ELS) 2002. The study included responses from 743 principals in 752 schools and from 15,362 10th grade students from public, Catholic, and other private schools. The dissertation investigated if the percentage of school participation in afterschool/summer outreach programs could predict students' perceptions of teachers, drug availability on campus, student misbehaviors and punishments, and attitudes toward school and grades. The independent variable was the percentage of students in afterschool/summer outreach programs as reported by principals.

The dependent variables related to students' responses to attitudes about teachers, if someone sold them drugs and if school and grades were important. Eight of the 10 variables were not statistically significant at \( p \leq .05 \). The teachers' praise of students was statistically significant at .009. Whether students were suspended or placed on probation was borderline significant at .057. The study revealed participation in afterschool/summer outreach programs could predict students' attitudes toward the importance of teachers praise and could impact if students are suspended from school or placed on probation.
DEDICATION

I dedicate the completion of this dissertation on prevention and intervention afterschool programs to Evelyn Horton Reaves – my 8th and 10th grade English teacher, my counselor, my friend and my sister in Christ. Second only to my mother, Lee Anna Jackson, Evelyn Reaves has motivated and encouraged me the most to aspire toward higher heights. She believed in me and my ability to obtain a college degree when my counselor and others thought I was not college material. Without her love, guidance and support, I probably would not have gone to college and achieved a Bachelors Degree. With each step along my educational career, she has been an integral part of my growth and development. She inspired me to pursue a Masters Degree in Counseling and to expand my knowledge by pursuing an Educational Specialist Degree in Educational Leadership.

This last educational milestone, completion of the Philosophy of Doctorate degree, is dedicated to her for all the lives she has touched in her 40+ years as a teacher, counselor, and director for programs to meet the needs of student's who are at-risk in Gary, Indiana. Evelyn is a phenomenal educator, mother, and friend. During my 30+ years as an educator, I followed in her footsteps as a teacher, counselor, and also a director of programs aimed at helping students at-risk but her shoes I could not fill. To my teacher, counselor, friend, and sister in Christ, I say thanks for believing in me since I was only 13 years old. I know I speak for the thousands of lives you have touched when I say may God bless you and keep you ever in His care.

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ACKNOWLEDGEMENTS

First I would like to acknowledge God for extending His grace, mercy, and love over the past three years as I denied my body of sleep, proper nutrition, and exercise in order to obtain the Ph.D. in Educational Leadership. I acknowledge and thank my parents Johnnie and Lee Anna Jackson who did their very best to raise eight children and to support all of us as we worked toward pursuing our goals. Second only to God, was the love and support from my husband, Clyde L. Chapman. I love you and I look forward to our life together after “dissertation”. A special thanks to all of my children – DeCarlo, Larry, Chappy, Kyle, and Lamar, along with my sisters, brothers, family members, and friends. I thank my Ebenezer Baptist Church Family and my work family – Prevention/Intervention of DeKalb County Schools for all of their support. A special debt of gratitude is extended to my childhood friend, “Judy” Lonnette Miller-Alford, who encouraged me, prayed for me, and helped me edit my final copy.

I would like to extend my special thanks and gratitude to my advisor and dissertation chair, Dr. Randy “SLUDOC” Anderson. He made himself available for calls at home, responded to countless e-mails and office visits, and kept me grounded and focused on the “big picture – quality work.” I especially appreciate my statistician, Dr. Mary Nell McNeese for her encouragement and guidance in the use of the ELS:2002 dataset and her overall support over the past two years. You were truly the wind beneath my sail from start to finish. I also thank Dr. Ronald Styron, and Dr. Thelma Roberson who served on my committee.
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CHAPTER I
INTRODUCTION

Student achievement has become the mantra for all school districts, and the No Child Left Behind (NCLB) legislation of 2001 explains how public education must respond to ensure that all students succeed in public schools across the United States. NCLB is the blueprint of President Bush's education policy. In addition to increasing student achievement, school districts are required to provide safe and drug-free learning environments (No Child Left Behind [NCLB], 2002). As scores on standardized tests plummeted during the 90's, many school districts were confronted with school violence, drug use, teen pregnancy, and high dropout rates which impeded student achievement (Swanson, 2004). Failure to comply with requirements of NCLB places school districts in jeopardy of losing millions of federal dollars. More importantly, failure to comply leaves millions of children ill-prepared to develop skills necessary to become productive adults able to compete in a global economy.

The NCLB legislation provides parents options and mandates local school district to meet certain criteria. For instance, parents are allowed to transfer their children from schools which do not meet Adequate Yearly Progress (AYP) or from schools labeled Persistently Dangerous as defined by state educational agencies (SEAs) (NCLB, 2002). The law also requires local school districts to recruit and hire highly qualified teachers. School districts must also keep parents informed on the qualifications of teaching staff and the progress of their schools.
The researcher will investigate whether participation in afterschool/summer outreach programs by sophomore students' impacts attitudes regarding their teachers, school performance, grades, alcohol and drug use, and personal commitment to school. Lofquist (1991) defined prevention as "an active, assertive process of creating conditions and/or personal attributes that promote the well-being of people" (p.10). He also defined intervention as "the art or science of assessing and responding to changes needed as problems arise" (Lofquist, 1991, p. 8). For the purpose of the study, afterschool programs are viewed as prevention and intervention because they fit the definition of both terms. Therefore, sometimes these words maybe used interchangeably because of how researchers identified their programs (Fleming, Haggerty, Catalano, Harachi, Mazza, & Gruman, 2005).

For efforts to be effective, programs and services must have a theory of causation that guides the choices of prevention and intervention programs and strategies (Lofquist, 1993). The theory of causation should move from an individual focus to community focus and from accessing deficits to assets. Hawkins and Weis (1985) discussed why this is so important. They found that a system's approach is more effective to bring about changes. When problems were viewed systemically and not in isolation, prevention efforts had long lasting results. Lofquist agreed that it is this paradigm shift which will promote the greatest change.

Programs identified as a prevention or intervention program often will encompass both techniques when responding to problems or potential problems
In some instances it is difficult to discern whether a student attended a program for prevention or as an intervention. Programs can be offered to students who may be at high risk for problem behavior, and these same programs may also attract students who may not fall into any high risk category. Prevention/intervention programs offered by the Boys and Girls Club of America attract children from various backgrounds although their programs are designed to reach disadvantaged youth. The Boys and Girls Club of America has as its mission "to inspire and enable all young people, especially those from disadvantaged circumstances, to realize their full potential as productive, responsible and caring citizens" (Boys and Girls Club, 2006, p. 1).

Project Learn is one of the afterschool programs offered by the Boys and Girls clubs. Five public housing communities offered Project Learn. Based upon results from a 30-month evaluation, students who participated increased their grade point averages from 5% to 22% depending on the subject. These students also had a school attendance rate of 87% as compared to 66% for nonparticipants. Some parents may have enrolled their children in Project Learn to "keep them out of trouble" and one could argue that it is intervention while someone else might refer to it as prevention. Whether the program or strategy is prevention or intervention depends on the reasons for entering the program. If one exercises to lose weight, this is clearly an intervention. However, in intervening to lose weight, one wants to "prevent weight gain." Students may attend an afterschool program for preventive reasons to enhance school performance, sharpen prosocial skills, or just to have fun. Other students may
attend afterschool programs to develop social skills and receive academic help to keep from failing (21st Century Community Learning Centers, [21st CCLC] n.d).

The 21st CCLC program is a major part of President Bush's NCLB Act. It is an opportunity for students and their families to continue to learn new skills and discover new abilities after the school day has ended. Congress appropriated $991.07 million for afterschool programs in Fiscal Year (FY) 2005. The focus of this program, re-authorized under Title IV, Part B, of the No Child Left Behind Act, is to provide expanded academic enrichment opportunities for children attending low performing schools. Tutorial services and academic enrichment activities are designed to help students meet local and state academic standards in subjects such as reading and math. In addition 21st CCLC programs provide youth development activities, drug and violence prevention programs, technology education programs, art, music and recreation programs, counseling and character education to enhance the academic component of the program (21st Century Community Learning Center, n.d., p.1).

According to Black (2003), local school districts found they could not meet the vast demands of all students during the regular school day hours. Local educational agencies (LEAs) cannot pull students out of physical education or elective classes to provide them with additional doses of reading or math due to attendance requirements, time on task, and specific seat time required in regular classes. The regular school day from 8:00 a.m. to 3:00 p.m. did not provide
enough time to meet the needs of students who lagged behind in reading, writing, or arithmetic (Black, 2003).

From the early 1900s, students have attended extracurricular activities such as athletics, band, and school clubs after school (Zaff, Moore, Papillo, & Williams, S. 2003). Extracurricular activities were proven to be successful in helping students not only receive the practice time needed to compete in sports events and music competitions, but participation also helped students to improve academic performance, as well (Galley, 2000). The Michigan Study of Adolescent Life Transitions conducted a 17-year study that followed 1,800 6th grade students in 10 schools across Michigan. The study found that students who participated in extracurricular activities (a) were less likely to be truant, (b) made better grades (c) held stronger feelings of attachment to school, and (d) experienced higher rates of achievement in college (Galley, 2000).

Afterschool hours, once reserved for athletics or band practice, occasional tutoring, and detention for misbehaving students, are now used to help all students (even those without athletic or musical talents) meet and exceed graduation and academic requirements (NCLB, 2002).

Using the hours from 3:00 p.m. to 6:00 p.m. has opened new opportunities for school districts to expand the school day and increase student achievement and improve student behavior. Afterschool programs are offered throughout the nation's schools to help remediate or "catch up students" and to promote prosocial skills. Summer school programs have changed from their original design which was to help students "make up" classes they failed during the
academic year. Summer programs changed to include: (a) enrichment and outreach programs aimed at reducing alcohol and drug use, (b) gang prevention, and (c) dropout prevention programs (Forum for Youth Investment, 2004).

Swanson (2004) reported in 2001 on the graduation rate in the United States which was not above the 80th percentile as reported in many national reports, but was actually 68%. Swanson reported that of the 4 million 9th graders who enter schools each year, roughly 1.3 million will not graduate, i.e., approximately 30% of the nation's youth will not graduate from high school. Swanson concluded by saying that either the NCLB can be blamed or lauded for requiring local schools to report on graduation rates and connect them to AYP.

Purpose of the Study

The purpose of the study is to present findings on whether afterschool programs impact students' attitudes regarding their teachers, school performance, grades, alcohol and drug use, and personal commitment to school. This study will support educational leaders as they search for new and innovative strategies to help all students achieve success - academically, behaviorally, and socially. As it becomes more difficult to reach the needs of students during the school day, utilizing hours when students are not in school become imperative for school leaders (School Governance & Leadership, 2005). School leaders are very interested in implementing prevention or intervention programs with proven success in improving student achievement and problem behaviors. There are stricter consequences brought against schools with high failure rates and unsafe schools (National Association of Elementary School Principals, 2005).
Not only has there been growing concern regarding schools meeting AYP, but also, no school wants to be labeled "persistently dangerous" (USA Today, 2003). Nationally, in 2003, only 52 out of 91,000 public schools were labeled “persistently dangerous.” Forty-four states along with the District of Columbia did not report any schools fitting their state’s definition of what constituted a persistently dangerous school. Only six states reported having persistently dangerous schools. “Pennsylvania reported 28 schools, Nevada eight, New Jersey seven, Texas six, New York two, and Oregon one” (USA Today, 2003, p. 1). To maintain safe and drug-free schools, the review of literature will present findings on best practices in the field of prevention and intervention. Research findings will be cited in this study on how educational leaders can implement no cost and cost effective prevention and intervention programs to promote protective factors and reduce risk factors (Catalano, 2005).

The study will provide school leaders with research-based information on the impact of afterschool programs. “The opportunity, for school administrators, to transform the quality of education the students receive may be as close as afterschool programs” (School Governance & Leadership, 2005, p. 5). Superintendents, district level staff, and school principals must become actively engaged in planning, implementing, and evaluating afterschool programs (School Governance & Leadership, 2005).

The researcher analyzed data collected by the National Center for Education Statistics in its Education Longitudinal Study of 2002 (ELS: 2002). The study will add to the field of educational and prevention research in both the
cognitive and affective domains in order to help lawmakers, educators, and other researchers make informed decisions to improve the quality of education for students. According to Adelman and Taylor (2000) prevention or intervention programs designed to reduce one risk factor, i.e. school failure, could successfully reduce other risk factors such as drug use, violence and teen pregnancy. If these risk factors are not addressed, research found that even the most well-planned and well-implemented programs designed to improve student achievement may not achieve the desired results (Catalano, 2005; Hawkins, 2005). The NCES launched the ELS: 2002 study. "The aim of the longitudinal studies program was to study the development of students at various stages in their educational, personal, familial and social lives that may affect students' personal, familial, and social development" (ELS: 2002 Data File User's Manual, 2004, p. 1).

Respondents to the ELS: 2002 study included students, their parents, teachers, principals, and librarians. The study tested students' achievements in math and reading and also obtained information about their attitudes and experiences. According to the ELS: 2002 Data File User’s Manual, (2004) issues that can be analyzed in the study are (a) students' academic growth in mathematics; (b) the process of dropping out of high school—determinants and consequences; (c) the role of family background and the home education support system in fostering students' educational success; (d) the features of effective schools, (e) the impact of course-taking choices on success in the high school years and thereafter; (f) the equitable distribution of educational opportunities as
registered in the distinctive school experiences and performance of students from subgroups; and (g) cross sectional profiles of the nation's high school sophomores and seniors.

Statement of the Problem

In 1988, the National Association of Elementary School Principals (NAESP) surveyed 1,175 elementary and middle school principals. The survey found, overwhelmingly, principals believed more afterschool programs were needed in their communities (National Association of Elementary and Secondary School Principals, 2005). Principals believed that a quality afterschool program would help students perform better in school. Of principals surveyed, 75% stated school was the logical place to host these programs yet only 22% had programs in their schools (National Association of Elementary and Secondary School Principals, 2005). Most reported they lacked the funding necessary to implement such programs.

In 1999, NAESP conducted another nationwide survey. In this telephone survey of principals, 67% reported they were providing some form of afterschool programming, while another 15% were planning to start a program. The principals reported that their afterschool programs helped to improve attendance, academic skills, social skills, and supported parents (National Association of Elementary and Secondary School Principals, n.d.).

From 1999 to 2004, the need for afterschool programs did not diminish. The demand for a more rigorous academic program and the NCLB mandates required schools to try different approaches to help all students. Extending the
school day was one approach. The Mott Foundation in 2001 and the Afterschool Alliance conducted surveys on afterschool programs. The results revealed afterschool programs helped students achieve academic success buffered students against engaging in other risky behaviors which rise during the hours of 3:00 p.m. to 6:00 p.m. ("After-School Programs Reduce Crime During Peak Hours of Violent Juvenile Crime," 2004).

According to the Office of Juvenile Justice and Delinquency Prevention (OJJDP), the hours from 3:00 p.m. to 6:00 p.m. are dangerous times for children to be alone (Black, 2003). He reported the following:

1) Children who are at home alone are at risk for injuries, poor nutrition, experimental drug use, and sexual activity.

2) The time from 3:00 p.m. to 6:00 p.m. is when more young children and teens are most likely to get into trouble based upon a survey of 2000 law enforcement officers.

3) Without constructive, supervised activities children are more likely to commit crimes, become victims of crime, be in car crashes, smoke, drink alcohol, and use drugs.

The Fight Crime: Invest in Kids (2003) study reported violent juvenile crimes, such as murder, rape, robbery, and aggravated assault, also rise during these hours. In fact, the increase in juvenile crimes peaked to 13% at 3:00 p.m., up from 5% at noon, and dropped to 6% at 9:00 p.m. More than 15 million children spend unsupervised time between the hours of 3:00 p.m. and 6:00 p.m. (Afterschool Alliance, 2004). Therefore, the need to provide afterschool programs
is not merely to help students meet academic gains but also to reduce their risks of engaging in delinquent and risky behaviors.

Just as high cholesterol is a risk factor for heart attacks, school failure is a risk factor for a myriad of problems. Prevention and intervention programs are needed to support local schools respond to problems associated with school failure. The reduction of problems will help students at-risk experience school success (Catalano, Haggerty, Oesterle, Fleming, & Hawkins, 2004). Earlier studies conducted by researchers reveal that school-based prevention and intervention programs can be effective in responding to major risk factors (Bernard, 1991; Hawkins, Catalano, & Miller, 1992).

If effective prevention programs are implemented, protective factors can halt the onslaught of many problems. Well-planned and implemented prevention programs are the key to successful prevention efforts (Catalano et. al., 2004; Haggerty, Cummings, Harachi, & Catalano, 2004). Therefore, it becomes important to examine not only cognitive factors that impede student achievement but also environmental factors within the home, community, and school that retard a student's academic growth (Haggerty et al., 2004).

The Afterschool Alliance (2004) reported findings on afterschool programs proven to improve academic achievement, keep students safe, and help working families by offering quality afterschool care. The programs were not designed for "only bad or troubled kids" but were available to a variety of students. Although most afterschool recreational programs have not been adequately tested, there are some encouraging findings from the Juvenile Justice
Fact Sheet. Cornell (2000) reported on the following findings:

1) Controlled studies of well-supervised afterschool recreational programs reported a reduction in juvenile crime, drug use, and vandalism.

2) The Boys and Girls Club implemented effective recreational programs in several public housing communities which reduced problem behaviors.

3) In a Canadian study, juvenile arrests were reduced by 75% after implementing an intensive afterschool program that offered sports, music, dance and scouting. In a comparison site, arrests rose by 67%.

Significance of the Study

This study will provide school leaders, politicians, teachers, and parents with the most current research on benefits and challenges to implement afterschool programs. For school districts that have already implemented afterschool programs, data will be presented on evaluating, maintaining, and sustaining programs. The study is also significant in demonstrating how data can be analyzed from the ELS: 2002 to test growing concerns regarding student achievement and other life experiences students face (ELS: 2002 Data File User’s Manual, 2004). In addition, data related to student achievement in math and reading and other life experiences can be analyzed from the ELS:2002 data file. Surveys completed by principals, teachers, parents, and media specialists can be analyzed to determine strategies to help students develop skills academically, socially, and behaviorally.
In addition to the benefits already stated, the study provides additional research to the field of school improvement and prevention studies to determine best practices to improve academic performance and reduce risk factors. As billions of federal, state, and foundation dollars are allocated to fund afterschool programs, this study will support continuing or discontinuing the allocations of these funds (Afterschool Alliance, 2004).

The researcher sought to examine if the percentage of participation by students in the in afterschool/summer outreach programs could predict students’ attitudes towards their teachers, school performance, grades, alcohol and other drug use, and personal commitment to school. Ten research questions and hypotheses were designed to address this prediction:

Research Questions

1. Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict how well students get along with teachers?

2. Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict the teachers' interest in students?

3. Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict teachers' praise of student’s efforts?
4. Can the percentage of 10th grade students participating in after school/summer outreach programs statistically significantly predict if students feel put down by teachers?

5. Can the percentage of 10th grade students participating in after school/summer outreach programs statistically significantly predict if someone tried to sell students drugs at school?

6. Can the percentage of 10th grade students participating in after school/summer outreach programs statistically significantly predict how many times students get in trouble?

7. Can the percentage of 10th grade students participating in after school/summer outreach programs statistically significantly predict how many times students are placed on in-school suspension?

8. Can the percentage of 10th grade students participating in after school/summer outreach programs statistically significantly predict how many times students are suspended or put on probation?

9. Can the percentage of 10th grade students participating in after school/summer outreach programs statistically significantly predict how much students like school?

10. Can the percentage of 10th grade students participating in after school/summer outreach programs statistically significantly predict how important grades are to students?
Hypotheses

1. Participating in afterschool/summer outreach programs can statistically significantly predict how well students get along with teachers.

2. Participating in afterschool/summer outreach programs can statistically significantly predict the teachers' interest in students.

3. Participating in afterschool/summer outreach programs can statistically significantly predict teachers' praise of students' efforts.

4. Participating in afterschool/summer outreach programs can statistically significantly predict if students feel put down by teachers.

5. Participating in afterschool/summer outreach programs can statistically significantly predict if someone tried to sell students drugs at school.

6. Participating in afterschool/summer outreach programs can statistically significantly predict how many times students get in trouble.

7. Participating in afterschool/summer outreach programs can statistically significantly predict how many times students are placed on in-school suspension?

8. Participating in afterschool/summer outreach programs can statistically significantly predict how many times students are suspended or put on probation.

9. Participating in afterschool/summer outreach programs can statistically significantly predict how much students like school.

10. Participating in afterschool/summer outreach programs can statistically significantly predict how important grades are to students.
Definitions of Terms

**Adequate Yearly Progress (AYP)** – a requirement in the NCLB Act of 2001 which was signed into law in January 2002. NCLB required states to set goals for all students to achieve success. State Boards of Education identified a starting point for the percentage of students performing at a certain level, then set annual objectives, intermediate goals, with the final goal of all students reaching the proficient level (*NCLB, 2002*).

**Archival Data** – information collected and stored for use at a later time (e.g., emergency room statistics, school surveys, trends, crime reports). After the data is collected, it can be analyzed and cross referenced to identify individuals, groups, and geographic areas (*Connect Wyoming, n.d.*).

**At-risk** – a term used to describe conditions or behaviors, which threaten the safety or well being of individuals (*Bernard, 1991*). A condition of being predisposed or more likely to exhibit negative behaviors, illnesses, or other conditions (*Connect Wyoming, n.d.*).

**Highly qualified teachers** – educators holding valid state certification in the content and grade level for the children that they teach (*NCLB, 2002*).

**Intervention** – "the art or science of assessing and responding to changes needed as problems arise" (*Lofquist, 1991, p. 10*).

**Outcomes** – change in attitudes, behaviors, or conditions based upon baseline measurement and results after prevention or intervention (*Connect Wyoming, n.d.*).
No Child Left Behind Act of 2001 – public law enacted by the United States Congress to close the achievement gap with accountability, flexibility, and choice so that all children will succeed in public schools across America. It became effective January 8, 2002 (NCLB, 2002).

Persistently Dangerous Schools – term used to refer to schools deemed unsafe by state definitions based upon provision of the NCLB Act of 2001. The NCLB Act requires states to set criteria to define and identify persistently dangerous schools. The guidelines given each state were: (a) states should develop the criteria used to identify unsafe schools, (b) such criteria must be objective, and (c) states should look for trends in the data or patterns of incidents (NCLB, 2002).

Prevention – defined by Lofquist (1991) as “an active, assertive process of creating conditions and/or personal attributes to promote the well-being of people” (p. 8). It is also defined as a proactive process that empowers individuals and systems that promote healthy behaviors and lifestyles (Connect Wyoming, n.d.).

Protective factors – traits, conditions, situations, and episodes which appear to alter or even reverse predictions of negative outcome and enable individuals to rise above life stressors” (Bernard, 1991). Conditions that build resilience can also serve to buffer the negative effects of risks which are also referred to as assets (Connect Wyoming, n.d.)
Prosocial Skills – attainment of skills (attitudes and behaviors) needed to become successful within the school, community and society at large (Topping, Bremmner, & Holmes 2000).

Quantitative Data – information that can be measured, counted, or expressed in numerical terms (Connect Wyoming, n.d.).

Resiliency – described as the phenomenon or coping mechanism by which individuals are able to rise above negative or challenging influences in one’s environment (Bernard, 1987). The term is also defined as the ability to spring back from negative or traumatic experiences, stress, and crises, and successfully adapt and experience life success (What is Resiliency?, 2004).

Resilient Children – as defined by Werner and Smith (1982), the child who: (a) works well, (b) plays well, (c) loves well, and (d) expects well. Bernard (1991) referred to the resilient child as one who possesses the attributes of (a) social competence, (b) problem-solving skills, (b) autonomy, and (d) a sense of purpose.

Risk factors – described as a number of biological, social, environmental, and psychological problems facing youth in today’s society (Kumpfer & DeMarsh, 1986). Catalano (2005) defined risk factors as predictors of negative outcomes.

Science-Based Prevention – a process in which experts use commonly agreed-upon criteria for rating research interventions to reach a consensus that evaluation research findings are credible and can be substantiated. From this process, a set of effective principles, strategies, and model programs can be derived to guide prevention efforts. This process is sometimes referred to as
research- or evidence-based. Experts analyze programs for credibility, utility, and generalizability. Credibility refers to the level of certainty concerning the cause and effect relationship of program to outcomes. Utility refers to the extent to which the findings can be used to improve programming, explain program effects or guide future studies. Generalizability refers to the extent to which findings from one site can be applied to other settings and populations (Connect Wyoming, n.d).

**Social Competencies** – the attainment of skills (attitudes and behaviors) needed to become successful within the school, community and society at large – also referred to as prosocial skill development (Topping, Bremmer, & Holmes 2000). Houglund and Leadbeater (2004) referred to social competencies as the condition of possessing the social, emotional, and intellectual skills and behaviors needed to succeed as a member of society.

**Social Development Model** – a theoretical framework which identifies risk factors as predictors of negative outcomes and protective factors as predictors of positive outcomes. It is based on the public health model of preventing adolescent health-risk behaviors by focusing on risk and protective factors associated with these behaviors. Research indicates that many of the same risk factors predict multiple poor outcomes including delinquency, substance abuse, teen pregnancy, and school dropout. The theory is based upon attachment, bonding, and commitment of youth to the environments where they reside. The goals of the adults are to develop strategies and protection to increase attachment, bonding, and commitment. Bonding to school and family can serve
to protect against this broad range of risk factors (Hawkins, Catalano, Morrison, O'Donnel, Abbott, & Day, 1992).

Social Emotional Learning (SEL) - incorporates attitudes, feelings, and behavior into the fabric of cognitive development. The SEL competencies are organized into four groups: (a) awareness of self and others, (b) positive attitudes and values, (c) responsible decision-making, and (d) social interaction skills (Payton, Wardlaw, Graczyk, Bloodworth, Tompsett, & Weissberg, 2000).

Delimitations of the Study

The study is delimited to the data made available from the ELS:2002 study. Schools excluded from the study were (a) schools without 10th grades, (b) schools without enrollment data (c) ungraded schools (d) Bureau of Indian Affairs (BIA) schools, (e) special education schools, (f) area vocational schools not directly enrolling students, (g) schools within detention and correctional facilities, and (h) Department of Defense schools (ELS: 2002 Data File User's Manual, 2004).

Summary

This researcher analyzed data from the database of the National Center for Educational Statistics: ELS:2002. The study included 752 schools and over 15,362 student participants and 743 administrators. Tenth graders were surveyed from public, Catholic, and private schools across the United States. The researcher analyzed 10 responses of student participants in two areas – school experiences and activities and beliefs and opinions about self. The researcher analyzed only one response from the administrators'
survey—percentage of 10th graders participating in afterschool/summer outreach programs. The dissertation investigated if the percentage of student participation in afterschool/summer outreach programs could predict academic improvements, attitudinal changes, and behavior changes as reported by participants.

As President Bush commented on the necessity to transform schools in the United States, he said;

The quality of our public schools directly affects us all – as parents, as students, and as citizens. Yet too many children in The United States are segregated by low expectations, illiteracy, and self-doubt. In a constantly changing world that demands increasingly complex skills from it workforce, children are literally being left behind....If our country fails in its responsibility to educate every child; we're likely to fail in other areas. But if we succeed in educating our youth, many other successes will follow throughout our country and in the lives of our citizens. (*Transforming the federal role, NCLB, n.d.*)
CHAPTER II
REVIEW OF RELATED LITERATURE

Introduction

Many factors impact student achievement. The literature review will take a historical perspective on how the United States responded to improve student achievement since the 1980s with a focus on prevention studies and afterschool programs. Research findings will be discussed based on factors that "impede" and "improve" student achievement. The researcher will cite research findings on the relationship of substance abuse and violence and how these risk factors impede student achievement. The study will also examine the role that educational leaders must play in implementing, evaluating, and sustaining afterschool and prevention programs. One approach to increase student achievement, as well as to reduce drug use and violence among teens, has been the implementation of afterschool and summer outreach programs (United States Department of Education [USDOE], 2000). It was espoused that children who participated in afterschool programs on a regular basis would (a) have better grades, (b) exhibit better conduct, (c) have better peer relationships, and (d) have a lower incidence of drug use, violence, and pregnancy (USDOE, 2000).

Afterschool and summer outreach programs fit the definition of prevention and intervention programs as defined in Chapter 1. They will be viewed in the context of prevention and intervention programs (Lofquist, 1991). One study refers to its program as "a preventive afterschool intervention" denoting the interconnectedness of prevention and intervention (Miller, 2003). Programs
aimed at reducing problem behaviors before the onslaught on a problem (prevention) may also interrupt or stop the spread of a problem (intervention) if one exists. Throughout the literature, the terms prevention and intervention are used interchangeably, and as such treated likewise in this study (Miller, 2003; Catalano, 2005).

It has been proven that student drug use and the prevalence of violence within a school community are impediments to learning (Austin, 1991; Arthur, Hawkins, Pollard, Catalano, & Baglioni, 2002). In the review of literature, the researcher will present studies on effective drug and violence prevention programs and strategies. The chapter subheadings are: (a) student achievement: a historical perspective (b) student achievement: risk factors – predictors of negative outcomes, (c) student achievement: protective factors – predictors of positive outcomes, (d) student achievement: resiliency–rising above the tide; (e) student achievement: social and emotional learning, and (f) student achievement: afterschool/summer outreach programs.

Student Achievement: A Historical Perspective

A Nation at Risk Report

For decades lawmakers, researchers, educators, and parents have attempted to identify causes related to the lack of student achievement as measured by standardized test scores (National Commission on Excellence in Education, 1983). When the A Nation at Risk report was released in 1983, lawmakers and others assessed why earlier efforts failed. The report astonished most Americans as international comparisons revealed American students did
not rank first or second on 19 academic tests, and in fact, ranked last on seven of
the tests (National Commission on Excellence in Education, 1983). The report
revealed that over 23 million Americans were functionally illiterate, and that there
had been a steady decline in math and science scores for decades. Additionally,
Scholastic Aptitude Test (SAT) scores had also met the same fate with steady
and science courses were required of high school students, more advanced
placement (AP) classes, and more teacher training were just a few of the
strategies implemented to respond to the findings in the report.

Fifteen years later in 1998, the National Center for Education Statistics
(NCES) produced its findings. Although improvements were noted, overall, the
U.S. still did not compare measurably to its international counterparts comprised
reported that America is still a nation at risk based upon their findings on youth
development. Factors ranging from (a) poor schooling, (b) poor parenting, (c)
poor community support, and (d) poor local, state, and federal support have
placed students at risk for problems such as school failure, drug use, violence,
and pregnancy (Farber, 1999; Fleming et al., 2005). As educators and politicians
continue to ponder the question, why can't Johnny read, there are new questions
on the horizon: Will Johnny ever learn to read, and, more importantly, whose
responsibility is it to ensure that Johnny learns to read (Coeyman, 2003)?
Schools are held accountable and educational leaders across the United States
seek answers and explore different approaches to help Johnny learn to read
while also helping Johnny develop social competencies needed to succeed (Peterson, 2005).

Coeyman (2003) raised the question as to whether the efforts made in school reform are making a difference. Results were mixed—showing some improvements after the release of the first year scores of students’ performance on the National Assessment of Educational Progress (NAEP). The results revealed that the nation’s fourth graders made some progress in reading throughout the 1990s. However, 12th-graders obtained the worst report. In the Southeast, the report revealed that students are reading better. There was also evidence that the gap between the reading skills of White students and minority students was narrowing (Coeyman, 2003). Yet, there is still need to continue efforts to improve academic performance for all children as evidenced by rising dropouts rates (Swanson, 2004).

Reasons once accepted by parents for school failure such as Johnny does not do homework, performs poorly on tests, does not pay attention in class, or just cannot comprehend are not readily embraced by parents (Farber, 1999; Oxford, Harachi, Catalano, & Abbott, 2001). Parents and the taxpaying public demand better results of public schools. Therefore, it is incumbent upon schools to try innovative approaches to reduce school failures and other problems that retard the academic and social development of children (United States Department of Education, 2000; National Association of Elementary and Secondary School Principals, 2005).
Principals and other educational leaders realize that in addition to responding to the mandates set by state and federal policies, they must also respond to the demands of parents and concerned citizens in their communities. According to principals who implemented afterschool programs, 41% were initiated by parents and 53% by principals. (National Association of Elementary and Secondary School Principals, n.d.). Effective afterschool programs and other prevention and intervention strategies cannot be implemented successfully without the support of district and local leaders in the school (School Governance & Leadership, 2005).

Prevention Strategies

Prevention Models: Three models have guided prevention efforts since the 1970s. They are the problem behavior theory, the biosychosocial model and the social development model. Jessor and Jessor (1977) described the problem behavior theory. The problem behavior model includes three dimensions – the individual's personality, perceived environment, and behavior. The personality dimension takes into account attitudinal tolerance of deviant behavior and values related to success in school. The perceived environment is inclusive of peer approval and peer modeling of problem behavior. The behavior dimension examines ones actions – drug use, gang activity, and other delinquent behavior (Jessor & Jessor, 1977). Bernard (1991) stated that there were problems with this theory because it focused on changing the individual and did little to develop strategies to change the environment which may have given rise to the problem.
The biopsychosocial model includes biological, psychological, and social factors from the family, school, and peer groups as they relate to substance abuse (Kumpfer, 1987). Prevention specialists should understand the total impact of their prevention approach on the person and the total environmental context. Preventions and interventions are more likely to be effective if they are coordinated and varied to address biological, psychological and social factors (Kumpfer, Molraad, & Spoth, 1996). This becomes very challenging when focusing on "root causes" of maladaptive behavior, because it is difficult to determine where to start with various preventions and interventions (Bernard, 1991).

The social development model expanded on the biopsychosocial model but emphasized assessing and implementing multiple protective factors to reduce risk factors within given environments, home, school, peer group, and community (Hawkins & Weis, 1985). They looked at the environment and how it effected or even predicted possible outcomes for problem behaviors. Hawkins and Weis (1985) addressed risk factors such as: (a) alcohol and other drug abuse (AOD), (b) teen pregnancy, (c) delinquency, and (d) gang activity and how these factors impacted schooling and juvenile crime. Existing etiological theories (study of causes for diseases) and their findings were incorporated into many of the studies done by these researchers. These and other researchers pioneered new directions to find new applications to eradicate risk factors which predict negative outcomes (Shure & Spivack, 1982; O'Donnell, Hawkins, Catalano, Abbott, & Day, 1995). Under the social development model, risk factors are
perceived as predictors for negative outcomes and protective factors are perceived as predictors for positive outcomes (Hawkins, Catalano, & Miller, 1992). With this model, school leaders can identify risks associated with schooling and implement protective factors to reduce those risks.

Research from the 1980's to present, presented new findings on effective and ineffective approaches to prevent problem behaviors among youth. As Glenn (1987) stated in Raising Children for Success, "Research today gives us a primary hold on many of the factors that contributed to the upward trend in problem areas" (p. 8). According to Glenn, it is important that researchers and prevention workers not look for blueprints in problem solving. Instead of becoming discouraged, they should view this as an opportunity to pioneer new and innovative approaches.

According to Bernard (1991) earlier social and behavioral scientists ascribed to a problem-centered approach to studying deviant or maladaptive behavior. They would conduct a one-time historical assessment of adolescents or adults with problem behaviors. This type data was of limited value to the prevention field (Bernard, 1991). She further stated that the desired results of the intervention were not obtained and data offered from the problem-centered approach studies tended only to perpetuate the problem. Werner (1989) referred to the prevention as a pathology model of research which ... "provided us with a false sense of security in erecting prevention models that are founded more on values than facts" (p. 72). This type of research approach became problematic for researchers who were focused on studying risks for the development of
problem behaviors because they were unsure which was the cause or consequence of such behavior (Lofquist, 1991). For example, does the lack of problem solving skills lead to drug use or does drug use lessen problem solving skills?

Bernard (1991) also took a critical look at the prevention work of the 1960s and 1970s. In the 1970s, there was a move away from the punitive measures of juvenile delinquent centers and homes for wayward youth toward the use of scare tactics and programs like scared-straight. Counseling programs focusing on self-esteem sprang up in schoolhouses across the United States. One-shot, hour-long assembly programs brought in ex-addicts and ex-cons who had turned their lives around became popular attempts at providing prevention programs for youth. The objective was to deter youth from wanting to experience the same plight. However, these methods did little to hold back the tide of problems afflicting youth and the nation (O'hara, 2000). According to Gibbs and Bennet (1990), the challenge became strengthening protective factors within the school, family, and community, not more money spent on punishment and reactionary efforts, or one shot programs.

The challenges of educating students are daunting for principals and teachers when considering all of the factors that inhibit a student's success (Catalano, 2005; Brewer, Catalano, Hawkins, & Neckerman, 1994). The research of Hawkins et al. (1992); Bernard (1991); and Botvin et al. (1995) provided a framework to plan, implement, and evaluate science–based prevention programs. Prevention research took a prominent role in guiding
lawmakers, educators, and concerned citizens on strategies to curtail and reduce the impact of drug use in communities. Prevention programs were implemented in America's schools and communities as drug abuse among teenagers reached epidemic proportions in the 1980s and plagued the quality of life for Americans—young, old, affluent, middle class, and impoverished citizens alike (Botvin, Baker, Dusenbury, Botvin, & Diaz, 1995).

During the upheaval for educational reform in the 1980s, the Federal Government tried to solve the problems of substance abuse and youth violence. In addition to setting more rigorous high school requirements, recruiting and hiring more trained teachers, the U.S. Department of Education funded programs to reduce problems interrupting the learning environment—i.e., drugs (USDOE, 1986). To combat the problem, President Ronald Reagan launched a war on drugs and First Lady Nancy Reagan took up the mantle to lead the nation and the world to help children say no to drugs. Just Say No clubs sprung up in schools and drug education became a requirement in grades K through 12. President Reagan signed into law the Drug-Free Schools and Communities (DFS) Act which funded drug prevention programs (United States Department of Education [USDOE], 1986). In 1994, the Office of DFS was expanded to address the rise of violence in schools and this office became known as the Office of Safe and Drug-Free Schools. Provisions of the revised act in 1994 required local schools to implement violence prevention programs, along with their drug prevention programs and services for grades K through 12 (Office of Elementary and Secondary Education, 1994).
The Federal Government borrowed from the literature on risk reduction and identified 11 factors that placed students at risk. They were: (a) school failure, (b) violence, (c) substance abuse, (d) poverty, (e) teen sexuality, (f) single-headed household, (g) mental illness, (h) physically handicapping conditions, (i) chronically absent, (j) self-esteem, and (k) lack of positive community norms (USDOE, 1986). With the establishment of the SDFS office at the federal level, school districts were given guidance to implement drug prevention programs. These guidelines were known as Principles of Effectiveness (POE). To implement programs, services, and strategies to combat the nation's growing drug problem and outbreaks of violence on school campuses, local educational agencies (LEAs) were required to implement research-based programs based upon POE. POE included (a) conducting needs assessments in schools, (b) setting goals and objectives based upon the needs assessments, (c) implementing science-based programs, services, and strategies, and (d) conducting yearly evaluations (USDOE, 1986).

The SDFS Communities Act also funded community-based prevention and intervention efforts. Schools and communities were required to collaborate on best practices to combat the problems of drug use and abuse both in schools and in communities (USDOE, 1986; NCLB, 2002). In studies conducted by Hawkins, (2005); Fleming et al., (2005), and Afterschool Alliance, (2004); reduction of problem behavior in the community would promote student achievement (Hawkins, 2005).
There is a plethora of research on how safety impacts learning from agencies such as (a) The Alliance for Excellent Education, (b) national associations of school counselors, psychologists, teachers, and administrators, and (c) other governmental and nonprofit agencies (Collaborative for Academic and Social Emotional Learning, [CASEL] 2002). The NCLB legislation operates on one assumption which is—that every child can learn and deserves to learn in a safe and drug-free environment (NCLB, 2002). In some schools, problems such as alcohol and drug abuse, truancy, violence, poor academic performance, and adolescent pregnancy were widespread while in other schools the problems fester just below the radar screen (Max & Northrop, 1995). These problems can and do disturb and interrupt the learning environment in the school. As stated in Chapter One, if schools do not meet annual yearly progress (AYP) or if they become labeled by the individual state’s definition as persistently dangerous, parents are given the option to transfer their child from that school (NCLB, 2002).

On the issues of both violence and substance abuse, the following study was released (Josephson Institute of Ethics, 2001). The survey included responses from 15,877 middle and high school students.

1. Thirty-nine percent of middle school students and 36% of high school students say they do not feel safe at school.

2. Forty-three percent of high school and 37% of middle school males say that it is okay to hit or threaten a person who makes them angry and 19% of females agree.
3. Seventy-five percent of all males and over 60% of females surveyed said they hit someone in the past 12 months because they were angry.

4. Twenty-one percent of high school males and 15% of middle school males took a weapon to school at least once in the past year.

5. Sixty-percent of high school and 31% middle school males said they could get a gun if they wanted to.

6. Sixty-nine percent of high school and 27% of middle school males said they could get drugs if they wanted to.

7. Nineteen percent of high school and 9% of middle school males admit they were drunk at school at least once in the past year.

There is encouraging news on the horizon with drug use declining consecutively from 2002 through 2005. The National Institute on Drug Abuse [NIDA], [2005] reported that from 2003 to 2004 illicit drug abuse among youth declined by almost 7% continuing a decline began in 2001. There was a decline in drug use among 8th, 10th, and 12th graders. However, the rates are still too high. NIDA (2005) reported that the lifetime use among 8th, 10th, and 12th graders was (a) tobacco 39.5%; (b) marijuana 31.3%; (c) amphetamine 7.6% and (c) LSD and MDMA (Ecstasy) 3%. At the same time, the latest report from the Monitoring the Future (MTF) survey showed an increase in inhalant abuse among eighth-graders and the painkiller OxyContin among all students surveyed (NIDA, 2005).

Since it has been proven by multiple studies that drug use impacts and impairs learning, it is imperative that effective drug prevention programs and services are implemented in schools (Fleming et al., 2005; Black, 2003 & Howe, 2000).
Afterschool programs have proven to be an effective prevention and intervention program to reduce drug use (Afterschool Alliance, 2004) and educational leaders across America are implementing these programs (National Association of Elementary and Secondary School Principals n.d).

Student Achievement: Risk Factors – Predictors of Negative Outcomes

Introduction

Under the Safe and Drug-Free Schools and Communities Act of 1995, billions of dollars have been allocated over the past 10 years to state educational agencies (SEAs), local educational agencies (LEAs), and communities to reduce drug use and violence among youth and adults (Howe, 2000; USDOE, 2000). Research findings on the prevalence of youth and adult violence and drug abuse prevention efforts to combat these problems will also be included in this section. The risk factors which can predict problem behaviors impeding student achievement will be discussed. As Howe (2000) found in his research, rigorous standards alone are not the answer for all children. The problem of substance abuse and violence do not merely impact student achievement. It also threatens the quality of life for healthy communities. Risk factors must be identified and protective factors implemented with the appropriate prevention and intervention strategies – in order to positive change to result.

Kumpfer and DeMarsh (1986) described risk factors as a number of biological, social, environmental and psychological problems facing youth. Catalano (2005) defined them as predictors of negative outcomes. Risk factors impacting a student's life are found in the three environments where students
reside—the home, community, and school (Hawkins & Weis, 1985; Office of Elementary and Secondary Education, 1994). Risk factors will be defined under the following subheadings: (a) individual, (b) peer groups, (c) family, (d) community, and (e) school.

**Individual Risk Factors**

Jessor and Jessor (1977) found individual risk factors included:

(a) inadequate life skills, (b) lack of self-control, (c) aggressiveness and lack of peer refusal skills, (d) lack of trust, (e) low self-esteem and self-confidence, and (f) emotional problems and psychological disturbances. Other risk factors cited were: (a) attitudes favorable to drug use, (b) early antisocial behavior—particularly lying, stealing, and aggressiveness (in boys), (c) shyness, (d) hyperactivity, and (e) rejection of prosocial values and religion. Youth problem behaviors fell into three categories: (a) behavioral, (b) emotional, and (c) attitudinal deficiencies. These problem behaviors caused them to become more vulnerable to AOD and a host of other risk factors. More recent studies on developmental assets conducted by the Johnson Institute revealed that the lack of certain assets predicts problem behaviors (*Josephson Institute, 2001*).

**Peer Risk Factors**

Elliott, Huizinga, and Ageton (1985) and Kandel (1985) found that one of the strongest predictors of adolescent drug use was association with drug-using peers. Dielman, Shope, Leech, and Butchart (1989) found that youth who were less susceptible to peer pressure were less likely to use alcohol despite exposure to alcohol use among peers. They listed three major peer risk factors:
(a) association with delinquent or drug-using peers, (b) association with any peers who have favorable attitudes toward AOD use, and (c) susceptibility to peer pressure. The study of Oxford et al., (2001) revealed that association with peers who used drugs was a predictor of the onset of drug abuse by teens.

Family Risk Factors

NCES (1998) listed risk factors found in families as: (a) poor family management, (b) lack of adequate child supervision, and (c) lack of organization and family rituals. If these risk factors exist in families, youth are at greater risk for developing interpersonal problems and for using drugs. In 1986, Kumpfer and DeMarsh discovered that families who abused AOD were more likely to experience (a) domestic violence, (b) family disorganization and chaos, (c) lack of family cohesion and codependent relations, (d) social isolation, (e) increased family moves, and (f) increased family stress. Other risk factors cited were (a) unclear behavioral expectations), (b) excessive or inconsistent punishment, and (c) ambiguous, lax, or inconsistent rules (Arthur et al., 2002). Families faced with these problems were less likely to focus on the child’s academic needs.

Catalano (2005) reported the following risk factors in families could lead to problem behaviors for youth: (a) substance abuse, (b) delinquency, and (c) school failure.

Community Risk Factors

The availability and attitudes Americans have about alcohol and other drug (AOD) use was a risk factor for youth (Room, 1990). Although laws make it illegal for minors to purchase alcohol, alcohol was the primary drug of choice
among teenagers (Valliant, 1987). According to Room (1990), American standards and acceptance about alcohol abuse were lower and more socially acceptable than in other countries.

Risk factors found in the community put students at risk for problem behavior (Kandel 1985; O'Hara, 2000). O'Hara (2000) reported on environmental risk factors and how they could lead to increased drug use among youth. Such risk factors included: (a) community disorganization, (b) lack of community bonding, (c) lack of cultural pride, (d) community attitudes favorable to drug use, (e) availability of alcohol and other drugs, and (f) the lack of youth services and opportunities (Gibbs & Bennet, 1990; Kandel 1985; O'Hara, 2000).

When social disorganization was found within high-risk communities, youth were more likely to be detached from the community and therefore may lack a sense of responsibility to carry out the goals of the community. When youth did not have a sense that they belonged, lacked resiliency traits, or were not bonded to their schools or families, they became prime candidates to rebel against rules and authority within the community (Catalano, Haggerty, Oesterle, Fleming, & Hawkins, 2004). Kumpfer and DeMarsh (1986) also found that youth who lived in high-risk communities rarely participated in religious activities, and were generally less involved in recreational, social, and cultural activities.

Coleman, 1987; Oetting, Donnermyer, & Plested, 1995; Bernard, 1989; and McNeese, 2000 reported poverty as a serious risk factor for problem behavior and school failure. They discussed the need for more programs and services in order to break the cycle of poverty. Kelly (1988) discussed poverty as
a condition that in and of itself is void of the basic necessities of life. Kelly (1988) went on to say that, "The long-term development of the competent community depends upon the availability of social networks that can promote and sustain social cohesion within the community" (p. 12). McNeese (2000), concluded in her study on poverty among 8th, 10th, and 12th grade students living in urban, rural, and suburban areas that more investigation needs to be done in the area of poverty, achievement and urbanicity.

School Risk Factors

Although schools may not be able to change the lives of families or the condition found within the communities, they can become aware of the risks associated with schooling and make every effort to change those risks. Smith and Fogg (1978) studied the lack of academic motivation as a risk factor for substance abuse. Coie and Kumperschnidt (1983) looked at the increased rejection by school peers at school and found students who felt rejected by peers were at higher risk for AOD use and other related risks. Baumrind (1985) noted the following as major school-related risks: (a) lack of school bonding, (b) ambiguous, lax, or inconsistent rules and sanctions regarding drug use and student conduct, (c) student or staff attitudes favorable to drug use, and (d) school failure. The research conducted by the Collaborative to Advance Social and Emotional Learning (CASEL) supported the findings of these earlier researchers (Collaborative for Academic, Social, and Emotional Learning [CASEL], 2002). CASEL integrated the research of early prevention findings into
their studies done on social and emotional learning. The findings from this research will be discussed under protective factors.

Research conducted by the National Institute on Drug Abuse (NIDA) also concurred with earlier findings regarding risk factors are prevalent in schools. Risk factors identified in schools were (a) poor social coping skills, (b) failure in school performance, (c) inappropriate, shy, and aggressive behavior in the classroom, (d) affiliations with deviant peers, and (e) perceptions of approval of drug-using behaviors in the school or other environments (NIDA, 1999). The highest risk periods for drug use among youth are during transitional periods—elementary school to middle school and middle school to high school. Prevention planners need to develop programs to provide support at each transitional period (NCES, 1998).

Catalano (2005) noted academic failure in late elementary and a lack of commitment to school as precursors for an onslaught of problem behaviors. The problem behaviors included (a) substance abuse, (b) delinquency, (c) school drop out, (d) violence, (e) depression/anxiety. When students do not feel bonded to their schools, this too causes some of the aforementioned problems. (Catalano et al., 2004).

**Protective Factors—Predictors of Positive Outcomes**

Protective factors can be defined as traits, conditions, situations, or episodes that can change or even reverse predictions of negative outcomes and make it possible for individuals to rise above problems (Bernard, 1991). Conditions that build resiliency can serve to buffer the negative effects of risks
which are also referred to as assets (*Connect Wyoming, n.d.*). Just as there are some risk factors found in all three environments, there are also protective factors (Bernard, 1991; Arthur et al., 2002). To increase protective factors adults must hold youth in high regard. They must: (a) show care and support, (b) hold high expectations, and (c) allow children and youth opportunities to participate and become involved in meaningful activities (Catalano & Hawkins, 2002). The section on protective factors will be organized similar to the discussion on risk factors except that individual and peer protective factors will be included in the section on resiliency.

**Family Protective Factors**

*Caring and supportive families.* According to Felsman, Stiffman, and Jung (1987), the social relationships among family members were by far the best predictors of positive behavioral outcomes among children. Rutter’s (1995), research found that even in cases of an extremely troubled home environment a good relationship with one parent (defined in terms of the presence of high warmth and the absence of severe criticism) provided a substantial protective effect. Three-fourths of children in troubled families studied by Rutter (1995) who did not have a close and caring relationship with at least one parent exhibited signs of conduct disorder as compared to only one-fourth of the children who had such relationships.

Additional research into family environments of resilient children supported a similar precept—despite the burdens of family strife and economic or social conditions some children excel academically and socially. (Rutter, 1979;
Children did not encounter emotional or behavioral problems if they had opportunities to develop a close bond with at least one person. This person did not have to be the mother or father as long as the adult provided care and appropriate attention during the first years of life (Werner, 1990). Werner and Smith (1989) identified caregiving during the first year of a child’s life as the most powerful predictor of resiliency in children. However, other researchers (Rutter, 1979; Felsman et al., 1987; and Demos, 1989) found a caring and supportive relationship remained the most critical variable throughout childhood and adolescence. Research conducted by the SDRG also found this to be true (Catalano et al., 2004; Oxford et al., 2001).

High expectations for children families. Research by Williams and Kirnblum (1985) and Kumpfer, Molraad, and Spoth (1996) concluded that high parental expectations were the contributing factor explaining why some children who grow up in poverty were still successful in school. Oxford, Harachi, Catalano, Haggerty, & Abbott (2001) reached similar conclusions in their study done on the attachment of elementary school-aged children to their parents. Oxford, Harachi, Catalano, & Abbott (2001) found in their study on the effect of family social control factors on deviant peer associations and substance initiation that deviant behavior was lessened when parents held high expectations of their children. According to Mills (1990), when adults expressed high expectation of children this played a major role in the reduction of several problem behaviors among children, including substance abuse. Furthermore, families who
established high expectations for their children's behavior from an early age played an even greater role in positive development of their children.

Family support was lauded as another essential ingredient in high expectancy theories (Haggerty, Fleming, Lonczak, Oxford, Harachi, & Catalano 2002). Families reported their religious beliefs provided them with stability and gave meaning to their lives, especially in times of hardship and adversity (Werner, 1990). Another aspect related to high expectations was faith. Werner (1990) hypothesized that this type of faith gave families the belief their lives had meaning, and everything would work out in the end, despite unfavorable odds. Researchers concluded that parents, regardless of their socioeconomic status, could provide the necessary protective factors for students to excel in school and combat risky behaviors.

Participation and involvement in the family. Research findings supported the theory of children needing opportunities to participate and contribute in meaningful ways to their home environment (Hawkins et al., 1992). When children were given responsibilities, it sent a message that they were worthy and capable of being contributing members of the family. Researcher Kurth-Schai (1988) found positive outcomes in children as young as age 3 assumed duties such as: (a) carrying wood and water, (b) doing household chores, (c) gathering and preparing food, and (d) caring for younger siblings.

Caring and supportive communities. The community is another important socializing agent for children and adults alike (Catalano & Hawkins, 2002). There is a need to take a closer look at the community and the role the community has
in this socialization process. Just as families promote traits needed to build productive, responsible adults, so do communities. The traits of (a) social competence, (b) problem solving skills, (c) autonomy, and (d) a sense of purpose for the future can be fostered from the community environment (Iscoe, 1974).

Communities must support families and schools, since these two entities are the backbones for raising children (Botvin, Baker, Filazzola, & Botvin, 1990). According to Brook, Nomura, and Cohen (1989), the most closely examined community protective factor was social cohesiveness or community organization. These were the formal and informal networks by which individuals develop or learn their competencies. The opinions of the community were important and could be received by youth as a source of strength or a yoke too heavy to bear.

Prevention programs work at the community level with civic, religious, law enforcement, and governmental organizations to enhance anti-drug norms and prosocial skills. Community interventions can help bring about changes in the following areas: (a) policies or regulations, (b) mass media efforts, and (c) community-wide awareness programs (Oetting et al., 1995). The available resources such as: (a) health care, (b) child care, (c) adequate housing, (d) employment, and (e) recreation within a community represent or demonstrate care and support (or the lack of care and support) at the community level. The greatest protective factor available in the community is to assist families met their basic needs (Garmezy, 1991; Coleman, 1987; Oetting et al., 1995).

High expectations of children in the community. The two cultural norms important to promote high expectations in the community rested with the value
the community placed on youth. Are youth viewed youth as resources or as problems were key factors in this valuing process (Kurth-Schai, 1988). The only responsibility some communities placed on children under 18 was to go to school and do well. It was not until they became adults that other expectations were placed upon them to become contributing members of society (Kurth-Schai, 1988). If communities expect youth to obey the laws of the community, they cannot hold permissive attitudes or have lax polices on alcohol and other drug (AOD) use since this might translate into youth engaging early in AOD use (Oetting et al., 1995; Hawkins et al., 1992). Early AOD use by teens, leads to other delinquent behavior impacting the quality of life within the community.

Participation and involvement in the community. It is important for communities to help youth become involved and participate in meaning activities. Creating opportunities for youth to participate and contribute to their community are essential to help youth feel bonded to the community and valued as resources and not as problems. The same importance placed on participation and involvement within the family and school must be present in the community. According to Kurth-Schai (1988), youth participation was homologous to improved personal and social development skills ranging from heightened self-esteem and increased political involvement. In contrast, the lack of youth involvement was associated with (a) personal and social isolation, (b) psychological dependence on external resources for personal validation, and (c) other self-destructive and antisocial behavior.
Caring and supportive schools. Second only to the family was the power of the school environment to provide a safe refuge for children who live in high-risk communities or dysfunctional families (Adelman & Taylor, 2000). The findings of several researchers supported the above statement (Botvin et al., 1995; O'Donnell et al., 1995). Further findings revealed how the school can provide a protective shield for children faced with a vicissitude of problems coming from their home, community, or both environments (Catalano, Mazza, Harachi, Abbott, Haggerty, & Fleming, 2003). Based upon the findings of Brewer et al. (1994), schools would demonstrate care and support by implementing the following: (a) reduction of class size for kindergarten and first grade classes, (b) continuous progress instructional strategies, (c) cooperative learning, (d) tutoring, (e) parent training, (f) marital/family therapy, (g) youth employment training programs with an educational component, (h) diagnostic prescriptive pull out programs, (i) nongraded elementary schools, and (j) computer-assisted instruction (Brewer et al., 1994).

Botvin et al. (1990) conducted a one-year study on the cognitive and behavioral approach to substance abuse prevention. The early findings were positive which prompted Botvin to conduct a 10-year longitudinal study – known as Life Skills Training. The study revealed classroom programs could be designed to provide far-reaching impact not only on reducing drug use but other risky behaviors (Botvin et al., 1995a).

The Life Skills Training program consisted of a 3-year prevention curriculum intended for middle or junior high students. The program was taught...
as follows: (a) 15 periods of class instruction the first year, (b) 10 booster lessons the second year and (c) five lessons the third year. The content area covered by the Life Skills Training program consisted of drug resistance skills and pro-social skills. The follow-up study of 6,000 students from 56 schools found significantly lower smoking and alcohol and marijuana use 6 years after the initial baseline assessment (Botvin et al., 1995a).

Schools can combat many of the social ills which interrupt the learning environment by; (a) adopting programs grounded in theory and practice, (b) training teachers on how to apply the principles of social and emotional learning when teaching children, (c) presenting developmentally and culturally appropriate lessons, (d) involving parents, (e) establishing organizational support and policies that foster success, and (f) incorporating continues evaluation (CASEL 2002).

Just as within the family, the amount of caring and support in the school setting was a predictor of positive outcomes among children. In a study done by Werner (1989), children who were considered to have resilient traits viewed the teacher as one who did more than merely impart knowledge. The teacher also served as a positive role model. Nodding (1988) supported these findings and believed the schools could provide a caring and supportive climate and yield positive results.

At a time when the traditional structures of caring have deteriorated, schools must become places where teachers and students live together, talk with each other, and take delight in each other's company. My guess
is that when schools focus on what really matters in life, the cognitive ends we now pursue so painfully and artificially will be achieved somewhat more naturally . . . . It is obvious that children will work harder and do things—even odd things like adding fractions—for people they love and trust. (Nodding, 1988, p. 8)

*High expectations for children in school.* It is also important for schools to set high expectations for children (American Youth Policy Forum, 2003; Rutter, 1979; Botvin et al., 1995b; Bernard, 1991). Garmezy (1991) hailed Rutter’s (1979) work as an excellent resource guide for schools to utilize if they wanted to promote the well being of disadvantaged children. In Rutter’s study of poverty-stricken children in London, some schools showed considerable differences in rates of (a) school failure, (b) delinquency, and (c) other negative behaviors even with high risk factors in the family and community. The schools that showed these positive results had in common the following attributes: (a) clear expectations and regulations, (b) high academic emphasis, (c) high levels of student participation, (d) varied alternative resources, (e) vocational work opportunities, and (f) extracurricular activities. Rutter (1979) concluded that schools which foster high expectations promoted the following traits: (a) high self-esteem, (b) social and scholastic success, and (c) reduction of students exhibiting emotional or behavioral problems.

A program implemented in California reported further evidence of the importance of schools in promoting high expectations. The California State Department of Education implemented a college core curriculum in an inner city
school in one of its lower socioeconomic districts which experienced a long history of (a) high failures, (b) discipline problems, and (c) very low scores on standardized tests. The results were very positive: 65% of the graduates continued on to higher education—up from 15% before the implementation of the program (California State Department of Education, 1990).

Kozol’s (1967) describes how high expectations transformed the lives of children who participated in a high expectation model study. Kozol explains in his book, *Death at an early age: The destruction of the hearts and minds of Negro children in the Boston public schools*, the results of this study in detail. The study was conducted in Boston with 200 Black children from slums who rode buses to go to school in the suburban town of Lexington. The students started in kindergarten. Other than additional counseling, they received the same education as their affluent suburbanite classmates. Nearly all of the students graduated from high school and most of them went on to 4-year colleges. Nonparticipants who remained in the public schools of Boston, experienced a 24% chance of similar success. More than 20 years later, Bernard (1991) referred to the relevancy of the study and has supported these findings. The common elements from research literature on high expectations was that when children consistently heard high expectations from family members, teachers, and peers, success became more eminent and problem behavior was reduced (Arthur et al., 2004; Bernard, 1991; Kozol, 1967).

The NCLB Act of 2001 set high standards for all students. Secretary of Education Spelling reported in a press release on four principles considered as
the hallmarks for success: (a) ensure that students are learning, by raising achieving and closing gaps, (b) make school systems accountable by including all students in statewide testing of reading and math in grades 3 through 8 and once in high school, (c) ensure easy accessibility of information to parents and provide parents with options, (d) provide parents with timely information about the local school, school choice, and after-school tutors, (e) encourage public choice and the creation of charter schools, and report cards on school and district success or failure, (f) improve teacher quality by implementing a rigorous system of selecting and training highly qualified teachers, and (g) create easy means to inform the public of the quality of teaching (NCLB, 2002).

Educational leaders must set high expectations for all students – those with handicapping conditions, those living in poverty, those having limited English proficiency (NCLB, 2002). All children are included in the nation’s “high expectancy” model and no child will behind. State Education Agencies (SEAs) must require Local Education Agencies (LEAs) to use tests aligned to state standards to measure student progress. LEAs must also establish academic achievement goals by setting academic standards in core subjects and also setting annual progress goals for school improvement to include all students according to the federal guidelines (NCLB, 2002).

*Participation and involvement in school.* Protective factors are also increased when schools involve youth at various levels of the decision-making process and provide them with opportunities to participate in activities (Catalano, 2005). Findings in the review of literature from 1974 through 1997 uphold the
importance of the school’s role in helping students feel bonded to the school setting. Several studies (Anthony, 1974; Botvin et al., 1995a; Kumpfer, Trunnell, Whiteside, 1990; Robins, Helzer, & Przybeck, 1986; Rutter, 1979) have contributed to this field of knowledge.

The Seattle Social Development Project (SSDP) found school bonding was a protective factor against many risky behaviors (Catalano et al., 2004). In 1991, the study began with first grade students who entered into the prevention program. Intervention strategies were implemented to reduce childhood risk factors for school failure, drug abuse, and delinquency. The success of the program was such that by the time the pilot group of first graders reached fifth grade, the program had expanded to 18 schools throughout the school district (Catalano et al., 2004).

The benefits of providing youth with opportunities to engage in meaningful, valued activities help youth develop problem solving and decision-making skills. (Wehlage, 1989). Edmonds (1986), reported on how schools could create protection that may be more potent than the family and other environments:

He stated, “a school can create a coherent environment, a climate, more potent than any single influence –teachers, class, family, and neighborhood –so potent that for at least six hours a day it can override almost everything else in the lives of children” (p. 94).

More prevention findings

Ramirez-Smith (1995) found in his study on effective school programs that when all members of a school and community work together for the well being of
the children, the rewards are bountiful and belong to everyone. The program studied was a School Development Program which was built on the guiding principles: (a) no Fault, (b) consensus decision-making, and (c) more collaboration. A team approach was used to bring about the desired changes in the school. There were six teams: (a) a parent program team, (b) a school planning team, (c) a mental health team, (d) comprehensive school plan team, (e) staff development team, and (f) an assessment and modification team. The model was called the Comer Model. The model was in place for only two years in Magruder Primary School located in Newport News, VA. The results were: (a) 53% of second graders reading on grade level compared to 1% before the program, (b) improvement in test scores up by 67% compared to 41%, and (c) 86% of third graders passed achievement tests (Ramirez & Smith, 1995).

Curwin (1995) found schools could become agents to reduce violence by including three basic components in their programs. First, teach skills such as: (a) conflict resolution, (b) peer mediation, (c) anger control, and (d) discipline. Second, teach children how to make more effective choices, grounded in values and principles. And lastly, schools should model for students alternative expressions of (a) anger, (b) frustration, and (c) impatience. To create a climate where these components of nonviolence can flourish, the school (all school personnel affecting the lives of students) must be willing to model desired behavior. This modeling includes (a) reducing cynicism, (b) teaching discipline based on values instead of rewards and punishment, (c) welcoming all students,
and (d) asking for and accepting students' contributions in some important
decision making matters.

Comer (1988) implemented a long-term program (1979-1984) in two low-
achieving, inner-city New Haven elementary schools. The program Comer
developed was guided by an important principle: children learn from people they
bond to. Another key to the success of the program was the promotion of parent
involvement. This was considered necessary to insure lasting gains in academic
student success. Both schools attained the best attendance records in the city
and near grade level performance. By the end of the fifth year, fourth graders in
both schools ranked third and fourth highest on the Iowa Test of Basic Skills.

Cummings (1986) proposed a theoretical framework to change the
relationship between educators and students which included family and
community participation. "The central principle of the framework was that
students from dominated minority groups can be either empowered or disabled
by their interactions with educators" (p. 56). Cummings found school failure does
not occur when groups: (a) are positively connected toward both their own and
the dominant culture, (b) do not perceive themselves as inferior to the dominant
group, and (c) are not alienated from their own cultural values. Schools which
promote a school climate conducive for ethnic pride to flourish have four
characteristics: (a) additive: incorporates culture into the school programs,
(b) collaborative: promotes family and community participation, (c) interaction
oriented: encourages children to use language in gaining knowledge for their
use, and (d) advocacy-oriented: encourages adults to become advocates for children—not critics of them.

Payzant and Wolf (1993) reported on the approach used by the San Diego School District in California to address the needs of students who were failing or barely meeting graduation requirements. The school board decided to raise standards and graduation requirements. The district partnered with the College Board to develop a pilot program to prepare all students for the educational demands beyond high school. The strategy was called Push-Pull. Workshops and trainings were offered teachers and a media campaign was launched to "get the word out that more students deserved to attend, and could flourish in college" (p. 43). Pacesetter courses were set up as laboratories for students in the core disciplines. Only trained teachers taught in these labs. The results of the program were—more than half the students entered into a fourth year math classes, and more students scored higher on the SAT as a result of this collaborative project stated Superintendent Payzant.

Student Achievement: Resiliency – Rising above the Tides

Some youth live in very risky environments, yet they do not succumb to the negative influences within their environment. Even when protective factors are missing in all three environments (family, school and community), some youth have not shown signs of maladaptive or antisocial behavior (Bernard, 1994). The term resiliency has been used to describe this phenomenon or coping mechanism and the youth have been labeled as resilient (Bernard, 1987). The term resiliency and the study of traits present in resilient youth have become
keen areas of interest for researchers of the Office of Elementary and Secondary Education (Office of Elementary and Secondary Elementary, 1994).

Garmezy (1974) and Werner and Smith (1989) defined the resilient child as one who (a) works well, (b) plays well, (c) loves well, and (d) expects well. As this definition appears somewhat abstract, more specific attributes describe resilient children as having exceptional skills or self-efficacy in the following areas: (a) social competence, (b) problem-solving skills, (c) autonomy, and (d) higher expectations (Bernard, 1989; Bernard, 1991). Below, each competency is discussed in more detail.

Social Competencies

According to the findings of Werner and Smith (1989 and Demos (1989), resilient children usually exhibited (a) responsiveness, (b) flexibility, (c) empathy and caring, (d) communication skills, (e) a sense of humor, and (f) other pro-social behaviors. Resilient children were considerably more responsive and could elicit more positive responses from others. A great number of resilient children have the ability to generate comic relief and find alternative ways of looking at things, as well as the ability to laugh at themselves and ridiculous situations (Masten, 1986). As a result, resilient children—from early childhood on—tend to establish more positive relationships with others, including friendships with their peers (Berndt & Ladd, 1989; Werner & Smith, 1989). However, individuals already experiencing problems with crime, delinquency, or other problem behavior usually lack social competency skills (Bernard, 1994; American Youth Policy Forum, 2003).
Problem Solving Skills

Shure and Spivack (1982) identified problem-solving skills inherent in resilient children and found these skills included the ability to think abstractly, reflectively, and flexibly. As with social competence, studies on adults experiencing psychosocial problems have been identified as lacking lack of problem-solving skills. Children living on the streets of cities throughout the United States and other countries displayed resiliency traits because they must continually be successful at negotiating in order to survive (Felsman, 1989). Resilient children also have the ability to attempt alternate solutions for both cognitive and social problems.

As with social competence, research on resilient children discovered problem-solving skills are identifiable in early childhood. Studies as far back as 30 years ago reported on children at early ages who showed they are agents capable of producing change in a frustrating situation. Once these children started school, they tended to be successful in school as well (Halverson & Waldrup, 1974).

Autonomy

Different researchers have used different terms to refer to autonomy. Anthony (1974) referred to it as a strong sense of independence or locus of control and a sense of power. Garmezy (1974) and Werner (1990) defined autonomy as the internal locus of control and sense of power. Garmezy and Rutter (1983) referred to self-esteem and self-efficacy and others viewed autonomy as self-discipline and impulse control (Bernard, 1991). The common
thread running through much of the literature on the issue of autonomy was the attainment of this trait is based upon a sense of one's own identity and an ability to act independently and exert some control over one's environment (Bernard, 1991).

Researchers have also identified the ability to separate oneself from the negativity inherent in the environment as the key to the development of autonomy (OESE, 1994; Bernard, 1994; Berlin and Davis, 1989). Anthony (1974) studied the characteristics of resilient children growing up in families with problems of alcoholism and mental illnesses. He found the children were able to stand away psychologically from the sick parent. Berlin and Davis (1989) called the behavior of standing away psychologically, the task of adaptive distancing. During this process, the child learns to break away from the focus on the dysfunction in the family. Beardslee and Podorefsky (1988) found resilient youth could discern the differences between their own experiences and their parents' problems. Children realized they were not the cause of the problem and their future did not have to mirror their families. Wallerstein (1983) reported on the challenges these children faced. He found they must successfully learn: (a) to detach from the centrifugal pull of the distress, (b) to find and maintain meaningful relationships in other settings (i.e., peers, school, or the community), and (c) not to allow the family crisis to dominate their inner world.

**High Standards**

Another characteristic of resiliency was resilient children have set high standards for themselves. They have a sense of purpose for their future. These
children were (a) goal-directed, (b) success oriented, and (c) motivated by achievement. They held healthy expectancies for their future and a sense of coherence. These factors appeared to be the most powerful predictors of positive outcomes (Arthur et al., 2002).

Student Achievement: Social and Emotional Learning

Social Emotion Learning (SEL) is the practice of obtaining skills in following areas: (a) recognizing and managing emotions, (b) developing care and concern for others, (c) making responsible decisions, and (d) establishing positive relationships and handling situations effectively. Social and emotional learning (SEL) research expanded upon the Social Development Model spearheaded by Hawkins and Weis (1985). SEL is supported by the following agencies: (a) Academic Development Institute, (b) Illinois Governor’ Office and the Department of Education, (c) the Ford Foundation and various other foundations, (d) the U.S. Department of Education Institute of Education Science, and (e) the U.S. Department of Education Office of Safe and Drug-Free Schools, as well individual donors (CASEL, 2002). Many programs and services have been developed to reduce problem behaviors among students in the local schools. However, many of these programs are fragmented and are not integrated into the curriculum (CASEL, 2002). SEL integrates prevention and intervention programs and services aimed at combating social, emotional, and behavioral problems into the curriculum.

The SEL model lists competencies and best educational practices must be employed for optimum results to occur—improved school performance and a
reduction of problem behaviors. The SEL competencies include 17 skills and attitudes. Competencies were organized into four groups: (a) awareness of self and others, (b) positive attitudes and values, (c) responsible decision-making, and (d) social interaction skills (Payton, Wardlaw, Graczyk, Bloodworth, Tompsett, & Weissberg, 2000). The features of quality programming enhance SEL competencies are (a) program design, (b) program coordination, (c) educator preparation and support, and (d) program evaluation (Payton et al., 2000).

Effective SEL programming have the following characteristics: (a) is grounded in theory and research, (b) teaches children how to apply SEL skills and ethical values in daily life, (c) builds connection to school through caring, (d) provides developmentally and culturally sound instruction, (e) helps schools coordinate and unify programs that are often fragmented, (f) enhances school performance by addressing the affective and social dimensions of academic learning, (g) involves families and communities as partners, (h) establishes organizational supports and policies that foster success, (i) provides high-quality staff development and support, and (j) incorporates continuing evaluation and improvement (CASEL, 2002).

Unlike other prevention efforts which are not readily embraced by teachers, the SEL model has at its core academic achievement (Payton et al., 2000). The core beliefs of CASEL are that students will: (a) be fully literate in both written and spoken language through a variety of media and technologies, (b) understand mathematics and science at the synthesis and evaluation levels,
(c) be effective problem solvers, (d) take responsibility for personal health and well-being, (e) develop effective social relationships, (f) be caring individuals with concern and respect for others, and (g) develop good character and behave in an ethical and responsible manner (CASEL, 2002).

SEL is directly tied to learning. Schools may deny drugs, violence, or other problems permeate their school doors. However, they cannot deny that learning is an expected outcome of schooling. Many drug prevention and violence prevention programs have been short-lived because many superintendents, principals, teachers, and parents alike do not believe it is the responsibility of the school to directly address these problem behaviors (CASEL, 2002).

SEL promotes and incorporates achievement as a part of its mission. SEL focuses on enhancing academics through assisting students to obtain the right mental attitude and behaviors. The SEL programs provide classroom instruction in a systematic way which improves students' capacities to recognize and manage emotions, understand the viewpoints of others, and identify, and solve problems. SEL promotes programs and services which are well planned with a systemic approach and are ongoing, evaluated, and refined as needed. This approach was consistent with improving academic performance (Payton et al., 2000). Beginning in the 2004-2005 school year, the Illinois State Board of Education adopted the SEL program and required all of its teachers to receive training (Illinois State Board of Education, 2006).
Student Achievement: Afterschool Programs

As school districts across the United States search for ways to improve student achievement, many look toward afterschool programs as a viable solution. The entire fall issue of School Governance and Leadership, a magazine for board members and superintendents published by the American Association of School Administrators (AASA), was devoted to the discussion of afterschool programs. It reported,

"well-structured after school programs effectively expand learning time for students, provide opportunities for collaboration with the broader community, and constructively fill those hours that, at best, are spent idly and, at worst, entice unsupervised youngsters into delinquent or high-risk activities" (School Governance & Leadership, 2005 p. 5).

It was also noted that afterschool programs do not just bolster academic improvements but they build social and emotional skills which students must have in order to succeed in life (School Governance & Leadership, 2005).

Several voter surveys conducted by the Afterschool Alliance showed public support as high in 90% of those in favor of afterschool programs and another 76% of the voters were willing to pay additional taxes to implement more afterschool programs in their communities (Peterson, 2005). In addition, a 1994 Phi Delta Kappa/Gallup Poll survey reported 94% of those surveyed support increasing instructional time (Peterson, 2005). This type of public support helped Congress make budgetary decisions to fund afterschool programs. Fifteen million dollars were allocated in 1994 to fund afterschool programs under the 21st
Century Learning Centers Communities Grant. The amount increased to $40 million dollars in 1998 and to an estimated $1 billion for fiscal year 2005 (21st Century Community Learning Center, n.d.). There are 7,500 21st CCLC centers with afterschool programs in rural and inner-city public schools serving more than 1,400 communities (Peterson, 2005).

The U.S. Department of Education convened a conference and brought together educators, practitioners, and policy experts to identify outcome indicators for improved achievement to evaluate afterschool programs. Over 50 indicators were listed ranging from reduced violence episodes to increased enthusiasm for learning. The connections to the indicators were summarized “academic achievement is dependent on engagement, motivation, behavior, and attendance” (School Governance & Leadership, 2005 p. 6). Based upon the committee report, programs should have an academic component, in addition to other enrichment programs.

Peterson (2005) stated school leaders can no longer limit their responsibilities to the hours between 8:00 a.m. and 3:00 p.m. because it is what happens to children afterschool hours that directly impacts how they learn. Evaluations on afterschool programs reported not only do afterschool programs provide a safe place for students but that students who regularly participate in quality afterschool programs receive additional benefits. The benefits for students were: (a) improved grades, (b) more bonded to schools, (c) fewer absences and tardies, (d) increased civic engagement, and lastly, (e) less likely to commit a crime or violent act during nonschool hours (Peterson, 2005).
Many school districts across America have opened up their doors after 3:00 p.m. and reported remarkable improvements in student achievement and student behaviors (Peterson, 2005). Superintendents contributed these achievements in large part to afterschool programs. In 2003, the CEO of the Chicago Public Schools reported in a press briefing on the bottom-line benefits of the afterschool program.

If you look at results—and we do have to be bottom-line oriented—our test scores jumped to all-time highs, our mobility rate dropped to its lowest point ever, our truancy rate dropped to its lowest point ever, our graduation rate is at an all-time high. For the first time ever, we have 8th graders beating national norms; that has never happened before. In a district where 85 percent of our students live below the poverty line, that was a huge real and symbolic accomplishment. And part of the reason—we can't say this is the only reason, but part of the reason—we think we did so much better in [that] last year we added about 50,000 students to our after-school programming ... So [after-school] is a core, part of our educational strategy (Peterson, 2005 p. 3)

In Scotland County, N.C., the superintendent also reported on the gains experienced by its school districts. Despite being in a rural and poor school district, students were closing the gap in reading and mathematics due in large part to their participation in the district's afterschool program. On the state-wide end of the year test, fourth graders students who participated in the SCHOLARS
afterschool program out performed nonparticipants reaching 23 out of the 26 reading and math performance indicators (Peterson, 2005).

In California, Michigan, and South Carolina, superintendents reported afterschool programs improved student achievement and reduced problem behaviors. Their stories ranged from math and reading score improvements by almost a year to improved absences, improved problem-solving skills, and leadership development. The superintendent of the Huron Valley School District reported to the *Detroit News* in December 2004 that students were also less likely to become involved in behaviors such as drug use (Peterson, 2005). These and other superintendents viewed afterschool programs as necessary to meet both state and NCLB requirements. The quality of afterschool programs reached beyond the school system's resources to involve the broader community which included volunteers, the faith community, businesses, and civic organizations (Afterschool Alliance, 2004).

Although there are promising reports on the advantages of the success of afterschool programs, there are also mixed reviews on the benefits of afterschool programs. The U.S. Department of Education with support from the Charles Stewart Mott Foundation conducted a rigorous examination on its 21st Century Learning Communities grant program. Fourteen schools were involved in the study done on afterschool programs for the 2000-2001 school year. The study was designed to report on outcomes related to academic success in elementary and middle schools and the students' feelings of safety. In the participating schools, programs had limited influence on academic performance and the
results showed no influence on feelings of safety or on the number of latchkey children. However, the study did find more increased parental involvement among parents of participating students. There were also some negative influences on behavior noted in the evaluation (Dynarski, James-Burdumy, Mayer, Moore, Mullens, Silva, Pistorino, & Hermond, 2001).

During the first year, most programs provided academic, enrichment, and recreational activities. Grantees implemented their programs as planned and gained support from the local staff and the community. Homework help was the most common academic activity. With funding from the 21st Century grant and other funding, programs spent about $1000.00 per student which was equivalent to a 16% educational increase. The Dynarski et al. (2001) study revealed the following findings for elementary and middle schools:

1) Limited academic impact: In elementary grades the reading scores and grades in most subjects were not higher than nonparticipants. Program did not impact whether students finished their homework or satisfactorily completed class assignments. For students in middle grades, grades were higher among 21st Century participants, although the results were small. There was a larger grade point improvement for Black and Hispanic students. Teachers reported less absenteeism and tardiness compared to nonparticipants. Teachers also reported that the assignments were completed to their satisfaction but there was no difference in homework completion.
2) Adult care increased but self care was not affected: The program did not change the percentage of latchkey children.

3) Parental Involvement: There was increased parent participation at both the elementary level and middle school level. Middle school students' parents volunteered at the school and attended PTA meetings more than nonparticipants. Parents of elementary school students were more likely to help students with their homework and ask about their school day. There was no change for middle school students.

4) No improvements in safety and behavior: Participants did not report feeling safe. In the middle school, participants were more likely to report they sold drugs "some" or "a lot" (although the incidence was low). They were more likely to have their property damaged.

5) Negligible impact on developmental outcomes: The program had no impact on students setting goals for the future, working together as a team, or the students' ability to solve conflicts with others.

6) Low levels of student participation: Most programs were offered four to five days a week but there was a low level of participation averaging less than two days per week.

7) Limited efforts to form partnerships and plan for sustainability: Although programs had to form partnerships to sustain the program after the grant funds ended, there was little evidence that this took place.
8) General comments: In general, low academic content and low student participation need to be addressed.

For middle school student, there were no significant differences between the treatment group and the comparison group on a composite measuring the frequency of breaking things on purpose, selling drugs, being detained or arrested by police. Also, there was no significant difference in attitudes regarding if students felt victimized. However the comparison group had a higher value than did the treatment group and more students in the treatment group reported breaking things than did those in the comparison group.

Summary

Factors contributing to student achievement may be daunting as the data continue to reveal declines in standardized test scores, high dropout rates, high teen pregnancy rates, and other risky behaviors. Factors such as poverty, adolescent drug use, proliferation of violence in public schools, and poor school performance cannot be viewed in isolation. Student achievement does not merely center on one's cognitive ability and motivation. It also includes environmental factors present within the child's surroundings—family, school, and the community (Catalano, 2005 & Hawkins, 2005). The most compelling research on how this trilogy—family, school, and community impacts learning and the overall academic growth comes from many of the researchers cited in this study.

There are factors which can predict school success. McNeese (2000) noted that more research needed to be done on characteristics of poor urban high school students who remain in school and on-grade. Afterschool and
summer outreach programs are just one prevention and intervention strategy used to improve student achievement and reduce problem behaviors. Based upon the first year preliminary findings on the effectiveness of the 21st Century Community Learning Centers, the results were not as promising. Yet, the results from many other studies revealed effective prevention programs designed to improve one risk factor i.e., school failure, are often successful at improving several other risk factors (Afterschool Alliance, 2004; Adelman, & Taylor, 2000). In addition, many other studies did show positive outcomes of afterschool programs.
CHAPTER III
METHODOLOGY

Overview

The researcher used archival data collected from the National Center for Educational Statistics (NCES). This chapter explains the methodology researchers at NCES used to conduct the Educational Longitudinal Study 2002 (ELS:2002) and how this information will be utilized in the present study. The following subheadings will be used to discuss how the study was planned, implemented, and analyzed: (a) introduction, (b) sample design, (c) sample selection, (d) instrumentation, (e) data collection, (f) data analysis, (g) research questions, and (h) hypotheses.

Introduction

The purpose of the ELS:2002 study was to track the progress of tenth grade students from high school to postsecondary school and/or into the workforce (ELS:2002 Data File User’s Manual, 2004). The researcher hypothesized that the percentage of 10th grade students in afterschool/summer outreach programs could predict students' perceptions of teachers, drug availability on campus, student misbehaviors and punishments, and attitudes toward school and grades. The demographic variables of gender, race/ethnicity, and socioeconomic status – in quartiles were included to describe the sample. The study included responses from students, parents, teachers, administrators, and librarians. For the purpose of this study, the researcher examined only selected responses from students and administrators. The study analyzed data
of student responses to determine if participation in afterschool/summer outreach programs could predict their attitudes toward school, teachers, and life experiences. Administrators were asked to report the percentage of 10th grade students who participated in afterschool/summer outreach programs. The independent variable for this study is based upon this question: Did the percentage of 10th grade students who participated in afterschool/summer outreach programs predict academic improvements, attitudinal changes, and behavior changes? Ten dependent variables were tested which reflect student responses to this question.

Sample Design

The database for the study is the ELS:2002 Electronic Codebook which has been made available for public use via a Web-based version and CD-ROM. The base year of the ELS:2002 study began in the spring of 2002 and was designed to offer trend data regarding significant transitions of 10th grade students as they matriculated through high school and beyond. There was a follow-up study conducted in 2004. Two additional follow-up studies will be conducted prior to participants reaching age 30. The ELS:2002 researchers gathered data related to: (a) student learning, (b) predictors of dropping out of school, and (c) access to postsecondary education and the work force. The study was longitudinal, studying the same individuals over time, and also multilevel, involving several respondents—students, parents, teachers, librarians, and administrators (ELS:2002 Data File User's Manual, 2004).
The sample included public, Catholic, and private schools with sophomore students located within the 50 states and the District of Columbia. Samples were stratified by nine U.S. census levels. The levels were as follows: (a) New England, (b) Middle Atlantic States, (c) East North Central, (d) West North Central, (e) South Atlantic, (f) East South Atlantic, (g) West South Atlantic, (h) Mountain, and (i) Pacific. Stratification for Catholic and private schools were grouped according to the U.S. four-level Census regions. Those regions were: (a) Northeast, (b) Midwest, (c) South, and (d) West. Additional strata and substratification was made based upon Suburban, Urban, and Rural coding for the location of schools (ELS:2002 Data File User’s Manual, 2004).

NCES developed the base-year design of the ELS:2002 study into two stages. After the stratification and substratification as mentioned above were completed, the next two stages were probability proportional to size (PPS) and school contacting. According to Dr. Owings, Project Officer for the ELS:2002 study, PPS sampling was used to ensure that there was a greater chance of larger school districts getting into the study since most of students in the United States attended larger schools (Owings, personal communication, February 1, 2006). NCES wanted to include students from large school districts. According to the Center for Disease Control and Prevention (CDC) Website, PPS is a sampling technique commonly used in multi-stage cluster sampling, in which the probability of selecting a particular sampling unit is proportional to some known variable (Center for Disease Control and Prevention, 2006). School contacting involved three stages. First, ELS:2002 study investigators contacted the state
department of education including the District of Columbia to receive permission to conduct the study within the state. Second, investigators contacted the local school district. Lastly, upon approval from the local school district, NCES contacted principals for final approval to conduct the study (ELS:2002 Data File User’s Manual, 2004).

NCES contacted 27,000 public, Catholic, and private schools with 10th graders. Of this number 1,221 schools were eligible and 752 participated in the study. Local schools were requested to submit an electronic or hard copy of the sophomore class roster with specific information for each student. The roster had to include (a) student ID, (b) SS # (if applicable), (c) name, (d) sex, (e) race/ethnicity, and (f) whether or not a student had an Individual Education Plan (IEP) on file. The file could be submitted via e-mail, on disk, uploaded from the ELS: 2002 Web site or sent in U.S. mail. NCES encouraged the electronic submission of all school rosters (ELS:2002 Data File User’s Manual, 2004).

Schools were given clear guidance on the criteria to include and exclude students. Schools used the same guidelines from the NELS:88 to create their rosters for the ELS:2002 study. Students were not automatically excluded if they had Individualized Educational Plans (IEPs) or Limited English Proficiency (LEP). The following categories of 10th grade students were deemed ineligible in the NELS: 88 study:

1. Students with disabilities (including students with physical or mental disabilities or serious emotional disturbance, and who normally had an
assigned IEP) whose degree of disability was deemed by school officials
to make it impractical or inadvisable to assess them; and
2. Students whose command of the English language was insufficient, in
the judgment of school officials, for understanding the survey materials,
and who therefore could not validly be assessed in English (ELS:2002

The assumption was that most students who fell into one of the categories
could participate in the study. If students with disabilities or those who had
limited English proficiencies were included in the sample, additional
accommodations were provided when necessary. There were 141 students who
received accommodations. After the rosters were received by ELS:2002, quality
assurance (QA) checks were performed. Schools that failed the QA check were
contacted by the Survey Administrator (SA) to resolve the problem. A stratified
systematic sampling process was used.

There were 15,362 students who completed the baseline data.
Approximately, half were females and half were males. The racial breakdown
was 57% Whites, 15% African Americans, 13% Hispanic Americans, 9.5% Asian
American, 4.8 % Multiracial, and .9% American Indian. Hispanics, Asians and
private schools were over sampled so that this group could also be studied
individually. Without over sampling, the numbers would have been too small to
obtain a representative sample for minority groups and students attending private
(personal communication, February 1, 2006) this group would be studied separately.

Sample Selection

The researcher analyzed data from the ELS:2002 CD-ROM Electronic Codebook. Only the base year data were analyzed, and the analysis was crosssectional. Only students who completed the relevant information (all demographic data and questions answered on the survey) were included in the study. Students with missing data were omitted. The same criteria for sample selection were used for administrators. Only completed questionnaires were included in the study.

Data Collection

On the day of the survey, school coordinators directed students who were approved to participate in the study to the designated place within the school. Students would complete the survey and other required tests in a group setting. The Survey Administrator (SA) hired by NCES and a Survey Administrative Assistant (SAA) administered the survey. The group-administered survey took approximately 45 minutes. If students were absent, SAs followed up with them and conducted a computer-assisted telephone interview (CATI). Incentives were provided to increase participation via the CATI (ELS:2002 Data File User's Manual, 2004). SAs and SAAs collected all materials from local schools.

The data collection process was different for administrators. The administrators' surveys were sent to the site coordinators along with student survey information. The packet contained a lead letter, survey directions,
ELS:2002 Users Data booklet, and a self-addressed stamped envelope. NCES allowed the school coordinator and the principal to designate someone else to complete the first five sections of the survey. Once the designated person completed those sections, the local principal completed the last section on governance and school climate. The SA encouraged principals to complete the surveys during the site visits. Administrators were required to return the completed survey via U.S. mail (ELS:2002 Data File User’s Manual, 2004).

Instrumentation

There were five instruments designed for the ELS 2002 study. Instruments were designed for students, administrators, teachers, parents, and librarians. NCES is the primary federal agency charged with the task of collecting and analyzing data related to education both nationally and internationally. All instruments were designed according to the standards set by the NCES. Statistical standards were revised by NCES in 2002. The goal of NCES is to provide high quality, reliable statistical information. Content validity of the student questionnaire was established by submitting the instrument to an “independent group of substantive, methodological, and technical experts” for review (ELS:2002 Data File User’s Manual, 2004, p. 29). The instruments were field tested and revisions were made. The reliability range was from .83 to .90 based upon Cronbach’s alpha (Education Longitudinal Study (ELS: 2002) Base Year Field Test Report, 2004).

There were 98 questions on the questionnaire. However, many questions had several subquestions. There were as many as 11 different responses to one
question. Thus, the survey required more than 200 responses to these 98 questions. Participants were asked to provide information regarding race, gender, SES, background, friends, and family relations. Additional questions included school activities and experiences relating to how well students liked school, success in school, access to computers, and behavior in school. The questionnaire also gathered information regarding the students' plans to go to college and/or enter the workforce (ELS:2002 Data File User's Manual, 2004).

The school administrators' questionnaire included information in six areas: (a) school characteristics, (b) student characteristics, (c) teaching staff characteristics, (d) school policies, and programs, (e) technology, and (f) school governance and climate. The administrators' survey was designed to merge with data from the student and teacher questionnaires and the student cognitive test battery.

In addition, "the school administrator data can be used contextually, as an extension of the student data, when the student is the fundamental unit of analysis. At the same time, the ELS:2002 school sample is nationally representative and can stand alone as a basis for generalizing to the nation's regular high schools with sophomores in the 2001-02 school year" (ELS 2002 Data File User's Manual, 2004, p. 29).

As with the student questionnaire, there were subquestions to the 42-item survey making this a 100-item questionnaire. The same measures were taken to ensure reliability and validity for the student questionnaire as were taken in constructing all other questionnaires.
Data Analysis

To analyze the data, the researcher used simple linear regression analyses to determine if participation in an afterschool/summer outreach prevention and intervention program could predict students' perceptions of teachers, drug availability on campus, student misbehaviors and punishments, and attitudes toward school and grades. Statistical calculations were performed by using the Statistical Package for Social Sciences (SPSS) version 13.0 for Windows.

To lessen the likelihood of a Type I error, "... the conscientious researcher will implement one of several available strategies. The most frequently used strategy of keeping the Type I error rate in line with the stated alpha level is the Bonferroni adjustment technique" (Huck, p. 410). This method was used to analyze the data. The alpha level of each individual test is adjusted downwards to ensure the overall experiment wise-risk for a number of tests remains 0.05. Although, the Bonferroni method reduced the risk of a Type I error, it increased the risk of a Type II error ("Statistical Consulting Services", 2005). Even if more than one test is done the risk of finding a difference or effect incorrectly significant continues to be 0.05.

In light of the fact that a mistake can conceivably occur regardless of what decision is made at the end of the hypothesis testing procedure, two technical terms have been coined to distinguish between potentially wrong decisions. A Type I error designates the mistake of rejecting the hypothesis when it is true. A type II error, on the other hand, designates
the kind of mistake that is made when you fail to reject it and it is false (Huck, 2004, p. 165).

The Bonferroni and Holms sequential Bonferroni methods can be used for applications involving multiple hypotheses testing. Since there were more than six comparisons in this study, the researcher used the Holms sequential Bonferroni method. The Holm's sequential Bonferroni method is preferable to the Bonferroni method for hypotheses because it is less conservative and has greater power (McNeese, personal communication, February 1, 2006). According to Statistical Consulting Services, (2005 p.1), “When there are numerous repeated levels (resulting in 6 or more comparisons), we can consider an alternative correction method, called the Holms sequential Bonferroni method, which allows for more powerful follow-up tests.”

In one particular study, four significant differences were reported using the Holms sequential Bonferroni method, whereas only one was reported using the Bonferroni method (Statistical Consulting Services, 2005). The findings in this study are supported by Afterschool Alliance (2004) and other researchers who have conducted multiple studies on prevention and intervention programs and afterschool programs (Catalano et al., 2004; Fleming et al., 2005; Center for Education Reform, 2002). Simple linear regression was used to test each of the research questions below:
Research Questions

1. Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict how well students get along with teachers?

2. Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict the teachers' interest in students?

3. Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict teachers' praise of student's efforts?

4. Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict if students feel put down by teachers?

5. Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict if someone tried to sell students drugs at school?

6. Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict how many times students get in trouble?

7. Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict how many times students are placed on in-school suspension?
8. Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict how many times students are suspended or put on probation?

9. Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict how much students like school?

10. Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict how important grades are to students?

Hypotheses

1. Participating in afterschool/summer outreach programs can statistically significantly predict how well students get along with teachers.

2. Participating in afterschool/summer outreach programs can statistically significantly predict the teachers’ interest in students.

3. Participating in afterschool/summer outreach programs can statistically significantly predict teachers’ praise of students’ efforts.

4. Participating in afterschool/summer outreach programs can statistically significantly predict if students feel put down by teachers.

5. Participating in afterschool/summer outreach programs can statistically significantly predict if someone tried to sell students drugs at school.

6. Participating in afterschool/summer outreach programs can statistically significantly predict how many times students get in trouble.
7. Participating in afterschool/summer outreach programs can statistically significantly predict how many times students are placed on in-school suspension?

8. Participating in afterschool/summer outreach programs can statistically significantly predict how many times students are suspended or put on probation.

9. Participating in afterschool/summer outreach programs can statistically significantly predict how much students like school.

10. Participating in afterschool/summer outreach programs can statistically significantly predict how important grades are to students.

The variables used in this study as well as the coding used to flag the responses of administrators and students are noted in Appendix A. Uppercase BYS reflect student responses and uppercase BYA reflect administrator responses. Alpha-numeric designations indicate the subquestions analyzed. The questions and subquestions disaggregated by students and administrators reveal perceptions of each respective group. Chapters four and five will discuss findings and implications for policy and budgetary decisions as they relate to afterschool and other prevention and intervention programs.
CHAPTER IV

ANALYSIS OF DATA

Introduction

The headings in chapter four are the: (a) introduction (b) data preparation, (c) description of sample, and (d) analysis of data. The chapter will describe how NCES prepared the data from the Educational Longitudinal Study (ELS):2002 for public use and how the data is used in the current study. The results are presented under the analysis of data.

Data Preparation

The National Center for Educational Statistics (NCES) implemented quality assurance (QA) checks at every step of the data preparation process. During the first year of the field test, NCES sought endorsements from organizations thought to have influence to move the project forward. The list of organizations included, the American Association of School Administrators, American Association of Librarians, American Federation of Teachers, National Catholic Educators Association, Council of Chief State Officers, PTAs, and other groups (ELS:2002 Data File User’s Manual, 2004).

The precollection data process began with school recruitment. The Chief State School Officers (CSSO) were contacted to obtain state-level approval. All 50 states gave NCES approval to proceed with conducting the ELS:2002 study. Once NCES received state level approvals, information packets were sent to school districts and dioceses. Eighty six percent of the school districts contacted

Local schools identified school coordinators to facilitate the survey process. Survey Administrators (SAs) employed by the NCES met with school coordinators to explain every aspect of the process from student selection to data collection to follow up requirements. SAs distributed school notebooks and all required information to coordinators. Schools were contacted in the fall of 2001. Student data collection began January 21, 2002. To communicate with parents, information was translated into Spanish, Mandarin, Vietnamese, Korean, and Tagalog. Information was sent out to parents of participating youth in the language specified by local schools (ELS:2002 Data File User's Manual, 2004).

Three days before the survey day, post cards were sent to school coordinators to remind them of needed preparation. On the survey day, SAs checked school rosters to ensure that only students who had proper authorization were participating in the survey. Permission slips were collected if local schools required active parent permission. SAs and Survey Administrator Assistants (SAAs) administered the student surveys in a group setting. SAAs contacted students who were absent on the survey day and setup a computer assisted telephone interview (CATI). Once they collected the surveys, they checked for accuracy and completion. SAAs tried to resolve all conflicts before dispatching surveys. Once they completed this process, surveys were batched and submitted to the Research Triangle Institute (RTI).
A different approach was used to secure surveys from administrators. From previous studies conducted in schools, NCES realized the demands placed upon principals, and therefore, principals could designate someone else within the school to complete the first five sections of the survey. Principals were only required to complete the last section of the survey on governance and school climate. When SAs made school visits, they followed up with principals encouraging them to complete and to return their surveys in the self-addressed stamped envelopes (ELS:2002 Data File User's Manual, 2004).

Student surveys were sent directly to the Triangle Research Institute (TRI) for data analysis. Student and school files were merged by their school identification number (SCH_ID), which ranged from 1011-4612 as denoted in Appendix I. Data were analyzed from one school or a cluster of schools based upon how the schools were stratified.

The NCES contracted with TRI because of its experience in the field of research. TRI has a record of success, which spans four decades. TRI's "mission is to improve the human condition through the cutting edge and analysis in health, drug recovery and development, the environment, education and training, economic and social development, advanced technology, and international development" (Triangle Research Institute, About RTI, 2006 p. 1). TRI employs over 2500 researchers and staff members who serve in over 30 countries. TRI was involved in every phase of the ELS:2002 study, from planning to sampling, and from data preparation to analysis and reporting (Triangle Research Institute, About RTI, 2006).
Description of Sample

The sample consisted of responses from 15,362 10th grade students, 752 schools, and 743 administrators. The racial breakdown for students is 57% White, 15% African American, 13% Hispanic American, 9.5% Asian American, 4.8 % Multiracial, and .9% American Indian. All 10th graders entered the study during the base year.

Analysis of Data

Ten research questions were analyzed in the current study. The researcher conducted a cross sectional analysis of the data. A simple linear regression test was used to analyze the data using the SPSS 13.0 software package. The independent variable was the percentage of 10th grade students participating in afterschool/summer outreach programs. Hypotheses were accepted at p < .05. Eight hypotheses were rejected and two were not accepted. The results of the research findings are as follows:

Research Question 1

Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict how well students get along with teachers?

Results

The hypothesis –participating in afterschool/summer outreach programs can statistically significantly predict how well students get along with teachers was rejected. Simple linear regression was not significant with F(1,14660) = .312, p = .576. The results did not show a relationship between how well
students got along with teachers and participation in afterschool/summer outreach programs.

Research Question 2

Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict teachers' interest in students?

Results

The hypothesis – participating in afterschool/summer outreach programs can statistically significantly predict teachers' interest in students was rejected. Simple linear regression was not significant with $F(1, 14404) = .873 \ p = .350$.

Research Question 3

Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict the teachers' praise of students' efforts?

Results

The hypothesis – participating in afterschool/summer outreach programs can statistically significantly predict the teachers' praise of students' efforts was not rejected. Simple linear regression was significant with $F(1, 14550) = 6.914, \ p = .009$.

Research Question 4

Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict if students feel put down by teachers.
Results

The hypothesis –participating in afterschool/summer outreach programs can statistically significantly predict if students feel put down by teachers was rejected. Simple linear regression was not significant with $F(1, 14590) = .207$, $p = .649$.

Research Question 5

Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict if someone tried to sell students drugs at school?

Results

The hypothesis –participating in afterschool/summer outreach programs can statistically significantly predict if someone tried to sell students drugs was rejected. Simple linear regression was not significant with $F(1, 14657) = .767$, $p = .381$.

Research Question 6

Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict how many times students get in trouble?

Results

The hypothesis –participating in afterschool/summer outreach programs can statistically significantly predict how many times students get in trouble was rejected. Simple linear regression was not significant with $F(1, 14580) = 234$, $p = .629$. 

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Research Question 7

Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict how many times students are placed on in-school suspension?

Results

The hypothesis – participating in afterschool/summer outreach programs can statistically significantly predict how many times students are placed on in-school suspension was rejected. Simple linear regression was not significant with $F(1, 14627) = .097, \ p = .755$.

Research Question 8

Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict how many times students are suspended or put on probation?

Results

The hypothesis – participating in afterschool/summer outreach programs can statistically significantly predict how many times students are suspended or put on probation was not rejected. It was not rejected but it is borderline. Simple linear regression was borderline significant with $F(1, 14583) = .626, \ p = .057$.

Research Question 9

Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict how much students like school?
Results

The hypothesis – participating in afterschool/summer outreach programs can statistically significantly predict how much students like school was rejected. Simple linear regression was not significant with $F(1, 14799) = .379, \ p = .538$.

Research Question 10

Can the percentage of 10th grade students participating in afterschool/summer outreach programs statistically significantly predict how important grades are to students?

Results

The hypothesis – participating in afterschool/summer outreach programs can statistically significantly predict how important grades are to students was rejected. Simple linear regression was not significant with $F(1, 15084) = .387, \ p = .534$. 

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### Table I

**Regression Table**

*Summary of After-school/Summer programs Regression Analysis for variables predicting student improvements*

<table>
<thead>
<tr>
<th>Research Questions (RQ)</th>
<th>B</th>
<th>SE</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ1 How well got along w/ teachers</td>
<td>.001</td>
<td>.002</td>
<td>.005</td>
</tr>
<tr>
<td>BYS20A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RQ2 Teachers interested in students</td>
<td>.002</td>
<td>.002</td>
<td>.008</td>
</tr>
<tr>
<td>BYS20F</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>RQ3 Teachers praise students' efforts</td>
<td>.006</td>
<td>.002</td>
<td>.022*</td>
</tr>
<tr>
<td>BYS20G</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RQ4 Students feel put down by teacher</td>
<td>-.001</td>
<td>.002</td>
<td>-.004</td>
</tr>
<tr>
<td>BYS20H</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RQ5 Someone tried to sell me drugs</td>
<td>-.001</td>
<td>.003</td>
<td>-.004</td>
</tr>
<tr>
<td>BYS22B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RQ6 How many times in trouble</td>
<td>.000</td>
<td>.001</td>
<td>.003*</td>
</tr>
<tr>
<td>BYS24D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RQ7 Times put in-school suspension</td>
<td>-.002</td>
<td>.001</td>
<td>-.016</td>
</tr>
<tr>
<td>BYS24E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RQ8 Times suspended or on probation</td>
<td>-.001</td>
<td>.002</td>
<td>-.005</td>
</tr>
<tr>
<td>BYS24F</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>RQ9 How much does student like school</td>
<td>-.002</td>
<td>.002</td>
<td>-.007</td>
</tr>
<tr>
<td>BYS28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RQ10 How important are grades to student</td>
<td>-.001</td>
<td>.002</td>
<td>-.005</td>
</tr>
<tr>
<td>BYS37</td>
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</tbody>
</table>

*variables significant at p ≤ .05*
CHAPTER V
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The dissertation investigated if participation in afterschool/summer outreach programs could predict students’ perceptions of teachers, drug availability on campus, student misbehaviors and punishments, and attitudes toward school and grades. Chapter V will present the results of the findings. The chapter headings include: (a) introduction (b) summary, (c) limitations (d) conclusions, and (e) recommendations.

Summary

Do prevention programs and intervention programs work? In other words are programs designed to address a particular problem successful in finding answers or solutions to the problems? What kinds of prevention and intervention programs are found to be successful? What are components of effective programs? Can participation in afterschool/summer enrichment programs predict: (a) how students feel about teachers, (b) how much trouble students get into, (c) if someone tries to sell students drugs at school, (d) how much importance students place on school, and (e) how much importance students place on grades? Research since the mid 80s of Bernard (1987), Brook et al. (1989), and Coie and Kumperschnidt (1983) has provided promising answers to these questions. The study examined the effectiveness of afterschool/summer outreach programs to predict positive outcomes for sophomores in 752 schools across the United
States. The review of the literature was examined to take a more in-depth look into the field of prevention studies.

Many researchers found positive changes in youth based upon the implementation of prevention and intervention programs. The research revealed the field of prevention, moved from individual-focused, short-term, one shot, interventions in schools to a growing awareness and implementation of long-term, research-based programs and approaches. The programs found to be effective were comprehensive and environmentally focused. They expanded beyond the school to include the community. If all students are expected to learn, different strategies and alternative approaches must be employed in order for this to become reality.

The implementation of afterschool programs is just one approach the Clinton and Bush administrations supported in their efforts to increase student achievement and create safe and drug-free schools. Within the last 10 years, afterschool programs, once utilized primarily for athletic training, band practice, or detention for misbehaving students have emerged as a preventive intervention to improve academic performance and create safe and drug-free school environments.

Most parents need and want a safe place for their children between the hours of 3 p.m. to 6 p.m. There are very few afterschool programs for children once they leave elementary school (After-School Programs, 2000). According to After-School Programs (2000), in 1999, there were more than 15 million children who were unsupervised during the hours of 3:00 p.m. to 8:00 p.m and the crime
rate tripled during this period of time. Black (2003) and Forum for Youth Investment (2004) reported that these problems still existed. Quality structured programs are still needed (Bartko & Eccles, 2003).

Conclusions

The research questions are identified by RQ and the corresponding number. There were ten research questions. Research questions three and eight were found to be statistically significant. Teachers' praise of students and students suspended or placed on probation could be predicted by participation in afterschool/summer outreach programs. No other questions were found to be significant at $p < .05$.

**RQ1:** There was no statistical significance found in participating in afterschool/summer outreach programs on how well students got along with teachers. These findings were supported by the first year evaluation on the 21st Century Community Learning Centers (CCLC) (*When Schools Stay Open Late*, 2003). The results on the 21st CCLC study found no difference in attitudes of participating students on how well students got along with teachers compared to nonparticipants. Yet, the finding revealed students valued their teachers. In several other studies, participation in afterschool programs was found to make a positive difference in how well students got along with teachers (*School Governance & Leadership*, 2005; *Afterschool Alliance*, 2004; *Forum for Youth Investment*, 2004).

**RQ2:** Participation in afterschool/summer outreach programs did not predict teachers' interest in students as hypothesized. Related research findings
on teachers and high expectancy theories are not consistent with these findings (Nodding, 1988, Haggerty et al., 2004). Researchers found when teachers express care and concern toward students; this buffered students from risky behaviors such as drug use, teen pregnancy, and violence. In several research studies when teachers hold high expectations and show care and concern, students perform better in school and this caring attitude serves as a protective factor against risks factors i.e., alcohol and other drugs (AOD) violence, and school failure (Nodding, 1988, Haggerty et al., 2004).

RQ3: There was statistical significance found between students who participated in afterschool/summer outreach programs and their attitudes regarding teachers' praise of them. As supported by Nodding (1988), CASEL (2002), and Cross (2005), teachers' attitudes toward students do matter. Feeling praised by teachers may cause students to love school as reported by students who participated in the project Students as Allies in Improving Their School (2004). One student went on to say, "You love school when it makes you feel smart. When you know the teachers care about you and your future, when they act like they think you'll be someone in life" (Students as Allies in Improving Their Schools, 2004 p. 1). Also, praise from one or two teachers may outweigh negative feelings from teachers who students do not get along with or teachers who do not show interest in them.

Research findings from CASEL (2002), reported that when students feel teachers care about them, they feel more bonded to school. And when students feel bonded to school, they perform better academically, behaviorally, and
socially (CASEL, 2002; Fleming et al., 2005; Houglund & Leadbeater, 2004).

Dworkin, Larson, and Hansen (2003) found participation in afterschool/summer outreach programs does affect attitudinal changes among students regarding how they feel about teachers and how they relate to teachers. These findings are further supported by the research findings conducted by the Social Development Strategies Group (SDRG) and the research conducted on social emotional learning (CASEL, 2002; Hawkins, 2005, Catalano, 2005).

**RQ4:** There was no significance found in participation in afterschool programs and how students felt about being put down by the teacher. Yet, according to Klem and Connell (2004), student-teacher relationships matter to students. Cross, (2005) in her study reported 73% of the students wanted to feel safe from embarrassment by teachers.

**RQ5:** There was no significance found in participation in afterschool/summer outreach programs and someone trying to sell students drugs at school. The preliminary findings from the *When Schools Stay Open Late* (2003) study reported similar findings. They also reported there was no significance found in students' responses to negative behaviors among the treatment group and the comparison group. Fleming et al. (2005), Baumrind (1985), Hawkins and Weis (1985), and Peterson (2005), presented findings in their studies which revealed these type programs helped students develop refusal skills to say no to drug use – even the sell of drugs.

In the current study, the researcher wanted to find out if alcohol use would impact participation in afterschool/summer outreach programs. However,
researchers of the ELS:2002 study could not ask students directly, if they used alcohol or other drugs (ELS:2002). RQ5 was pertinent to determine to what extent students might be exposed to illegal drugs. If they were offered to purchase drugs, could it be at a community-based afterschool hours program? Midnight basketball programs, is an afterschool hours program offered to youth on weekends in many cities.

The intervention designed to keep students off the streets on weekends has been criticized as a program yielding more bad results than good ones. Bayne (1994) reported that these programs gave drug dealers more visibility and made them easy to access since drug deals could be organized at these locations. However, others reported a reduction in crime and violence as a result of Midnight Basketball programs. (Midnight Basketball and More Program, 2001). For future studies NCES, should clarify what is meant by afterschool/summer outreach programs because one might consider Midnight Basket as an afterschool or summer outreach program – unless the intent of the study is to allow students to categorize their out of school experiences in such a broad perspective. If this is the intent, this fact should be clarified. The researcher could also ask other questions to discern the availability of drug use at school. If someone wanted to purchase drugs, where is the most likely place for them to go? Do you have drug using friends at school - in the community? Do you believe drug use is a problem at your school? Are there drug prevention programs in your school? These are just a few questions that could be added to the survey to
examine if students perceive there is a problem of drug use at school or within the community.

Studies conducted by researchers affiliated with the SDRG found afterschool/summer outreach programs can serve as buffers to protect students against engaging in drug use (Hawkins, 2005). Fleming et al. (2005), Baumrind (1985), Hawkins and Weis (1985), Peterson (2005) and other researchers found well-planned and well-developed afterschool/summer outreach programs serve as predictors to ward off drug use. These programs can also serve as protective factors to predict the likelihood that students will not sell drugs (Elliott, 1985; Haggerty et al., 2004).

**RQ6:** Research findings from the Afterschool Alliance (2005) reported findings to support the benefits of afterschool programs keeping students out of trouble. Peterson (2005) also reported on findings which revealed the effectiveness of afterschool programs in predicting whether students got in trouble in school and in the community. Yet, the findings in this study are supported by the *When Schools Stay Open Late* (2003) study of 21st Century Community Learning Centers.

**RQ 7:** The study did not show any significance in the number of times students were placed on in-school suspension. These findings were supported by *When Schools Stay Open Late* (2003). Yet, Peterson (2005) presented several findings which showed a positive correlation between participation in afterschool programs and staying out of trouble. The findings from Peterson...
revealed participation in quality well-planned afterschool programs can predict if students are placed on in-school suspension.

RQ 8: The study revealed there was significance in how many times a student was suspended or put on probation. This finding supports earlier studies on the relationship between afterschool programs and suspensions (Arthur et al., 2002; Catalano, 2005; Fleming et al., 2005; Forum for Youth Investment, 2004). These studies found participation in well-planned quality afterschool programs buffer students against problem behaviors. One might conclude that if students are not getting in trouble, then they will not be suspended.

RQ 9 referred to whether afterschool/summer programs could statistically significantly predict how much students like school. It was not found to be statistically significantly. The results supported the findings from the When Schools Stay Open Late (2003) study of 21st Century Community Learning Centers afterschool programs that participation in afterschool programs did not impact students’ attitudes toward school. The When Schools Stay Open Late study revealed no significant impact in attitudes of students who participated in the afterschool program when compared to the comparison group. However, research conducted by CASEL (2002), Afterschool Alliance (2004), and Miller (2003) found significance in attitudes of students who participated afterschool programs. The attitudes ranged from students feeling more bonded to schools to students performing better academically. Students who felt more bonded to schools were at less of a risk to engage in risky behaviors. In addition, this
feeling of being bonded to school was found to have a positive impact on their opinions, attitudes, and behavior.

RQ 10 referred to whether afterschool/summer programs could statistically significantly predict how important grades were to students. This research question did not show significance. Again, the results supported the findings from When Schools Stay Open Late (2003) study. And yet, there are numerous studies which showed a positive correlation between students' attitudes toward grades and participation in afterschool programs (After-school Program, 2000; Miller, 2003; School Governance & Leadership, 2005 and Forum for Youth Investment, 2004).

Limitations

The study was limited because only percentages of 10th grade students involved in afterschool/summer outreach programs were reported by principals. Students did not self report if they participated in afterschool/summer outreach programs. Student participants were limited to (a) second-semester 10th graders, (b) English proficient students based upon the judgment of the local school administrator, (c) students in special education (not restricted by their IEP from taking standardized tests), and (d) students whose parents gave them permission to participate.

The study is ex post facto in nature. Wiersma (1995) referred to ex post facto, as something that is done afterwards, in natural settings. In ex post facto research, variables are studied in retrospect—in search of possible relationships and effects. There were no variables deliberately manipulated by the researcher.
in this study. "An investigator of an ex post facto field study normally manipulates no independent variables but studies attitudes, values, and perceptions of individuals and groups in the situation he/she has chosen" (p. 171). According to Kerlinger (1973), the weaknesses lie in the character of the field study because the researcher lacks control over the sample chosen and it limits the conclusions that can be drawn from the study.

Many of the questions were ambiguous and could be interpreted in several ways. BY20A: Students' responses were based upon if they got along with teachers, in general. NCES did not define what is meant by "getting along with teachers" (ELS:2002). Does getting along with teachers mean (a) student likes teachers, (b) the student doesn't get in trouble in class, (c) teachers don't have problems with student, (d) getting along with current teachers in 10th grade, or previous teachers dating back to kindergarten, or (e) any or all of the statements above? This question lends itself to many different interpretations.

Question BYS20F asked if teachers are interested in students. This question did not ask "is your teacher interested in you" but if teachers are interested in students in general. A student could feel the teacher is interested in him/her but not in other students. Question BY20H asked, "do you feel put down by teachers." Feeling put down is a phrase which can also be interpreted in several different ways and therefore responses would vary based upon how students interpret the phrase (Nodding, 1988; CASEL, 2002). Question BY22B was also ambiguous – has someone tried to sell you drugs at school? It was not clear if “at school” referred to (a) during school hours, (b) after school hours, or at
(c) at school sponsored parties. Different interventions would be implemented depending on the extent of the problem and where it took place. Lastly, question BY24D – I got in trouble for not following school rules. “Getting in trouble” can be viewed as minor infractions related to bringing paper, pencil, or books to class or behavioral infractions, which could include tardiness, truancy, talking back, or fighting. These limitations need to be considered when drawing conclusions from the findings.

Administrators were asked on question BYA14K to report on the percent of 10th graders participating in afterschool/summer outreach programs. However, there was no description on the type of afterschool program reported by principals. Therefore, it would be difficult to duplicate programs which yielded positive results or modify programs which needed improvements.

Recommendations

The researcher recommends to NCES the following:

1) Modify instrument – make it shorter than 200 questions and change the wording on questions which may be considered ambiguous to students as discussed under limitations.

2) Provide more instructions on the instruments to clarify the questions.

3) Ask separate questions regarding participation in afterschool programs, summer programs and outreach programs.

4) Ask teachers, students, and parents about student participation in afterschool programs.
5) Expand the sample size to include other grades at least 9th & 11th for high school, and add middle school-age students.

The researcher recommends local school districts employ best practices as reported by the American Association of School Administrators (AASA) in their fall 2005 issue of *School Governance & Leadership*.

1) Superintendents should (a) set the vision for afterschool programs within the district and hire a district level staff person to oversee programs, (b) commit to afterschool programs and become lead the charge to ensure adequate resources are allocated to sustain afterschool programs, (c) set clear reporting guidelines and accountability for afterschool programs, (d) advocate for afterschool programs, and (e) connect afterschool program to regular school programs by tying it to systems' goals and objectives (*School Governance & Leadership*, 2005). The superintendent should ensure ongoing evaluation of afterschool programs takes place at every level from process to outcome (Miller, 2003; *Afterschool Alliance*, 2004).

2) Building principals should (a) hire qualified project director to oversee program at the local site, (b) be involved in hiring staff to work with afterschool program, (c) advocate for afterschool programs, and (d) connect afterschool program to regular school programs by tying it to local school’s goals and objectives (*School Governance & Leadership*, 2005). The principal should ensure that ongoing
evaluation of afterschool programs takes place at every level from process to outcome (Miller, 2003; Afterschool Alliance, 2004).

3) Program Directors should (a) collaborate with principal to hire quality staff to work with afterschool programs, (b) collaborate with and report frequently to local staff and central office personnel on progress and needs of program, (c) seek support from students, parents and businesses to sustain program, (d) keep building level principal informed of progress and needs of program, and (e) serve as cheerleader and advocate for afterschool programs (School Governance & Leadership, 2005). Project directors should ensure ongoing evaluation of programs and report findings to all stakeholders – students, parents, school staff, community and business leaders, and central office staff (Miller, 2003; Afterschool Alliance, 2004).

School leaders must be aware of barriers which impede the successful implementation of afterschool programs. School Governance & Leadership (2005) reported on many of the barriers to implementing afterschool programs which ranged from (a) lack of funding, (b) staffing, (c) district bureaucracy, and (d) sustainability if program is grant funded. However, if local school districts want to implement quality afterschool programs, they must also know how to overcome those barriers. Many school leaders found implementing afterschool programs to be worth the time, money, and most importantly beneficial to students. According to School Governance & Leadership (2005), common components of successful afterschool programs were as follows:
1) Superintendents were visible.

2) Central office staff and local principals were knowledgeable of superintendents' commitment to afterschool programs.

3) Superintendent employed an afterschool director and the role of the afterschool director was clearly defined.

4) Afterschool director was "district savvy."

5) Afterschool personnel in local schools were well-qualified.

6) Afterschool staff were paid adequately which lessened turnover.

7) Clear and consistent communication was established from central office to local schools and vice versa.

8) Participation was encouraged from teachers and other instructional staff, as well from community leaders.

9) Afterschool programs included an academic focus and include youth enrichment and development activities.

10) Creative strategies were devised for continuation of programs, such as merging several funding streams together.

In addition to implementing afterschool programs, school districts may want to consider examining their current extra-curricular activities. The Afterschool Alliance (2004) cited numerous studies conducted on the benefits of student participation in extra-curricular activities. Matthews (2001), reported that
"extracurricular activities, such as sports, drama, music, scouting, dance, and various clubs, are an important part of the educational experience of many students. Most studies find that children who participate in these activities are more successful academically than those who don't" (p. 1). Moore (2002) found participation in extra-curricular activities to be a predictor of student absenteeism and therefore, recommended that administrators find ways to involve more students in extra-curricular activities. Expanding student participation in already established extra-curricular activities may not require additional funding. At a minimum, all personnel and volunteers should be trained so they exhibit at all times (a) care and concern for all participants, (b) set high expectations for students to achieve, and (c) provide students with an opportunity for active involvement and recognition (Catalano, 2005; Hawkins, 2005).

Evaluation - Key to Prevention

The researcher recommends schools implement ongoing evaluation for all afterschool programs. The key to the effectiveness of any educational program lies in its evaluation component. Prevention is no different. In fact, it becomes even more important because there are no standardized tests used to assess the effectiveness. Evaluation is critical to the prevention efforts of practitioners in the field (Afterschool Alliance, 2004; Brown, McComb, Scott-Little, 2003; Miller, 2003; Muraskin, 1993). The process should be ongoing throughout various stages of the program. Muraskin (1993) stated evaluation must be included during the (a) planning phase, (b) implementation phase, and (c) completion phase of any prevention program. All parties affected by the prevention should
be included in the planning process. Evaluation will assist schools know if programs should be continued and if additional funding is needed for future efforts.

The review of literature revealed no easy answers or quick fixes to solve problems in the field of prevention and intervention studies. Just because the prevention worked once, the same approach may not work with a different group the next time. It was made quite clear by researchers – no one agency or environment (home, school, or community) can be successful in isolation (Hawkins & Weis, 1985; Arthur et al., 2002; Fleming, 2005). When one environment fails to provide adequate support, other environments must fill in the gaps as best as possible. For instance, if the major risk for the child is in the home, protective factors need to come from the school or community environments. Just as, when a child's major risks come from the community (children living in poverty as over one-fourth of the children in the United States now do); protective factors must come from the family and school systems. As in the study, praise by teachers was found to be significant. If praise is missing in the home, the school could serve as the missing link to provide students with encouragement which is vital to a child's growth and development (Nodding, 1988). School leaders may want to take a closer look into whether teachers foster praising children in their classrooms – not just in afterschool programs.

A multitude of agencies and entities within society must come together to find answers to reduce risk factors threatening the safety and well being of children (Turnbaugh-Lockwood, 2003). The first, of course, is the home. Next,
the religious community, governments at all levels, businesses, communities, and of course schools, must all play active roles and do their parts to solve problems threatening the growth and development of youth. Risk factors, such as, school failure, drug use, and violence cripple the abilities of homes, schools, and communities to raise healthy and productive children. To be successful, all entities must identify and increase protective factors and build upon the strengths within these environments – the home, school, community. If at first the efforts or programs are not successful, try again and again and again.

Evaluation is needed at every level from the process level to outcome and impact. Muraskin (1993) defined evaluation as the "systematic collection and analysis of data needed to make decisions, a process in which most well-run programs engage from the outset" (p. 2). Muraskin listed three basic types of evaluations. First, there is the process evaluation, which assesses program materials and activities. Did you use the materials or engage in the activities designed in the project? Second, there is the outcome evaluation component, which assesses the immediate or direct effects of the program. Can participants demonstrate skills based on activities? And third, impact evaluation assesses long-term results or unexpected results, such as longitudinal studies (e.g. Headstart). Does the program have a long-term impact? Do alcohol and other drug (AOD) abuse prevention programs work? This question, asked by Federal, State, and local government funding agencies; concerned citizens; and prevention community, can be answered only after results from systematic outcome evaluations are examined.
Questions such as: (a) Did I prevent what I was trying to prevent?; (b) Was the intervention successful?; (b) How do I know the prevention/intervention contributed to the outcome?; (c) If I did not meet with success, were the attempts made futile?; d) If not successful, does the program need to be modified or abolished?; must be answered after the evaluation of the program is applied (Muraskin, 1993). In his handbook, Measurements in Prevention, Muraskin (1993) listed five basic steps needed to ensure that the evaluation will be conducted according to program needs and requirements. The steps are as follows:

1) Develop a logic model: Determine indicators for the program’s success, reviewing measurement issues and identifying the programs measurement issues.

2) Develop evaluation plan: Decide level of measurement, type of evaluation and preliminary measurement model.

3) Select instrument(s): Locate and list possible instruments, choose the most appropriate instrument and design or order the instrument(s).

4) Pilot test instruments: Develop informed consent forms, revise tests and determine any gaps in measurement model.

5) Develop test batteries: Develop complete test batteries (pretest, posttest, and follow-up), pilot test and revise, implement pretesting on program participants (Kumpfer, Shur, Ross, Bunnell, Librett & Millward, 1993, p. 4).
What works in preventing problem behavior and what does not? There were guidelines that most of the researchers supported. Implementers of quality afterschool programs should also use these guidelines to implement programs. They were as follows: (a) do not fall into the pathology paradigm of blaming the victim with its concomitant focus on fixing kids, (b) know that personality and individual outcomes are the result of a transactional process with one's environment, and (c) focus on enhancing and creating protective factors within families, schools, and communities that, in turn, reinforce positive behaviors. If risk factors can be reduced and protective factors can be increased, AOD and violent behaviors will be tremendously reduced (Bernard, 1991).

In conclusion, there are no easy answers to reduce or resolve problem behaviors which impact the learning environments in schools. However, based upon the research over the past 30 years, prevention studies revealed what works and what does not. If school districts follow best practices in the planning, implementation, and evaluation of afterschool programs and services, then they could begin to see positive results in the areas of increased academic performance and a reduction of drug use, violence, and other problem behaviors.

The need for increased opportunities for children to learn and develop in safe and drug-free environments outside of regular school hours is clear. Lacking constructive activities after school, children are vulnerable to drug use and gang involvement. In communities without libraries, many children do not have access to books, computers, and other informational resources needed to succeed in school. Children may also need access to adults who can help with challenging
homework. If students cannot access these resources, some of these students may not learn the skills needed to become productive citizens.

Future implications of the study:

The study will provide data for lawmakers, educators, and parents to further the advance of afterschool programs. Although the results of this study only found two of the 10 hypotheses statistically significant, the importance of afterschool programs should not be discounted due to the plethora of resources which support their significance. As school districts look to strategies to keep students off suspension and probation, they can look toward afterschool programs as it was should in this study to be borderline significant.

The researcher suggests that the study be replicated with student’s response serving as the independent variable instead of administrators. In addition to the recommendations made to NCES on sampling and instrumentation, the researcher recommends a pre and post test be administered to actual participants. As Peterson (2005) denoted, afterschool programs are worth the time, money, and effort because they expand the learning opportunities for students—cognitively, socially, and emotionally.
### APPENDIX A

**Variables Used to Construct Base Year Sample**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Variable Description</th>
<th>Value Labels</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>BYA14K</td>
<td>% of 10th graders in afterschool/summer outreach programs</td>
<td>None</td>
<td>0 – 100</td>
</tr>
<tr>
<td>BYS20A</td>
<td>Student gets along well w/ teachers</td>
<td>1 = SD**, 2 = D**, 3 = A**, 4 = SA**</td>
<td>1 – 4</td>
</tr>
<tr>
<td>BYS20F</td>
<td>Teachers are interested in students</td>
<td>Same as BYS20A</td>
<td></td>
</tr>
<tr>
<td>BYS20G</td>
<td>When I work hard, teachers praises my efforts</td>
<td>Same as BYS20A</td>
<td></td>
</tr>
<tr>
<td>BYS20H</td>
<td>In class, I often feel put down by teachers</td>
<td>Same as BYS20A</td>
<td></td>
</tr>
<tr>
<td>BYS22B</td>
<td>Someone offered to sell me drugs at school</td>
<td>1 = More than twice, 2 = Once or twice, 3 = Never</td>
<td></td>
</tr>
<tr>
<td>BYS24D</td>
<td>I got in trouble for not following school rules</td>
<td>1 = 10 or more, 2 = 7 to 9 times, 3 = 3 to 6 times, 4 = 1 to 2 times, 5 = Never</td>
<td>1 – 5</td>
</tr>
<tr>
<td>BYS24E</td>
<td>I was put on in school suspension</td>
<td>Same as BYS24D</td>
<td></td>
</tr>
<tr>
<td>BYS24F</td>
<td>I was suspended or put on probation</td>
<td>Same as BYS24D</td>
<td></td>
</tr>
<tr>
<td>BYS28</td>
<td>How much do you like school?</td>
<td>1 = Not at all, 2 = Somewhat, 3 = A great deal</td>
<td>1 – 3</td>
</tr>
<tr>
<td>BYS37</td>
<td>How important are grades to you?</td>
<td>1 = Not at all, 2 = Somewhat Imp.*, 3 = Important, 4 = Very Important</td>
<td>1 – 4</td>
</tr>
<tr>
<td>SEX</td>
<td>Sex of Respondents</td>
<td>1 = Male, 2 = Female</td>
<td>1 – 2</td>
</tr>
<tr>
<td>RACE</td>
<td>Respondents’ Race/Ethnicity</td>
<td>1 = White, 2 = Black, 3 = Hispanic, 4 = Asian, 5 = Native Hawaiian, 6 = American Indian</td>
<td>1 – 5</td>
</tr>
<tr>
<td>SCHID</td>
<td>School ID</td>
<td>None</td>
<td>1011-4612</td>
</tr>
</tbody>
</table>

*SD = strongly disagree; D = Disagree; A = Agree; SA = Strongly Agree; Imp = Important*
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