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The impact of a substance abuse prevention program: An evaluation

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THE IMPACT OF A SUBSTANCE ABUSE PREVENTION PROGRAM:
AN EVALUATION

by

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A dissertation submitted in partial fulfillment
of the requirements for the degree of

Doctor of Philosophy

in

Sociology

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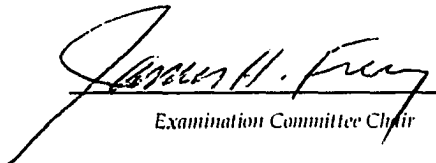
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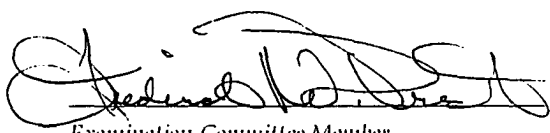
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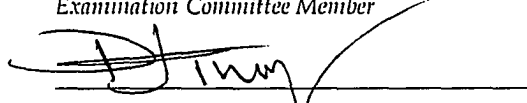
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ABSTRACT

The Impact of a Substance Abuse Prevention Program: An Evaluation

by

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This study tests the theory of risk and protective factors. The risk and protective theory suggests that substance abuse prevention programs, in order to be effective, must decrease risk factors and increase protective factors for youth. Seventeen risk and protective factors are identified in the literature and are tested in this study.

To determine the degree to which this theory applies to prevention programming, this study evaluates the effectiveness of a substance abuse prevention program entitled the National Youth Sports Program (NYSP). NYSP is a nationally sponsored summer youth and academic program that includes a prevention education component. Three hundred twenty five youth are recruited for program participation from the greater Las Vegas, Nevada area. The sample size of this study is 353 at-risk youth ages 10-16

(N=353). This five week program is held on the campus of the University of Nevada, Las Vegas and is sponsored by the College of Education.

A program evaluation was conducted on this program in 1992 and this current study replicates the earlier work. The Individual Protective Factors Index (IPFI) was used as the measuring device both in the 1992 evaluation and during this study. The research design for this study is a quasi-experimental design. Three waves, a pre-test, post-test, and three month follow-up, were conducted to measure program effects over time.

This study found that of the seventeen risk and protective factor dimensions evaluated, only one - family supervision - was statistically significant. The data suggest that significant changes in the other dimensions did not occur.

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Regardless of the distance between us, there is one person who has instilled in me the desire for higher education, Dr. Robert G. Johnson. He represents, for me, the person I would like to someday become. He is a true intellectual with the spiritual acuteness and determination not often present in a single human being. Dr. Bob has been in my life since the day I was born and through countless interactions defined my thirst for knowledge. He was and continues to be my “advisor” through my journey in life.

Finally, special thanks to Dr. Fred Springer and Joel Phillips whose prevention work I have relied heavily upon. They provided the measuring instrument used in this dissertation, the Individual Protective Factor Index (IPFI). Dr. Gary Fisher helped with countless discussions on prevention research and supplied SPSS. Finally, special thanks to the youth and staff of the NYSP who took the time to complete the survey. I appreciate the support of all these significant people.

DEDICATION

To the thousands of dedicated
prevention specialists who have given
youth the tools to celebrate a drug-free, healthy lifestyle.

CHAPTER 1

INTRODUCTION

Drug use has been a social problem throughout history. Many people think that today's drug problems are unique to this era; however, as one reads about ancient cultures, it becomes apparent that drug use has always been a part of social life. For example, the "Grecian oracles of Delphi used drugs, Homer's Cup of Helen induced sleep and provided freedom from care, and the mandrake root supplied hallucinogenic belladonna compounds" (Witters and Venturelli 1988:3). Alcohol has a long history in most cultures. For example, problem drinking was addressed in the code of Hammurabi in 2240 B.C. and was described as a problem stemming from laziness. Assyrians sucked opium lozenges and Romans ate hashish sweets almost 2000 years ago. From ancient history to the modern day, drug use has been a part of social life.

To understand more about social drug use, it is useful to ask why people use drugs for reasons other than medical. Researchers and theorists have hypothesized that the onset of drug use occurs for a number of reasons. The following list, taken from Witters and Venturelli (1988:3-5) provides a general rationale.

1. They are searching for pleasure. Drugs may make them feel good.
2. Drugs may relieve stress and tension, or provide a temporary escape.

3. Peer pressure is strong, especially for young people. The use of drugs has become a “rite of passage” in some parts of our society. Sometimes it is part of the thrill of risk taking.
4. From an early age we are “programmed”; the media tell us that drugs are a part of the technology that can help make life a little bit better. One national commission studying the drug-abuse problem estimates that by the age of 18 the average American has seen 180,000 television commercials, many of which give the impression that pleasure and relief are to be found in sources outside oneself.
5. In some cases the drugs may enhance religious or mystical experiences. A few cultures teach their children how to use specific drugs for this purpose

Research contends that “drug consumption cuts across income, social class, and age groups: drugs are as seductive to the poor as they are to the wealthy, to the highly educated and school dropouts, to the young and the old” (Witters and Venturelli 1988: 5). More recently, a sociological theoretical approach has emerged which more carefully hypothesizes youth drug use as correlating to “risk and protective factors” which exist in society. This approach stems, in part, from the work of Robert Merton, Travis Hirschi, David Hawkins, and Richard Catalano. This sociological theoretical approach of risk and protective factors will be presented and tested in this study to determine to what degree the National Youth Sports Program (NYSP) is effective at changing the factors as well as alcohol, tobacco, and other drug (ATOD) attitudes and behaviors. The main premise of the risk and protective factor approach is that substance abuse prevention programs must both increase protective factors and decrease risk factors to help youth make positive drug-free choices. It is this risk and protective factor theory that will be used to guide this study of youth drug use. This theoretical approach will be explained in greater detail in chapter two and tested in this study.

Specifically, this study will explore the effectiveness, or ineffectiveness, of a youth substance abuse prevention program called the NYSP located in Las Vegas,

Nevada and co-sponsored by the University of Nevada, Las Vegas (UNLV) College of Education. This program targets at-risk youth aged 10-16 from 27 at-risk schools, neighborhoods, and low income housing complexes in Clark County, Nevada. The term “at-risk” refers to youth who already have a number of risk factors present in their lives and may include all or several of the following items; alcohol and other drug availability, neighborhood economic deprivation, neighborhood disorganization, family drug behavior, low bonding to family, early and persistent problem behaviors, academic failure, low commitment to school, peer rejection in elementary grades, association with drug-using peers, alienation and rebelliousness, attitudes favorable to drug use, and early onset of drug use. The program participants are from all ethnic groups, although the bulk of the youth are African American. Socio-economically, most of the at-risk youth and their families meet the federal government’s low-income guidelines and qualify for free school meals.

The NYSP is a five-week primary substance abuse prevention program that combines a prevention education program component with a sports alternative activity program component for boys and girls ages 10-16 on the university campus. Three hundred twenty five students are targeted and receive transportation to and from campus for five consecutive weeks during the months of June and July with follow-up booster sessions occurring throughout the year. The prevention education aspect of NYSP includes alcohol, tobacco, and other drug abuse (ATOD) prevention programming. The ATOD program includes information on the dangers of substance use, information on goal setting which includes education and job achievement, health and nutrition

information, advanced educational exposure, community presentations from successful program graduates, conflict resolution skills, and decision making skills. The alternative activity sports program consists of both individual and team sports. Students participate in swimming, basketball, softball, tennis, soccer, volleyball, dance/aerobics, and golf. In addition NYSP participants receive at no cost (1) NYSP clothing, (2) daily USDA approved meals, (3) transportation to and from campus, (4) medical examination, (5) accident-medical insurance coverage, and (6) positive interaction with college students and staff. A critical component of NYSP, as indicated above, is sports programming. Chapter three contains a detailed discussion of the sociology of sport literature that also informs this study. A modern day assumption of many sports programs is that they positively develop character traits in youth while decreasing delinquency. This assumption will be explored in the literature review in the subsequent chapter and the discussion will determine if any significant empirical data supports this assumption..

The NYSP was selected for evaluation for several reasons. The first is that this is an established substance abuse prevention program which has been in existence for seventeen years and receives government funding from the Nevada Bureau of Alcohol and Drug Abuse, a single state agency in Nevada responsible for funding and monitoring successful drug abuse prevention programs. Secondly, this program is located on the UNLV campus and routinely conducts and is open to evaluation and scientific pursuits so has completed the Human Subjects Review process and protocols. Thirdly, the NYSP was a part of a national substance abuse prevention evaluation using the same instrument proposed in this study and has a track record for properly adhering to research protocol.

Since NYSP was involved in the original evaluation study which occurred in 1992, the program director was very interested in replicating the study to determine if his program had changed in any way since the original study.

The instrument used for evaluation is the Individual Protective Factors Index (IPFI) developed by Fred Springer and Joel Phillips of Evaluation, Management, and Training (EMT) Associates. This 144 item questionnaire (see Appendix I) has established validity and reliability. The instrument was completed by each enrolled youth three times (pre-test, post-test 1, and post-test 2) who attended the program during the survey administration. The children were divided up into age appropriate categories, for example, all the ten year olds were grouped together in one classroom as were the 11 year olds, 12 years olds, and so on. A trained facilitator read each question carefully to ensure respondent completion. Since the youth are at-risk and struggle with the written word, facilitators were trained to carefully read the directions and each question without embellishing on any words or items. A more detailed discussion is presented in chapter three.

In summary, the social problem of youth drug use is well established as a sociological area of interest. This study will evaluate the effectiveness of a social program, NYSP, to determine to what extent onset of drug use is prevented. The theoretical approach of risk and protective factors will be measured with the IPFI as the major testing device. The IPFI will measure self-reported responses to individual risk and protective factor items as well as ATOD attitudes, beliefs, and behaviors. A quasi-experimental design was selected to best determine the degree to which the NYSP

prevents substance abuse. The purpose of this replicated study is to evaluate the degree of change in three major areas; risk factors, protective factors; and ATOD attitudes and behaviors of the respondents enrolled in the NYSP.

CHAPTER 2

LITERATURE REVIEW

In many ways, American society has been and continues to be a “drugged society”. The use of both illegal and legal substances has become a core aspect of American culture. Erich Goode (1993:37) contended that “a drug is anything we call a drug”.

The term “drug” contains two morally opposing connotations, each of which relates to how the drug is used: (1) a substance used in medicine, under controlled circumstances, to help people with a medical problem; or (2) a substance used illegally under clandestine circumstance, with effect of harm either to the user and / or others. The former connotation refers to “normal” circumstance, the latter implies deviant drug use (Meier and Geis 1997:69-70).

The illegal drugs purchased and consumed by children and adults vary; marijuana, cocaine, amphetamines, barbiturates, hallucinogens, heroin, and all other narcotics. The legal drugs consumed by adults generally include alcohol, tobacco, over the counter (OTC) non-prescription drugs, and prescription drugs. Some of these drugs are legal for adult consumption but are illegal for children, for example alcohol is illegal for consumption for individuals under the age of 21 in the United States. The trafficking, sales, and consumption of drugs are a huge money making industry in America. Although costs and descriptions vary, the following account describes the cost of a single

drug, heroin, in the early 1970's from the sociological perspective of Block and Chambliss, (1981:33).

The average heroin addict in the United States in the early 1970's was spending \$30,000 a year on heroin Although this is a very high figure, it is noteworthy that it is an average based upon the fact that not all heroin addicts are "street people". Many addicts are wealthy professional and business people who no doubt pay considerably higher prices for their "shit" than do the people in the ghettos and the slums.

Accepting for the sake of argument, this average expenditure per addict enables us to also estimate the gross volume of business from heroin. If, as most experts agree, there are at least one million addicts in the United States, then this means that the annual gross sale of heroin in the United States today exceeds \$20 billion...

Drugs have been and continue to be a problem in American society. Both legal and illegal drug use negatively effects society both in terms of human tragedy and economic costs.

The remainder of this review will be divided into two main sections. First, an extended discussion of federal government and university based substance abuse prevention research and western regional drug use statistics will be presented. This will help the reader grasp the multi-disciplinary scope of current prevention research and will frame the extent of the youth drug problem in the Western United States. Secondly, a discussion on the sociology of sports will ensue to link research on youth sport programming to substance abuse prevention concepts. Specifically, the area of sports character development and its link to decreased delinquency will be explored.

Federal Government and University Based Prevention Research Review

The Center for Substance Abuse Prevention (CSAP) and the National Institute on Drug Abuse (NIDA) are two federal government agencies providing oversight in the area

of substance abuse prevention. CSAP and NIDA determined that the most promising strategies for preventing alcohol and other drug use among adolescents were derived from a sociological approach that focused on risk and protective factors.

Investigators have also noted variability in response to risk exposure and have sought to identify protective factors that enhance the resilience of those exposed to high levels of risk and protect them from undesirable outcomes. Three broad categories of protective factors against stress in children have been identified: (1) individual characteristics, including resilient temperament, positive social orientation, and intelligence; (2) family cohesion and warmth or bonding during childhood; and (3) external social supports that reinforce the individual's competencies and commitment and provide a belief system by which to live. As distinct risk factors, protective factors are hypothesized to operate indirectly through interaction with risk factors, mediating or moderating the effects of risk exposure (Hawkins 1996: 153).

The risk and protective approach to substance abuse prevention initially stemmed from the work of Merton with significant revision. This theory, sometimes called "the social development model" incorporates the ideas of multiple sociological theorists into a single approach aimed at predicting substance abuse.

The theory outlined here is a synthesis of control theory, social learning theory, and differential association theory. Control theory is used to identify causal elements in the etiology of drug abuse and delinquency as well as in the etiology of conforming behavior. Social learning theory is used to identify processes by which patterns of conforming and antisocial behavior are extinguished or maintained. Differential association theory is used to identify parallel but separate causal paths for prosocial and antisocial processes. (Hawkins 1996:155) .

Some of the key sociological theorists specifically mentioned in the theoretical discussion advanced by Hawkins and Catalano (1996:149-197) include, Hirschi, Akers, Sutherland, Merton, Gottfredson, and Matza just to name a few of a long list of contributors.

Substance abuse prevention studies over the past two decades have tried to determine the origins of drug use. Several factors have been identified that differentiate those who use drugs from those who do not. Factors associated with greater potential for

drug use are called “risk” factors, and those associated with reduced potential for such use are called “protective” factors. The study of factors that increase the risk for using drugs or protect against drugs has identified the following primary targets for prevention programs: family relationships, peer relationships, the school environment, and the community environment. These domains can host a setting for deterring the onset of drug use through increasing social and self competency skills, adoption of prosocial attitudes and behaviors, and awareness of the harmful health, social, and psychological consequences of drug use (NIDA 1997).

David Hawkins and his colleagues at the University of Washington have developed a theory that identifies risk and protective factors associated with adolescent alcohol and other drug problems (Fisher and Harrison 1997: 328). Hawkins, Catalano, and Miller (1992:66-80) identified seventeen risk factors for drug use by youth. They include the following; 1) laws and norms (including taxation, laws regulating to whom liquor is sold, criminal laws making drugs illegal, and cultural norms), 2) availability, 3) extreme economic deprivation, 4) neighborhood disorganization, 5) physiological factors (biochemical and genetic factors), 6) family drug behavior, 7) family management practices, 8) family conflict, 9) low bonding to family, 10) early and persistent problem behaviors, 11) academic failure (including intelligence and school failure), 12) low commitment to school, 13) peer rejection in elementary grades, 14) association with drug-using peers, 15) alienation and rebelliousness, 16) attitudes favorable to drug use, and 17) early onset of drug use. The presence of multiple risk factors were hypothesized to increase the overall chance of youth substance abuse and criminal behavior.

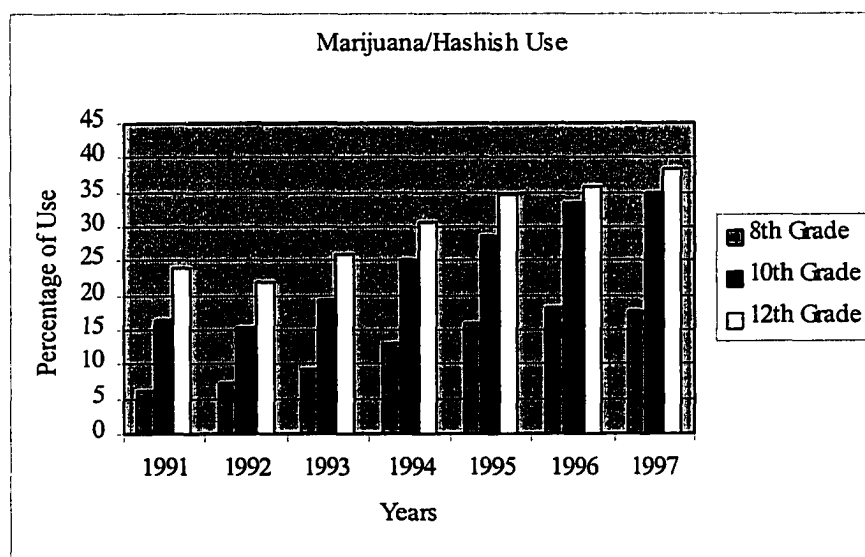
Prevention strategies derived from a risk factor approach and applied to communities have resulted in positive outcomes (Blakely et al. 1996). Although this research tradition is new and currently under development, many programs utilizing this theory have been proven effective (Developmental Research and Programs 1996). The remainder of this review is organized by the topic categories of youth illicit drug use, underage drinking, alcohol drugs and violence, and HIV/AIDS and drug use. Most current research in the field of substance abuse prevention is multi-disciplinary, although sociological thought definitely influences a great deal of the discussion. In addition, the six Center of Substance Abuse Prevention (CSAP) prevention strategies will be highlighted in the review and include the following; information dissemination, prevention education, problem identification and referral, alternative activities, community based processes, and environmental policy in prevention. This discussion follows the prevention focus of the Office of National Drug Control Policy (ONDCP) goals and those highlighted in Healthy People 2000. Each section will first provide an overview of the Western United States incidence data and will conclude with a multi-disciplinary literature review in prevention.

Youth illicit drug use (with an emphasis on marijuana)

National surveys conducted in 1995-1996 reported escalating illicit drug use by youth, (PRIDE, Monitoring the Future [MTF] and Youth Risk Behavior Surveillance System [YRBSS]). Results from these surveys showed marijuana use by youth has increased from previous years. MTF (NIDA 1997b) reported increases by eighth, tenth,

and twelfth graders in the annual prevalence rate of marijuana use. This survey also found that nearly one in twenty seniors and one in every thirty 10th graders is a daily user of marijuana. Gender differences are also present regarding marijuana use. YRBSS (CDC 1997a) found that male students were more likely than female students to report current marijuana use.

Figure 2.1. Marijuana/Hashish Use



Regionally, the 1996 MTF study showed that twelfth graders in the West had the highest prevalence rate of marijuana use in the last month, as demonstrated in figure 2.1. Daily use of marijuana by eighth graders in Hawaii was double the national average (Hawaii Department of Health 1996). Consistent with national trends, Washington, Oregon, Nevada, Montana, Wyoming, Alaska, Hawaii and Arizona surveys in the past three years have also reported increases in the use of marijuana by students.

Increasing the perception of harm by providing tobacco, alcohol, marijuana, and other information to a wide range of audiences has been scientifically demonstrated as an effective strategy. Prevention program media campaigns, literature distribution, and advanced technology based learning environments (such as the Internet) all fall within this strategy. Reynolds et al. (1997) contend that the perception that marijuana use is a low risk activity can be countered through a focused campaign, publicizing credible information about the risks.

In the field of substance abuse prevention, Kumpher (1997: 690) stated that there is “. . . an increased need for the dissemination of information on effective prevention programs”. For example, accurate information on marijuana needs to reach the current substance abuse prevention workforce. The discussion around the epidemiology of marijuana use, specifically the terms "cohort effect" and "generational forgetting" have important implications for the future (Kumpher 1997).

Drug Abuse Resistance Education (D.A.R.E) was developed as a cooperative effort by the Los Angeles Police Department in 1983 and has expanded to almost every state and territory in the United States. This program was designed to be a drug abuse prevention education program conducted by local police officers whose goal was to equip elementary school children with skills for refusing drugs and resisting peer pressure. Numerous evaluation studies have been conducted and all have demonstrated limited effectiveness. The most recent evaluation conducted on D.A.R.E. occurred in the state of Minnesota in 1997. Some key findings include “the vast majority of respondents believe that D.A.R.E. must be integrated into a more comprehensive set of prevention strategies

implemented over time in order to be effective”, “the most frequently reported benefit of D.A.R.E. is an improved relationship between police and students”, and “there are mixed perspectives on the effectiveness of D.A.R.E. in meeting its objective of preventing alcohol and other drug use” (Minnesota Institute of Public Health 1997:3-4). In summary, D.A.R.E. evaluations have demonstrated limited effectiveness in deterring youth drug use.

With regard to the prevention education strategy, the Research Triangle Institute (Silvia & Thorne 1997) recently completed a longitudinal study in selected school districts on school-based drug prevention programs. The key findings include the following: 1) Some drug prevention programs improve student outcomes, but effects are small; 2) Few schools employ program approaches that have been found effective in previous research; 3) Program delivery is variable and inconsistent; and 4) Student behaviors, beliefs, and attitudes about drugs mirror national trends. The results indicated that programs that are put into place without sound research, or without the proper assessment of the needs, have little likelihood of having a significant impact on youth.

Successful school-based prevention education programs have also been researched and implemented effectively. Botvin and colleagues (1994, 1995a, 1995b) have consistently demonstrated that the Life Skills Training program has a significant impact on decreasing tobacco, alcohol, and marijuana use with a diverse range of adolescents and produces results that are long lasting when taught by teachers, peer leaders, and health professionals. For example, The Life Skills Training universal classroom program is designed to address a wide range of risk and protective actors by

teaching general personal and social skills in combination with drug resistance skills and normative education to all types of students in a school setting. The program consists of a 3-year prevention curriculum intended for middle school or junior high students. It contains 15 periods during the first year, 10 booster sessions during the second, and 5 sessions during the third. Three major content areas are covered by the Life Skills Training program: drug resistance skills and information, self-management skills, and general social skills. This program has been extensively studied over the past 16 years. Results indicate that this prevention approach can produce 59 to 75 percent lower levels (relative to controls) of tobacco, alcohol, and marijuana use (NIDA 1997a).

Studies conducted by CSAP (1995) and others (Adams 1992; Cato 1992) have demonstrated that the alternative strategy actually promotes protective factor influences that deter drug use. Both the risk and protective factor model (Hawkins et al. 1992) and the resiliency model demonstrate that alternative activities provide a protective quality to at-risk youth throughout their development. The Western Regional Center Drug-Free Schools and Communities publications (Austin et al. 1993; Austin & Pollard 1993; Sieber & Austin 1992; Sieber & Austin 1993) all provide scientific evidence that alternative activity prevention helps children and families remain resilient throughout development. Specifically, sensitivity to culture, gender, and age remain important considerations in the successful implementation and evaluation of alternative activity programming.

The problem identification and referral strategy supports programs that focus on identification of youth that have been involved in age-inappropriate use of alcohol,

tobacco, or other drugs. Donovan (1996) described the problem-behavior theory model with regard to adolescent marijuana use. Key components include: 1) in the personality system, more frequent marijuana use is associated with lower value on academic achievement, 2) in the perceived environment system, more frequent marijuana use is associated with less perceived compatibility between parents and friends and more with friends who use alcohol or marijuana, and 3) in the behavior system, more frequent marijuana use is associated with less frequent attendance at religious services, lower school grades, greater intake of alcohol, and greater involvement in delinquent-type behavior. This has important implications for programs assessing problems and making appropriate referrals.

With regard to the community-based process strategy, Kaftarian and Hansen (1994:3) described the community partnership as a prevention program which could be "best developed, implemented, and sustained through the coordinated efforts of a partnership of key organizations serving the community". The usefulness of qualitative methods as well as some alternative and adaptive methods for evaluating community-based and multidimensional programs is suggested. Community-based demonstration programs can be seen as effective tools for the generation and dissemination of policy lessons.

Environmental approaches to substance abuse prevention often include normative social change that influences tougher laws and policies. In regard to marijuana use, Mrazek and Haggerty (1994:265) contend that "... it appears that the enhancement of social norms against tobacco, alcohol, and marijuana use in adolescence is essential to

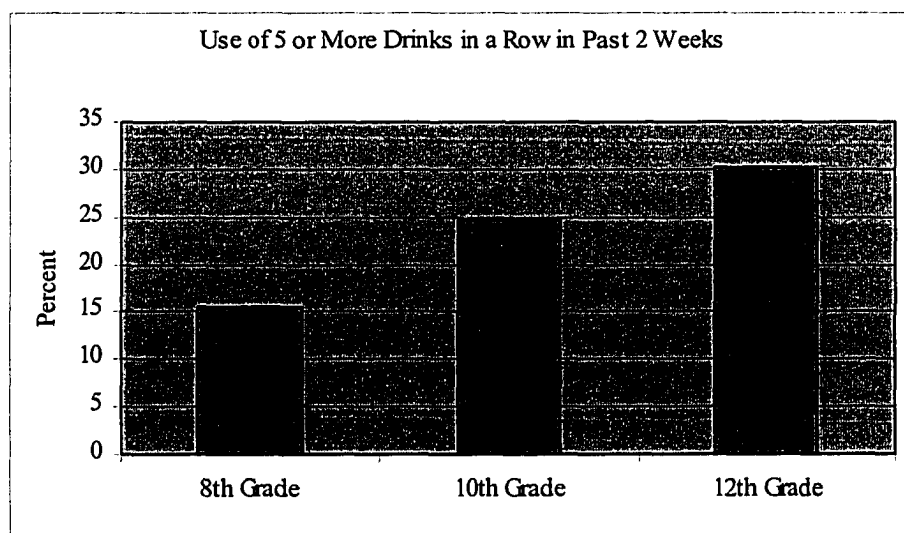
prevent the early onset of alcohol and other drug use". Social norms and policies guide human social behavior. Therefore, changing written or unwritten community standards, policies, codes, attitudes, and norms influence the incidence and prevalence of tobacco, alcohol, marijuana, and other drug use in the general population. Programs in this category will typically target legal/regulatory initiatives and/or action-oriented initiatives.

Others (CSAP 1995; Hawkins et al. 1992) argue that environmental pressures encouraging tobacco, alcohol, or other drug use are risk factors that may lead to the onset of drug use.

Underage drinking

Results from several national surveys suggest that the rates of underage drinking remain stubbornly stable. In 1996, the MTF study found that binge drinking has increased 2 to 4 percent for all three grade levels. The 1995 YRBSS reported that White and Hispanic students were significantly more likely than African-American students to have had at least one drink of alcohol during their lifetime. For young adults, alcohol use rates were also elevated. 1996 the MTF study indicated that alcohol use of five or more drinks in a row in the past two weeks was high for 8th, 10th, and 12th graders as indicated in figure 2.2. Wechsler et al.(1995) surveyed college students and found that 50 percent of the men and 39 percent of the women reported being binge drinkers. Regionally, according to the MTF study, the West reported the lowest rates of binge drinking for twelfth graders.

Figure 2.2. Recent Use of Alcohol



Many recent survey results have continued to confirm the connection between underage drinking and other high-risk behaviors. A California study (Drug Strategies, 1994) found that 15 percent of the high school dropouts reported that alcohol or other drugs affected their decision to drop out. A study performed in Washington State (Einspruch & Pollard 1993) found that high school students who worked more hours at a part-time job reported being moderate or high users of alcohol and other drugs.

A significant theme in the underage drinking literature is community-based prevention and environmental prevention programs. Succinctly, a wealth of information exists regarding the effectiveness of alcohol policies on driving under the influence for both youth and adults (Chaloupka & Wechsler 1996; Edwards 1995; Klitzner et al. 1993). A variety of research studies indicate that legislative strategies have been the most effective means to reduce underage drinking. Additional suggestions are made which

encourage policies and legislation aimed at increasing taxation on alcoholic beverages, decreasing alcohol availability to youth, and providing alternative non-alcohol activities for youth participation (Gordis 1996; Hingson 1996; Kenkel & Manning 1996; Ritzen 1995; Single 1996).

Another theme concerns the effectiveness of prevention programs and the risk/protective factors that seem to influence youth alcohol use. Specifically, a three year follow-up study found that neither comprehensive school curriculum nor community intervention was successful in preventing adolescent drinking. Predictor variables included adult role models who use alcohol primarily in the family environment (Stevens et al. 1996). However, evidence of family support as a significant role in shaping children's social behavior to use alcohol was discovered (Foxcroft & Lowe 1995). A third study found that adolescent alcohol involvement is strongly influenced by sibling environmental effects (McGue et al. 1996). These studies enhance our understanding of alcohol prevention programs and the various roles families play as both a risk and a protective factor for youth.

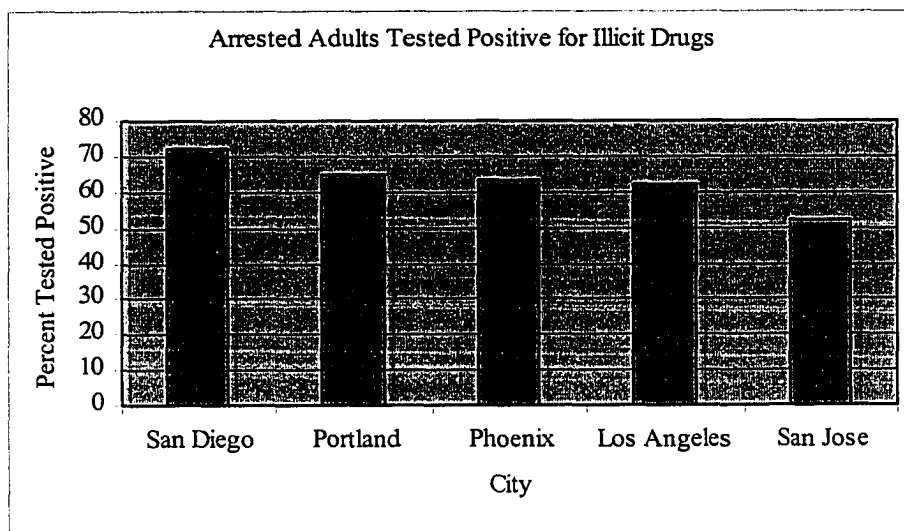
Alcohol, drugs, and violence

The connection between alcohol, drugs and violence is well established. A survey by the National Institute for Citizen Education in the Law (1995) assessed secondary students' perception of the cause of teen violence. Sixty-one percent blamed drugs. According to a 1995 study of Job Corp participants (CSAT 1996), drug/alcohol abusing youth were more than twice as likely as non-users to belong to a gang. The 1995-96

PRIDE survey (National Parents' Resources Institute for Drug Education 1997) found that drug use was more prevalent among students who carried a gun, joined a gang, and got in trouble with the police. A Washington State Survey (Einspruch & Pollard 1993) found that 60 percent of the students who reported bringing a weapon to school also reported high levels of alcohol use.

Another indicator of the link between violence, crime, and alcohol/drugs is the number of offenders who are under the influence at the time of arrest. According to the National Institute of Justice (1997), 43 percent of all juveniles arrested tested positive for an illicit drug in 1995. In the same report, arrested adults who tested positive for illicit drugs by cities in the Western Region included the following percentages: San Diego, 72 percent; Portland, 65 percent, Phoenix, 63 percent; Los Angeles, 62 percent; and San Jose, 52 percent, as demonstrated in figure 2.3.

Figure 2.3. Arrested Adults Tested Positive for Illicit Drugs



Besides youth committing more crimes, violence against teenagers has also increased. For example, five of the fifteen states with the highest violent death rate for teens are in the Western Region (Center for the Study of Social Policy 1997).

Literature stemming from the Office of Juvenile Justice and Delinquency Prevention (OJJDP 1995) subscribes to the risk and protective factor model as the primary model for delinquency prevention. This model is consistent with the CSAP prevention philosophy and is echoed through most single state alcohol and drug agencies throughout the nation. The following principles are based on findings regarding delinquency prevention (OJJDP 1995); 1) Address the highest priority problem areas and identify strengths (risk and protective factors) to which children in a particular community are exposed, 2) Focus most strongly on populations exposed to a number of risk factors, and 3) Address multiple risk factors in multiple settings such as family, schools, and peer groups. The National Institute on Justice (Rosenbaum et al. 1994) found that grassroots organizations can help protect youth by establishing drug-free school zones, drug prevention education and recreational programs, tutoring, and job training programs. Also, they suggest the improvement of the physical environment by making use of abandoned buildings as rehabilitated low-income housing or drug treatment centers.

Additionally, prevention education needs to occur in the violence/drug policy arena. Silvia and Thorne (1997) found that the use of drugs was related to violent behavior in schools. This finding suggests that prevention education programs should include some violence prevention messages as well. In regard to environmental

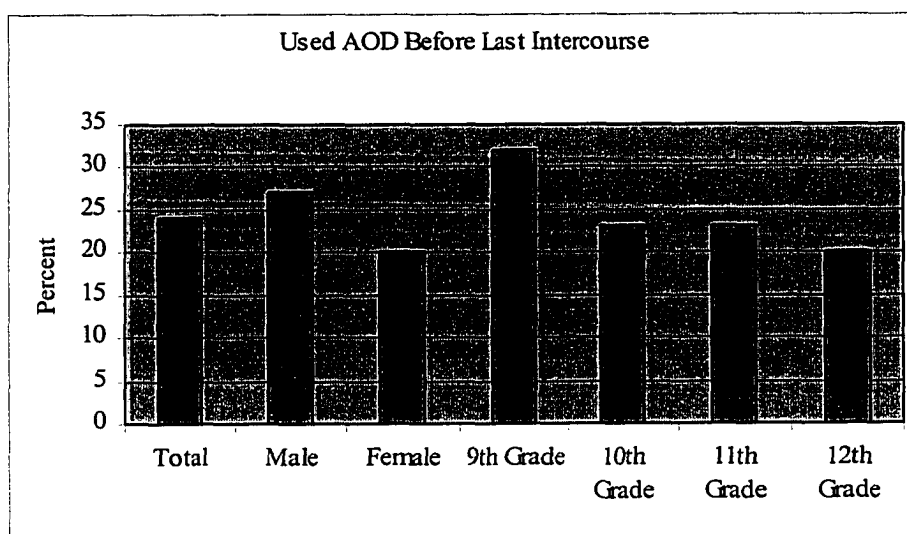
prevention programs, Ross et al. (1995) found that schools should have clear policies regarding the link between violence and drug use for each school campus. They discovered that most school districts do not have clear policies or that they fail to link them in a coherent manner.

HIV/AIDS and drug use

The link between HIV/AIDS and drug use remains indisputable. Thirty-five percent of reported AIDS cases among men and women infected heterosexually are attributable to sex with an intravenous drug user (IDU), and 45 percent of children infected perinatally were born to women who were IDUs or had sex with IDUs (Center for Disease Control [CDC], 1997b). Also, 26 percent of all newly reported AIDS cases among adults and adolescents in 1995 can be directly attributed to IDU (CDC, 1997b). A report prepared by Drug Strategies (1994) for California indicated that 20 percent of the new adult AIDS cases were drug-related. A Utah report (Research and Evaluation Program, 1996) found that HIV transmission through IDU was increasing as a percent of the total HIV infected population in the state, especially among minority racial and ethnic populations. Adolescents and young adults are especially at risk for HIV/AIDS. A report to the White House stated that half of all the new HIV infections occur among individuals 25 years old or younger and 25 percent of all new infections occur in youth 13 to 21 (Office of National Aids Policy 1996). Young gay men of color and young women are especially at increased risk. The 1995 YRBSS found that 53 percent of ninth to twelfth grade students participated in sexual intercourse with 18 percent reporting sexual

intercourse with four or more partners during their lifetime. According to YRBSS, nearly one-fourth of the sexually-active students reported that they had used alcohol or drugs during the most recent episode of sexual intercourse. Males were twice as likely to use alcohol or drugs than females during sexual intercourse. The Nevada YRBS (1995:37) study found that nearly one in four (24 percent) drank alcohol or used drugs before they had sexual intercourse the last time. Figure 2.4 demonstrates the findings measured with this question. A Washington State survey (Einspruch & Pollard 1993) found a strong relationship between students who used alcohol and drugs and participation in sexual intercourse.

Figure 2.4. Used AOD Before Last Intercourse



Primary prevention education approaches focus on impaired decision making, risky behavior, and AIDS prevention information (Docheff 1994; Goh et al. 1996; Kelly 1995; Koopman et al. 1994). In addition, Wolitski et al. (1996) and Jason et al. (1993) reviewed the literature concerning the use and effectiveness of HIV media prevention

programs.

Interestingly, studies have found that television is the most frequently cited media source for accurate information on HIV/AIDS. Other prevention efforts include HIV/AIDS guides (Freudenberg & Zimmerman 1995), curricula (Kapperman et al. 1993), findings from evaluations (NIDA 1994a), and community-based prevention programs (Freudenberg & Zimmerman 1995; NIDA 1991). Multiple prevention strategies including community-based processes, information dissemination, prevention education, and environmental are also discussed. Street outreach is a common sub-theme that runs through most discussions in this category. Emphasis is dispersed to included gender specific programming, culturally diverse and ethnic specific considerations, and visually impaired, or other disability, primary prevention considerations.

HIV/AIDS prevention also involves outreach programs that target high-risk populations in non-traditional environments including gay bars, urban prostitution areas, or high-risk neighborhoods with drug use. Triangulated methods are advocated for the evaluation of program effectiveness and arguments are made for new ways of measuring effectiveness of these outreach programs. Finally, secondary and tertiary prevention efforts involve the need for bleach contact in needle cleaning prevention programs (Adrien et al. 1990; Calsyn et al. 1992; Christensson 1991; Coutinho 1990; Mandell et al. 1994; Watters et al. 1994).

Sociology of Sports

The sociology of sports deserves mentioning in this context. Research in the

socialization of and through sport has brought forth many contradicting findings. For example, some studies indicate that involvement in sports makes participants different from those who do not participate. “There is much research that seems to show that engaging in youth sports makes participants different from nonparticipants - for example, by improving their social and psychologically adjustment, by enhancing their self-concept, and by producing culturally desirable changes” (Nixon and Frey 1996: 97). Still, other studies contend that youth sport participation has no effect or negative effect on these kinds of factors. “In fact, it is possible that the socialization effects attributed to youth sports are spurious” (Nixon and Frey 1996: 97).

Coakley (1986, 1990); Nixon and Frey (1997); and Watson (1976, 1977), contend that “the sports experience becomes especially meaningful when participants receive feedback from significant others in close, personal relationships, for instance with family members, friends, teammates, and coaches”. Perhaps it is not the sport itself that increases protective factors, but the process of positive youth interaction with significant others around the sporting process that has important implications for substance abuse prevention. It could be argued that this interaction begins the positive self-concept development advocated by Cooley and Mead. Additionally, positive interaction with significant others has been suggested to provide a protective factor against substance use and other deviant behavior in youth.

Roberts (1977a, 1977b, 1992) and Veroff, (1969) suggest that the competitive sport process, when it occurs at the appropriate developmental stage, has positive social contributions for children.

Being favorably evaluated by their peers in sporting activities is very important to young boys in particular. Indeed, it has been suggested that competence in physical skills is the major area in which young boys in our society socially compare themselves. Comparing themselves in sports is a most important source of information to children about their own relative competence and, by inference, their own self-worth (Roberts 1992:181).

The link to substance abuse alternative activity prevention is clear. When children are involved in a supervised sports program, they are engaging in a non-drug activity that promotes positive self-image. Roberts (1992) explains that age is a key variable for consideration when engaging children in competitive sports. The research demonstrates, for example, that when children are too young, they don't understand the competitive environment. Adults placing much emphasis on "wins and loses" discount the level of positive play interaction for the children. Too much emphasis on winning or losing can alienate the child and cause psychological stress.

Finally, socialization processes may be enhanced by youth sport programs. McPherson (1978) discusses the socialization of children into the sport milieu. Several links with the substance abuse prevention literature can be drawn into McPherson's discussion regarding youth socialization. Specifically, he describes role theory and reference group theory where he argues that social learning occurs via imitation and modeling of significant others. In sport programs, parents and coaches become significant others to the children participating in the activity. Thus, through imitation and modeling, children begin the learning process of social behavior. The research clearly demarcates the "double edge" effect of this modeling. When parents and coaches place too much emphasis on winning or losing or model socially deviant behavior, the children can begin imitating and modeling the undesired role as well. As mentioned above, the

findings become spurious as studies reveal contradicting information. In regard to substance abuse prevention, positive interaction with adult role models has shown some indication of acting as a protective factor for youth. For example, if a non drug using adult models drug-free behavior as being positive and fun, the children may learn the same attitude and imitate this behavior.

Character development in youth sports programming has long been considered by most Americans to occur. However, quite curiously, little empirical data exists to support this assumption (Eitzen and Sage 1997). In a popular book for parents, coaches, and athletes about youth sports, the authors lists seven character development values achieved from youth sports programs.

1. Helps a child's overall physical development.
2. Gives the child the opportunity to become familiar with his/her body and to learn the body's needs and limitation.
3. Is social as well as physical and thus teaches young athletes how to interact with his/her peers.
4. Teaches cooperation, teamwork, and how to follow rules.
5. Helps the child learn for him/herself if winning or losing is important.
6. Gives parents the opportunity of offering the child unqualified support.
7. Helps the child gain acceptance and credibility among his/her peers (Waller 1932:116).

The extent to which these above-mentioned values occur due to sports programming is largely unknown due to the lack of studies and therefore empirical data available. Some authors (Miracle and Rees 1994; Rees, Stark, Kent, and Fink 1987; and Howell and Miracle 1990) contend that character development attributes achieved through sports programming is a myth. Further, in some cases, not only does sports involvement not enhance character but can actually increase delinquency. Begg, Langley, Moffitt and Marshall (1996) found that no relationship existed between sports programming and

decrease of delinquent behavior. In fact, in some specific instances, sports actually increased juvenile delinquency for program participants. “These findings suggest that involvement in physically aggressive sports may in fact increase participation in aggressive acts, rather than function as a ‘cathartic discharge for the aggressive impulse’” (1996:336).

One study that looked at the relationship between sport participation as a “cure” for deviant behavior found some significant results. Michael Trulson (1986) conducted a study where 34 young men, aged 13 to 17 and who had been classified as delinquents were assigned to one of three treatment groups. The first group received traditional Tae Kwon Do training with philosophical lectures on building confidence, self esteem, patience, perseverance, honor, and so on. The second group received modern Tae Kwon Do training that consisted of fighting and self-defense techniques. The third group received no treatment but served as a control group for maturation, increased physical activities, and the influence of being with the instructor. They participated in a number of activities with an instructor including basketball, jogging, and football. The findings indicated clear-cut changes among the participants in the first group. After six months, they were classified as normal instead on delinquent on an MMPI psychological test. The participants in the second group, however, had higher delinquency scores indicating that they were more aggressive and less well-adjusted than when the study began. The participants in the third group showed no significant changes on their delinquency scores but self-esteem and social scores demonstrated an improvement. Overall, these findings indicate that “simply getting young people to play sports will not keep them from

engaging in deviant behavior” (Coakley 1994:149). These findings also indicate that teaching “values” during sports activities accounts for differences in the outcome of sports programs.

The literature in the area of sports sociology shows a lack of empirical evidence to support the assumption that youth sports programs actually increase positive youth character development. Clearly, more research needs to be conducted in this area to determine what relationship occurs, if any, between youth sports programming and positive youth character development and abstinence from drugs. Several studies have suggested that in some instances, sports actually increases drug use among young athletes. Some athletes view drinking beer, liquor, and using drugs as part of being a “cool” athlete. In the sports subculture, the definition of “maleness” often means engaging in risk behavior, such as using alcohol and other drugs. Finally, as Miracle and Rees succinctly summarize, “An important component of the myth is that sport decreases delinquency and, recently, it has been alleged, drug use, by increasing positive self-concept, enhancing skills, and demonstrating to the individual that success can be obtained by following the rules” (1994:23). The research described above has important implications for this evaluation of a sports program, NYSP. This evaluation will determine if risk and protective factors, which include a “value component”, actually deter drug use for the participants.

In summary, this chapter has provided a thorough literature review of the prevention research currently available; included some prevention drug use statistics to help further define the extent of the drug problem for youth, and finally presented some

interesting perspectives of the sociology of sport. Most of this research has shown that many cultural myths exist in regard to the benefits of youth sports programming. All of this discussion is helpful to this study as we explore how the NYSP actually prevents drug use and influences risk and protective factors.

CHAPTER 3

RESEARCH DESIGN AND METHODS

Generally, evaluation research is as old as social science research. Babbie explained that,

In part, the growth of evaluation research no doubt reflects social scientists' increasing desire to actually make a difference in the world. At the same time, we cannot discount the influence for (1) increased federal requirements for program evaluations to accompany the implementation of new programs and (2) the availability of research funds to fulfill that requirement. Whatever the mixture of these influences, it seems clear that social scientists will be bringing their skills into the real world more in the future than every before (Babbie 1986:298).

Weiss (1998:10-15) traces the earliest evaluation roots to the 1660's where empirical studies of social problems in Britain were conducted. Although these studies were not called "evaluations" but labeled "political arithmetic" it was clear that this was an early attempt to scientifically evaluate if education reduced crime. Other early evaluations assessed the usefulness of public works, the effectiveness of social programming, and the outcomes of work in education and health.

Current sociological research contends that when evaluating social programs, the use of experimental or quasi-experimental designs is often used (Babbie 1986; Weiss 1972; Campbell and Stanley 1963; Rossi and Williams 1972; and Rossi and Freeman 1989). The purpose of this evaluation research study is to determine if the substance

abuse prevention program, NYSP, accomplished its goal of preventing drug abuse among at-risk youth while increasing protective factors and decreasing risk factors. It is important to emphasize that this is a replication study of an earlier large-scale program evaluation conducted by EMT group in 1992. This original study used the IPFI as the primary outcome-measuring device. Due to this, the IPFI has established reliability and validity.

Carol Weiss (1972:4-5) discussed that there are many types of programs evaluated and that looking at a number of considerations helps the evaluator to determine the best design.

Programs are of many kinds. Not only do they range over a gamut of fields; they also vary in scope, size, duration, clarity and specificity of program input, complexity of goals, and innovativeness. These differences in programs have important consequences for the type of evaluation that is feasible and productive. It is one thing to evaluate the effects of a small, short-term, specific, well-defined program, such as a training film. It is a far different and more difficult matter to evaluate the effects of the national antipoverty programs, with its diversity of methods, actions, and goals. The evaluator may find it rewarding to become aware of the difference among programs so that he can think about ways to shape evaluative approaches and method to suit (Weiss 1972:4-5).

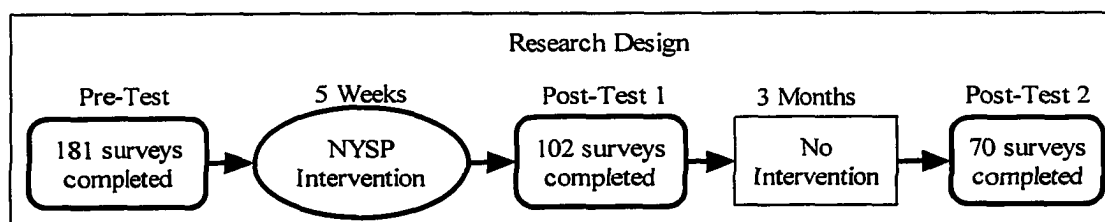
To understand and justify the selection of my evaluation research design, all these considerations were explored. The *scope* of NYSP was 27 at-risk schools, neighborhoods, and housing complexes located within the city of Las Vegas. The *size* of the program was estimated at 350 youth. The *duration* of the program was five consecutive weeks for five days per week from the hours of 1:00 - 6:30 p.m. The *clarity and specificity of program input*, in terms of what NSYP actually does, is complex and diffuse. The program uses different instructors to implement different goals and objectives in each classroom setting. These change from activity to activity and are often

conducted by outside community members as well as NYSP staff. Some staff focus on ATOD prevention education, others on sporting activities, and still others on special topics of interest including multi-cultural enrichment, healthy diets, and increasing self esteem. The *complexity and time span of goals* are also complex. The ultimate goal of NYSP is to delay the onset of substance use. However since prevention theory on risk and protective factors clearly establishes correlation between the seventeen risk and protective factors with drug use and other social problems, including teenage pregnancy, runaways, and other adolescent social problems, a complex web of risk and protective factor dimensions was also measured. The *innovativeness* of the program is apparent. NYSP not only provides prevention education and sport alternative activities for at-risk youth, but the context is innovative as they house the program on the UNLV campus. Most prevention programs occur in at-risk neighborhoods in community centers.

Consideration of these key programmatic aspects, lead this evaluator to conclude that a quasi-experimental design would be best considering another important issue, lack of a control group. The Clark County School District is apprehensive about allowing research access to students for research. After much discussion with the dissertation committee, it was unanimously decided that a quasi-experimental design should be implemented as demonstrated in figure 3.1. Specifically, this design included three testing waves. The first, a pre-test, was administered at the beginning of the NYSP. The second wave, a post-test, was administered on the last day of NYSP. The third wave, a three month follow-up post test, was administered after the conclusion of NYSP to measure any long-term effects. Permission was obtained from the Human Subjects

Review Office (see Appendix II). Additionally, both parent and child assent forms were completed by each respondent in the program (see Appendix III).

Figure 3.1. Research Design



EMT Associates (1992) under contract with the National Collegiate Athletic Association, evaluated fifteen of the 172 college and university sites who conducted the National Youth Sports Program in 1992. As stated previously, this current study is a replication of the original evaluation study conducted in 1992. Over the time span of three years, this research group implemented both process and outcome evaluations. The Individual Protective Factor Index (IPFI) was the survey they developed to measure specific outcomes for the NYSP. This instrument was developed based upon the theoretical insight of Hawkins and others who subscribe to the risk and protective factors approach. The UNLV NYSP was a part of the original study conducted in 1992. The program director of the UNLV NYSP was open to replicating use of the IPFI to determine if the results obtained in the 1992 study were still applicable in 1997, five years later.

The instrument used for each of the three testing waves was the IPFI which measures risk and protective factors identified in the literature. Written permission to use

the instrument was obtained from EMT Associates who developed the instrument. (See Appendix I). As mentioned previously, the IPFI was used as the measuring device for this study. The IPFI was originally developed in 1992 to measure the effectiveness of 13 NYSP programs located on various college campuses across the country. The IPFI was developed based on the theoretical work of Hawkins, et al. and Benard. The IPFI is a 144 item self administered questionnaire that asks youth a series of questions concerning drug use attitudes and behaviors, risk and protective factor questions, and some general demographic items. All the risk and protective factor items are collapsed into seventeen dimensions. The seventeen dimensions are then collapsed into seven domains. Additionally, the protective factor area has three domains and the risk factor area has four domains. The IPFI has established validity and reliability. The IPFI was duplicated, instructor training implemented, and data collection ensued. This one hundred forty-four item closed ended questionnaire includes questions that fall within three protective factor domains; social bonding, personal competence, and social competence and four risk factor domains; family, peer group, environment, and personal behavior.

During the first wave, 181 respondents successfully completed the survey. The second wave secured 102 completed surveys. The third wave, the three-month follow-up survey, secured 70 surveys. Obviously, internal sources of invalidity may have played a role and include the following; maturation, testing, and mortality. This will be discussed in chapters four and five. It is an area of noted concern that such a large percentage of youth dropped out of the program. However, when the Clark County School District began year round school sessions, NYSP began to lose many participants due to the

conflicting schedules.

The statistical package for the social sciences (SPSS) was used to organize and analyze the data collected. One over-riding hypothesis was tested in this study. The hypothesis was that if NYSP is an effective social program, the statistics should demonstrate a positive change in attitude, belief, or behavior on the questions pertaining to *drug use, protective factors, and risk factors*. For example, the data should show a decrease, over time, in favorable attitudes toward drug use. In order to determine if the NYSP made a difference for the youth participants, frequencies were run on each item and clustered into the dimensions they formed. Alpha co-efficients were run to determine the replicated reliability in comparison to the reliability calculated in the 1992 study. Finally, analysis of variance (ANOVA) tests of statistical significance were administered to measure the differences over time of dimension means.

Briefly, I wish to note that the data had to be cleansed, as many of the items on the questionnaire had to be reversed to prepare the data for accurate statistical analysis. For example, a common questionnaire design strategy is to reverse some questions to eliminate response bias. Frey (1989:173) states that “primary” or “recency” effect is the tendency for respondents to choose the last or first alternative, regardless of content. The authors who developed this instrument phrased the questions both in the “negative” and “positive” semantic sense to keep respondent interest and reduce error. Additionally, I conducted a “spot-check” on the data to ensure that coding was correct. Random surveys were drawn and matched with the cases in the data set to insure accuracy. Finally, when respondents negated to answer a question, a zero was recorded in the data set. To account

for this, I defined all zeros as missing values while all other values remained the same.

Table 3.1 demonstrates the reliability of the IPFI Measure of Risk and Protective Factors. Each domain and dimension is listed along with the number of items used to measure each and the alpha coefficient from both the EMT study and this study.

Chronbeck's Alpha Co-efficient measurement, found in columns 4 and 5, indicates that degree of inter-relationship between the items in the index and the dimensions under which the items are organized. Low Alphas (below .60) indicate that items do not exhibit a strong pattern of similar response and are therefore "not reliable". The instrument could be revised to better capture similar responses from different items in the future. When comparing columns 4 and 5, it is apparent that the majority of dimension measures are similar. Three exceptions to this statement exist. The dimensions of school, self-efficacy, and assertiveness have a .10 difference. This may have occurred due to the smaller sample size of my study as compared to the larger EMT sample size.

In summary, a quasi-experiment was conducted to test the theoretical hypothesis that follows: If NYSP is an effective social program, the statistics should demonstrate a positive change in attitude, belief, or behavior on the questions pertaining to drug use, protective factors, and risk factors. This study was replicated from an earlier program evaluation that occurred in 1992. There are several differences to note between the initial EMT program evaluation and this study. The original EMT evaluation included thirteen NYSP sites across the Nation, this study includes one. The EMT evaluation research design included one pre-test and one-post test, plus an extensive process evaluation component. This study has three waves of survey administration and no process

Table 3.1. IPFI Reliability of Risk and Protective Factor Dimensions

Domain	Dimension	Number of Items	EMT Alpha Coefficient (N=2,416)	Hogan Alpha Coefficient (N =353)
Protective Factors				
Social Bonding	School	6	.61	.51
	Family	6	.58	.63
	Pro-social Norms	6	.48	.48
Personal Competence	Self-concept	6	.58	.50
	Self-control	6	.65	.69
	Self-efficacy	7	.56	.46
	Positive Outlook	7	.56	.51
Social Competence	Assertiveness	6	.46	.36
	Confidence	6	.59	.63
	Cooperation / Contribution	6	.65	.67
Risk Factors				
Family Environment	Family Supervision	4	.35	.39
	Family Interaction	4	.64	.62
Peer Group	Positive Peer Association	4	.59	.62
	Peer AOD Use	3	.65	.77
Environment	Neighborhood AOD	10	.81	.66
Personal Behavior	Self Reported Risk Behavior	9	.80	.81
	Personal Behavior	5	.72	.71

evaluation component. Finally, the EMT evaluation, due to a high attrition rate, did not have an adequate sample during its second survey administration which led to problems with generalization. Although this study experienced an attrition rate during the three

month follow-up testing phase, it was not as significant as the original EMT rate. The IPFI was used as the measuring device and was administered two times over the course of the program with a three-month follow-up. Results showed 181 respondents completed the pre-test, 102 completed the post-test, and 70 completed the follow-up test. SPSS was used as the statistical program to analyze the data.

CHAPTER 4

RESEARCH RESULTS AND ANALYSIS

This chapter will discuss the data gathered from the self-administered questionnaire entitled the IPFI used to evaluate the NYSP substance abuse prevention project (See Appendix I). It will include demographic characteristics of the respondents, detailed discussion of both the protective factor dimensions and the risk factor dimensions, and will conclude with a discussion of the statistical tests used to test the research hypothesis. The hypothesis formulated for this study is that if NYSP is an effective social program, the risk and protective dimensions should demonstrate a positive change over the three time phases (pre-program, post-program, and follow-up).

Table 4.1 describes the various demographic characteristics of the respondents. The gender category indicates that 59 percent of the respondents were male. A large portion, 20 percent of the total respondents, were in the sixth grade. In terms of ethnicity, 69 percent of all respondents were African American youth. The smallest racial category were Asian / Pacific Islanders who represented only 1 percent of the NYSP participants.

The remainder of this chapter will present two sections for discussion on the distributions of responses across both protective factor and risk factor categories.

Table 4.1. IPFI: Profiles of NYSP Respondents

Characteristics	Categories	Percent	N
Gender			352
	Boys	59	
	Girls	41	
Grade in School			353
	Third	1	
	Fourth	15	
	Fifth	14	
	Sixth	20	
	Seventh	17	
	Eighth	16	
	Ninth	8	
	Tenth	7	
Race / Ethnicity			353
	African American	69	
	Asian / Pacific Islander	1	
	Hispanic / Latino	9	
	Native American	4	
	White	6	
	Other	11	

Note: Percentages were rounded so may not add to one hundred.

The first section will present information obtained in the protective factor measures of the IPFI. The second section will present the findings from the risk factor measures of the

IPFI. EMT Associates wrote three unpublished manuscripts (1992a, 1992b, and 1992c) which contain an overview of the categories and present much discussion concerning the differences between domains and dimensions. These documents form the foundation of the information presented in the remainder of this chapter. Since this study is a replication of the earlier EMT Associates evaluation, much reference is made to these documents. First, several definitions will be provided to help frame this discussion. Domains are larger categories which include several dimensions. Each dimension includes a number of items, or questions, which were asked in the IPFI. The table previously viewed (table 4.1) pictorially demonstrates the organizational framework with differences between domains, dimensions, and items. It is important for the reader to understand that these domains and dimensions were organized based on the theoretical constructs identified in the literature.

The NYSP Participant Protective Factor Results

EMT Group authored several unpublished documents that describe the findings from their evaluation of NYSP prevention programs across the Nation (1992a, 1992b, 1992c). The focus of the EMT national program evaluation and the local UNLV program evaluation conducted in this study was based on several assumptions. The first is that the NYSP prevention education program involved youth from high risk environments. The NYSP cannot change the environment in which the youth live, so the objective must be to affect the ways in which youth cope with their environment. Their ability to cope and succeed is what the literature describes as protective factors and is what the IPFI

measures. The second assumption is that the NYSP prevention education component has just twenty-five hours during the summer program to address tobacco, alcohol, and other drug issues. This is clearly not enough time to sufficiently address complex, learned skills. This means that the focus of the prevention education component should be on protective factors reinforcement so youth can obtain the skills needed to succeed in life. Thirdly, the NYSP prevention component should address skills and orientation beyond the simple and basic information education concerning tobacco, alcohol, and other drugs. “Past research has demonstrated that information education alone will not provide protection against environmental risk for alcohol and drug use” (EMT 1992a:5). Further, this assumption suggests that tobacco, alcohol, and other drug use is a larger problem inclusive of a number of deviant behaviors, as described by Hawkins and Catalano. These assumptions formed the framework around the initial development and replication of the IPFI.

The first domain within the protective factor approach concerns “social bonding” which is the positive affect and commitment to basic social institutions such as school, family, and community. This domain reflects the categories of family drug behavior, family management practices, family conflict, low bonding to family, academic failure, low commitment to school, and peer rejection in elementary grades found in the work of Hawkins, et al (1992). The IPFI contains measures of the following dimensions within this domain; school bonding, family bonding, and pro-social norms. School bonding refers to the positive affect and motivation the youth has toward school currently and in the future. The perception that education is important to future success and personal

accomplishment is measured in this dimension. Family bonding is the positive affect the youth have toward the family and their perception of support and positive interaction. Pro-social norms refers to the youths' positive affect toward the community along with the perception that people are generally trustworthy or worthwhile and that it is beneficial to have positive interactions with them (EMT 1992b:7).

The second domain within the IPFI protective factor section is personal competence. Elements within this domain are common in prevention literature, which focus on one's sense of individual identity. The ability to function effectively as a decision-making person in control of one's future is a common underlying theme. The work of Hawkins et al. (1992) identifies risk and protective factors within this domain which includes early on-set of drug use, attitudes favorable to drug use, and alienation and rebelliousness which reflect the ability of a youth to make decisions. The first dimension is self-concept which refers to a youths positive self-image in general terms such as "feeling good" about one's self. The second dimension, self-control, refers to the youth's ability to control impulses, particularly anti-social impulses such as anger and violence. This is a common theme in the Hawkins et al.(1992) literature. Here, pre-delinquent behavior or early risk behavior can become an indicator of alcohol and drug abuse. The third dimension, self-efficacy, refers to a youth's sense that life can have purpose and that one's actions can effectively achieve those purposes. The fourth dimension, positive outlook, refers to the general belief that life can have a positive outcome and that this is obtainable, even probable.

The third domain, social competence, refers to the ability to be responsible, caring, and flexible in social situations. The youth or adult who has these qualities will elicit positive responses and reinforcement with positive results. Bonnie Benard (1992) comments that social competence is a “commonly identified attribute of resilient children”. Hawkins’ et al. (1992) discussion of early and persistent problem behaviors, peer rejection in elementary grades, and association with drug-using peers all fall within this domain. Obviously, many of the factors described by Hawkins, et al. (1992) are phrased in the “negative” sense but fall along a positive continuum that serve as both risk and protective factors. Three dimensions fall within this domain, assertiveness, confidence, and cooperation. Assertiveness refers to one’s ability to stand up for oneself in social situations. Distinct from aggressiveness, it indicates comfort in social situations rather than hostility. The second dimension, confidence, refers to self esteem and the belief that one is liked or likable causing acceptance in a variety of social situations. Cooperation, the third dimension, refers to the desire to contribute to social groups of which one is a part. This includes the internalized sense of accomplishment and satisfaction that comes with contributing to groups.

Social bonding

The first major domain of the IPFI is the social bonding domain. Items within this domain measure the degree to which NYSP respondents feel satisfactory involvement and motivation for accomplishments and efforts in a number of age appropriate social institutions. Specifically, the dimensions of school, family, and pro-

social norms display a positive generalized attitude toward the rules of society.

“Prevention research has shown that positive involvement in existing institutions is a strong associate of delayed alcohol and drug experimentation, use, or abuse in later life”(EMT Group 1992c:34-5).

Table 4.2 indicates the social bonding dimension of the IPFI. Social bonding items measure the positive orientation toward school in terms of school accomplishments or the degree of effort devoted to school activities. This table demonstrates that across all three time spans, youth tended to show a positive regard for school related items. Overall, we also observe the strongest positive responses for school were measured during the post program wave. The follow-up wave shows a slight decrease in favorable attitudes toward school. Finally, ANOVA significance results indicate a measure of .563 with an F factor of .576 which indicates that the school dimension changes over time were not statistically significant. Specifically of interest is the item” I really want to graduate from college”. Initially, 87 percent indicated they strongly agreed with this statement. During the post program measurement, this number increases to 95 percent. However, during the three month follow-up phase, the number of youth strongly agreeing with this statement decreases to 85 percent. This change has substantive significance and is an interesting finding. Interpreted, long term change does not appear to be supported by NYSP.

The family bonding dimension reflects indicators of attitudes toward and ties to the family unit. The items asked in the IPFI primarily reflect positive aspects of family life such as enjoying family interactions, family pride, and other positive feelings

Table 4.2. Protective Factors for Social Bonding: School

Item	Response Rates and Percentages														
	Pre-Program					Post-Program					Follow-up				
	YES	yes	no	NO	N	YES	yes	no	NO	N	YES	yes	no	NO	N
I really want to graduate from college.	87	8	1	4	178	95	3	1	1	101	85	10	2	3	68
Finishing high school is important.	95	3	1	1	179	94	2	2	2	101	93	6	0	1	70
School is a waste of time.	6	5	16	74	179	9	5	12	74	99	4	7	16	73	69
I try hard to do well in school.	81	17	2	1	180	81	16	3	0	102	80	16	1	3	70
I would like to quit school as soon as I can.	6	6	12	76	178	6	2	12	80	101	4	6	12	78	69
A lot of days, I would rather not go to school.	28	23	17	33	178	25	18	15	41	99	25	23	16	36	69

Note: Percentages are rounded and may not add to one hundred.

associated with the family. This type of cohesion is an important aspect in much of the substance abuse prevention literature on family influences and youth adjustment and behavior. Hawkins, et al. (1992) discuss four family related factors in their theoretical perspective on high risk behaviors. Table 4.3 demonstrates the distribution of responses to these dimensions. There is a significant shift in favorable responses from the pre-program wave to the post-program wave. However, measures taken during the follow-up wave signify less positive attitudes toward the family. This may be due to a smaller number of respondents during the follow-up wave or could be indicative of troubling family circumstances. The youth, after the completion of NYSP, go back to their at-risk neighborhoods and homes where family management practices may be negative. Without the benefit of an on-going prevention program, the youth may begin to develop negative attitudes about their families. Of specific interest is the item “my family has let me down”. Here we notice that pre-program, 8 percent strongly agreed with this statement while post-program, 15 percent strongly agreed. This number significantly decreased to 3 percent during the follow-up phase of survey administration. NYSP impacts short-term attitude change but does not sustain long term change. ANOVA significance was calculated at .946 with an F factor of .055. This indicates that the family dimension was not statistically significant.

The final dimension for the social bonding domain is that of pro-social norms. This dimension is more abstract than the earlier two mentioned. The items in Table 4.4 are indicative of a more generalized and abstract positive orientation towards society. The items in the IPFI are primarily measuring the positive “affect” towards others, the

Table 4.3. Protective Factors for Social Bonding: Family

Item	Response Rates and Percentages														
	Pre-Program					Post-Program					Follow-up				
	YES	yes	no	NO	N	YES	yes	no	NO	N	YES	yes	no	NO	N
I like to do things with my family.	68	26	6	2	180	70	22	7	1	101	63	24	7	6	70
I enjoy talking with my family.	53	33	10	5	178	52	37	5	6	99	63	21	9	7	70
I can tell my parents the way I feel about things.	49	40	5	6	181	49	33	9	9	102	44	41	6	9	70
My family expects too much of me.	25	21	28	26	178	26	17	30	28	102	18	21	19	42	67
Sometimes I am ashamed of my parents.	16	25	21	38	179	16	15	25	44	98	22	18	19	41	68
My family has let me down.	8	9	17	67	180	15	13	13	60	102	3	6	19	73	69

Note: Percentages are rounded and may not add to one hundred.

belief that people are good, and an orientation towards “following the rules of the game”. The questions within these two general areas demonstrate an internally consistent orientation towards society. Interestingly, the statistics demonstrate that the NYSP respondents felt a stronger sense of pro-social norms during the pre-program measure than during the post-program measure. For example, the question “I don’t like most people” found that 35 percent strongly disagreed pre-program, this dropped to 24 percent post-program, and increased to 40 percent during the follow-up wave. Several other items within this dimension show dramatic shifts in perception over time. The item “I like to see other people happy” found that 68 percent strongly agreed pre-program, this dropped to 60 percent post-program, but increased back to 67 percent during the follow-up wave. Again, these items indicate that NYSP impacts short-term change but is not effective in sustaining long term change. ANOVA calculations indicate a significance score of .088 and an F factor score of 2.444. This indicates that the pro-social norms dimension is not statistically significant. Perhaps NYSP could enhance its sports program to include more positive coaching communication to develop a sense of team work in the youth which may in turn promote a sense of pro-social norms.

Personal competence

Personal Competence is the next domain of the IPFI protective factors discussion. The following table 4.5 presents the distribution of responses for personal competence. The personal competence dimension relates to the personal development of youth which includes self-image and outlook development. Self-concept, the first dimension, refers to

Table 4.4. Protective Factors for Social Bonding: Pro-social Norms

Item	Response Rates and Percentages														
	Pre-Program					Post-Program					Follow-up				
	YES	yes	no	NO	N	YES	yes	no	NO	N	YES	yes	no	NO	N
I like to see other people happy.	68	30	2	1	181	60	32	3	5	102	67	29	1	3	69
Following rules is stupid.	6	10	28	56	180	8	8	30	55	101	9	9	26	57	69
Most people can be trusted.	21	30	28	22	179	14	23	36	28	101	28	32	29	12	69
It is more important to play fair than to win.	66	21	8	5	178	65	27	5	4	102	69	19	4	7	68
There is some good in everybody.	63	29	4	4	178	61	33	3	3	98	55	35	3	7	69
I don't like most people.	14	20	32	35	178	17	24	34	24	99	13	19	29	40	70

Note: Percentages are rounded and may not add to one hundred.

the development of self-esteem in youth. This self-concept measure is primarily composed of items that reflect “affective” self esteem which is “a positive general orientation towards self, a feeling of satisfaction with one’s self without probing the content of that satisfaction” (EMT 1992c:39). The most interesting statistical difference to note in table 4.5 is that there is not much change in self-concept, both pre-program and post- program, although it slightly improved. The item “people usually like me” shows that 40 percent strongly agreed pre-program, 41 percent post-program, and 57 percent strongly agreed during the follow-up wave. Many of the items demonstrate a similar trend during the follow-up wave. This is curious due to the fact that NYSP held no programming during that time. In terms of an explanation, since a control group was not utilized in this design, the students could have received another program intervention that had a component on self-esteem. Perhaps, the fact that the sample size decreased significantly could also account for this change. Regardless of this subtle change, ANOVA significance results are not statistically significant with a score of .157 and an F factor score of 1.864.

The second distribution of responses on protective factors for personal competence is self-control as indicated in table 4.6. The self-control dimension contains items that relate to the ability of youth to control their impulses and temper. This dimension has been identified by the authors as particularly important for pre-delinquent acting out behaviors and other kinds of aggressive, anti-social behavior. The response patterns to these items indicates more variation than was encountered on the self-concept dimension. This indicates that youth have differing degrees of agreement. For example,

Table 4.5. Protective Factors for Personal Competence: Self-concept

Item	Response Rates and Percentages														
	Pre-Program					Post-Program					Follow-up				
	YES	yes	no	NO	N	YES	yes	no	NO	N	YES	yes	no	NO	N
I like the way I act.	50	40	7	4	177	48	44	5	3	102	51	44	6	0	69
People usually like me.	40	46	7	7	178	41	48	10	2	101	57	34	6	3	68
I can be trusted.	59	29	6	7	178	55	33	6	6	102	59	33	3	6	70
My life is all mixed up.	9	11	28	53	179	9	9	23	59	101	7	12	21	61	68
I can do most things I try.	64	30	2	4	178	61	34	1	4	100	68	30	0	1	69
I like the way I look.	63	25	4	8	180	65	23	6	6	101	70	23	1	6	70

Note: Percentages are rounded and may not add to one hundred.

Table 4.6. Protective Factors for Personal Competence: Self-control

Item	Response Rates and Percentages														
	Pre-Program					Post-Program					Follow-up				
	YES	yes	no	NO	N	YES	yes	no	NO	N	YES	yes	no	NO	N
Sometimes you have to physically fight to get what you want.	17	18	19	46	179	12	15	34	40	101	16	19	27	39	70
I get mad easily.	35	16	32	16	178	28	25	29	18	100	27	16	49	9	70
I do whatever I feel like doing.	8	23	31	38	179	12	17	32	39	100	15	19	25	42	69
When I am mad, I yell at people.	28	31	20	22	179	34	23	28	16	101	31	33	17	19	70
Sometimes I break things on purpose.	15	19	20	46	179	15	25	14	47	102	20	10	19	51	70
If I feel like it, I hit people.	14	15	18	53	177	21	19	21	40	101	19	9	30	42	69

Note: Percentages are rounded and may not add to one hundred.

the item “when I’m mad I yell at people” shows a fairly even distribution of responses across the categories for selection both during the pre-program and post-program waves. During the follow-up wave, this same item shows a shift toward the “yes” and “YES!” end of the category selection continuum. The item “if I feel like it, I hit people” shows that pre-program 14 percent strongly agreed, post-program 21 percent strongly agreed, and follow-up program 19 percent strongly agreed. In this case, it appears that more youth are dealing with anger inappropriately after the NYSP intervention than before. This is a curious finding and may indicate that an anger management component should be introduced into NYSP. ANOVA measurements indicate a significance measure of .777 and an F factor of .252. This indicates that the findings between the dimension of self-control and time are not statistically significant.

The third dimension within the personal competence domain is self-efficacy. Table 4.7 contains the distribution of responses for the items falling within this dimension. Self-efficacy is measured based upon a selection of items from the locus of control and consequential decision making dimensions (from the personal competence domain) and a few items from the refusal skills dimension (from the social competence domain). The authors of the IPFI subjected this dimension to a factor analysis that included strong loadings on each of the seven items included in the self-efficacy scale displayed in table 4.7. This factor analysis was not replicated in this study, but the findings are significant to this discussion. Self-efficacy relates to the areas of life that have to do with establishing autonomous control over one’s behavior and separating one’s own direction from the influences of the environment. Three items show

Table 4.7. Protective Factors for Personal Competence: Self-efficacy

Item	Response Rates and Percentages														
	Pre-Program					Post-Program					Follow-up				
	YES	yes	no	NO	N	YES	yes	no	NO	N	YES	yes	no	NO	N
If I study hard, I will get better grades.	86	9	4	1	176	83	11	1	4	99	83	14	1	1	70
It is important to think before you act.	82	13	2	3	179	75	15	3	8	102	73	17	6	4	69
To make a good decision, it is important to think about what will happen afterwards.	78	15	4	3	179	68	22	5	5	99	77	14	3	6	70
I am responsible for what happens to me.	66	25	4	5	178	68	15	10	7	101	66	20	6	9	70
If you work hard, you will get what you want.	67	26	5	3	179	70	23	3	4	101	79	13	3	4	68
When I try to be nice, people notice.	44	34	13	9	180	40	30	16	14	100	55	25	6	15	69
Other people decide what happens to me.	20	14	17	49	178	14	12	12	63	102	10	10	19	61	70

Note: Percentages are rounded and may not add to one hundred.

significant increases in the “YES!” category from the pre-program wave to the post program wave. These items are “I am responsible for what happens to me”, “If you work hard you will get what you want”, and “Other people decide what happens to me”. The remaining items do not display much change over time. Consequently, ANOVA results indicate a significance level of .564 and an F factor measurement of .575. The interpretation of these scores indicates that the findings are not statistically significant.

The final dimension, positive outlook, is reflected in Table 4.8. Positive outlook refers to a general positive orientation toward the future. This dimension measures respondents along a continuum of pessimistic to optimistic expectations. The distribution of responses show some interesting results. Specifically, during the pre-program wave, 72 percent responded “NO!” to the item “I will probably die before I am thirty”. Post-program this increased to 74 percent and increased again to 79 percent during the follow-up wave. This indicates that most NYSP program participants have a positive outlook toward life that increased over time. Most of the items falling within this dimension only experienced subtle change over time. Consequently, ANOVA analysis indicates a significance score of .462 and an F factor score of .775. Interpreted, these scores indicate that this dimension is not statistically significant. To be statistically significant, the items within the dimension should have shown stronger change between testing waves.

Social competence

The final domain within the protective factor area is social competence. Social competence measures skills and orientations that contribute to positive social adjustment

Table 4.8. Protective Factors for Personal Competence: Positive Outlook

Item	Response Rates and Percentages														
	Pre-Program					Post-Program					Follow-up				
	YES	yes	no	NO	N	YES	yes	no	NO	N	YES	yes	no	NO	N
I will probably die before I am thirty.	4	4	19	72	180	3	7	16	74	99	4	0	17	79	70
I think I will have a nice family when I get older.	74	20	3	2	179	77	13	7	3	101	77	17	0	6	69
I am afraid my life will be unhappy.	9	15	25	51	177	10	18	26	46	100	13	7	23	57	69
Bad things happen to people like me.	14	15	31	41	177	13	19	28	41	102	16	12	25	47	68
I think I can have a nice house when I grow up.	78	21	1	0	179	81	14	2	3	101	80	19	1	0	70
I will probably never have enough money.	18	13	26	43	178	17	12	16	55	100	16	9	16	60	70

Note: Percentages are rounded and may not add to one hundred.

and the feeling of acceptance in social situations. The three dimensions within social competence include assertiveness, confidence, and cooperation / contribution.

Table 4.9 demonstrates the distribution of responses for the assertiveness dimension. Assertiveness refers to the ability to pursue personal needs and objectives in a social setting. Items within this dimension concern the youth's ability to disagree, to question, and to represent one's self in front of a group. These skills are often a component of most prevention programs and are thought to be related to refusal skills needed to deter drug use. Generally, most respondents showed positive assertiveness skills. Over time, there does not appear to be much significant change, although slight variations do occur between some items. For example, the item "I am often too embarrassed to ask questions" seems to improve over time. Pre-program results showed that 31 percent indicated "NO!" responses to this statement. Post-program, 34 percent strongly disagreed, and follow-up, 41 percent strongly disagreed. Regardless of the fact that this specific item showed positive change, when ANOVA tests were conducted on the entire dimension of assertiveness, a significance measure of .583 and F factor score of .541 indicates no statistically significant change occurred over time.

The second dimension is confidence. Confidence refers to the feeling of social acceptance and a belief that one can gain acceptance in new settings. Social confidence is a component of protective factors and resiliency because it counteracts the social isolation, alienation, and search for acceptance that is recognized as an attribute of high risk youth. Table 4.10 demonstrates that the vast majority of youth respond positively. The data demonstrates that intense feelings of loneliness changed over time, from 19

Table 4.9. Protective Factors for Social Competence: Assertiveness

Item	Response Rates and Percentages														
	Pre-Program					Post-Program					Follow-up				
	YES	yes	no	NO	N	YES	yes	no	NO	N	YES	yes	no	NO	N
If I disagree with a friend, I tell them.	67	23	4	6	181	58	31	11	0	102	67	26	3	4	70
If I have a reason, I will change my mind.	45	36	9	11	179	54	31	5	10	100	60	21	4	14	70
If I don't understand something, I will ask for an explanation.	61	30	9	2	177	59	32	6	3	102	59	34	4	3	70
I am often too embarrassed to ask questions.	22	22	26	31	176	12	23	31	34	100	19	16	25	41	69
I hate being in front of a group.	25	20	25	30	178	27	26	18	28	100	27	26	14	33	70
I often disappoint people.	14	20	33	32	177	10	24	35	32	101	11	20	39	30	70

Note: Percentages are rounded and may not add to one hundred.

Table 4.10. Protective Factors for Social Competence: Confidence

Item	Response Rates and Percentages														
	Pre-Program					Post-Program					Follow-up				
	YES	yes	no	NO	N	YES	yes	no	NO	N	YES	yes	no	NO	N
I will always have friends.	72	19	5	5	178	50	32	11	7	98	71	18	9	3	68
I get along well with other people.	39	50	7	4	178	37	50	7	7	101	49	42	4	4	69
I like being around people.	54	34	7	5	179	49	34	11	7	101	58	27	8	8	67
It is hard for me to make friends.	11	12	23	55	180	8	13	20	59	101	4	9	19	69	70
My friends respect me.	53	38	6	4	178	56	37	5	3	102	60	39	0	1	70
I often feel lonely.	19	18	28	35	176	12	20	25	44	98	22	12	20	46	69

Note: Percentages are rounded and may not add to one hundred.

percent, to 12 percent, and then to 22 percent respectively. Perhaps after NYSP concluded, some youth felt alienated and lonely due to lack of program contact. The item “I will always have friends” showed a curious shift in strongly agreed upon responses over time. During the pre-program wave, 72 percent strongly agreed, post-program this fell to 50 percent, and during the follow-up wave increased to 71 percent. Interpreted, NYSP respondents felt less positive about always having friends after the program concluded but then increased to the pre-program rate during the follow-up wave. Additionally, ANOVA tests indicate a significance score of .168 and F factor score of 1.793 which means that the findings are not statistically significant.

Table 4.11 shows the distribution of responses on the final dimension within the social competence domain. Cooperation / Contribution refers to the personal sense of motivation and satisfaction the youth feel from doing their part in a group thereby contributing to the overall group effort. Here, we see that the majority of respondents selected “YES!” or “yes” categories for each item. This demonstrates that most youth feel good about teamwork, cooperating with others, and making contributions to group work. Some items indicated some fluctuations between the two “yes” categories over time, but there was no major shift from a Yes to a No category as time progressed. The item “I always like to do my part” shows strongly agreed upon responses of 46 percent during the pre-test, 49 percent during the post-test, and 54 percent during the follow-up wave. Although this particular item indicates positive change over time, the other items within this dimension did not show a similar pattern. Consequently, the NYSP did not seem to significantly impact youth attitudes on this dimension over time. ANOVA tests

Table 4.11. Protective Factors for Social Competence: Cooperation / Contribution

Item	Response Rates and Percentages														
	Pre-Program					Post-Program					Follow-up				
	YES	yes	no	NO	N	YES	yes	no	NO	N	YES	yes	no	NO	N
I like to help around the house.	33	42	11	15	178	32	38	19	12	101	24	43	19	15	68
Being part of a team is fun.	71	23	3	3	180	56	35	2	7	102	60	35	0	4	68
Helping others makes me feel good.	65	29	4	2	179	48	42	4	6	102	56	29	6	9	68
It is important to do your part in helping at home.	74	20	4	3	179	60	31	5	4	100	65	28	0	7	69
I always like to do my part.	46	36	11	8	180	49	40	9	2	102	54	35	10	1	69
Helping others is very satisfying.	53	33	9	6	180	47	43	6	5	101	58	30	7	4	69

Note: Percentages are rounded and may not add to one hundred.

demonstrate a significance score of .535 and an F factor score of .627. Again, this test indicates that a statistically significant relationship between cooperation and time does not exist. In summary, the domains and dimensions of the protective factor section appear to have no statistical significance over time.

The NYSP Participant Risk Factor Results

This section of the chapter summarizes information from the risk assessment section of the IPFI. The risk factor section on the instrument concerns individual and environmental characteristics associated with the level of risk for alcohol and other drug use that confronts NYSP participants. The questionnaire included questions concerning prominent dimensions of risks identified in the literature. There are four domains within the risk factor area of the IPFI and include family, peer group, environment, and personal behavior. The family domain includes questions concerning the degree of structure within the home such as clear rules, chores, expectations and the degree of positive and supportive interaction in the family. The family domain includes the dimensions of family supervision and family interaction with a total of eight items on the IPFI. The second domain, peers, acknowledges the literature by conveying that friends have a major influence on youth. The questionnaire includes indicators of positive behaviors among friends and of the prevalence of alcohol and other drug experimentation or use among friends. The peer domain includes two dimensions of positive peer association and peer AOD use with a total of seven items on the IPFI. The third domain, environment, refers to the literature recognition that risk is primarily an attribute of the situations youth are in,

rather than a characteristic of youth themselves. The questionnaire measures the degree of risk inherent in the residential situation of respondents and the degree of exposure to others using alcohol and other drugs. For purposes of the data and this study, the neighborhood environmental risk and AOD use exposure are combined for discussion. The fourth and final domain for the risk factor discussion is personal behavior. The questions within this domain refer to early acting out and anti-social behaviors that have been identified in the prevention literature as a predictor to alcohol and other drug problems. The questionnaire includes a broad range of behavior measurements ranging from problems at school to early criminal activity.

Family environment

The first domain within the risk measures on the IPFI is the family. This domain includes questions concerning the degree of structure and positive or supportive interaction in the family. Family supervision and family interaction are the two dimensions within this domain.

Table 4.12 shows the distribution of responses on risk factors for the family environment in the area of family supervision. Items related to family environment are indicators of the degree to which children experience regularity and structure in the home with respect to such things as chores, house rules, the time they are expected home, and having a place to do homework (EMT Group 1992c:16). Table 4.12 demonstrates that the vast majority of respondents experienced structure in the home. Additionally, over time, most item responses increase with the exception of the item “I have a clear time

Table 4.12. Risk Factors for Family Environment: Perception of Degree of Structure at Home (Supervision)

Item	Response Rates and Percentages								
	Pre-Program			Post-Program			Follow-up		
	YES	NO	N	YES	NO	N	YES	NO	N
The rules in our house are clear.	88	12	181	92	8	102	93	7	70
I have regular chores to do at home.	82	18	180	85	15	102	90	10	69
I have a clear time when I have to be home.	74	26	181	84	16	102	79	21	70
I have a regular time and place to do homework.	59	41	179	67	33	101	66	34	70

Note: Percentages are rounded and may not add to one hundred.

when I have to be at home”. Here we observe that post-program results indicated that 84 percent of the students indicated yes while the follow-up wave indicated 72 percent. Again, this may be indicative of the smaller sample size due to program attrition than an actual change in family structure over time. ANOVA tests indicate that a statistically significant shift occurred over time. The significance score of .034 and an F factor score of 3.402 confirms this dimension is statistically significant. This is a curious finding because NYSP does not have a formal family or parent component. Since no control group was included in this design, it is possible that NYSP participant’s parents may have attended a family program offered in the community during this study.

The second dimension within the family environment domain is family interaction. The family interaction dimension measures the degree to which there is open communication and shared social interaction in the family. Table 4.13 displays the distribution of responses on risk factors for family interaction. Generally, the majority of respondents indicated positive responses to these four items. The item “The whole family eats dinner together” showed a more even distribution between the categories “all the time”, “often”, and “not very often” more so than other items. Additionally, pre-program, 27 percent of the youth selected “all the time”, post-program this decreased to 24 percent, and follow-up wave results decreased again to 20 percent. This item demonstrates a decrease in families eating dinner together over the course of the NYSP. The responses to other items did not show significant change over the course of the three testing waves. ANOVA measures indicate a significance score of .961 and an F factor score of .040. The findings are not of statistical significance.

Table 4.13. Risk Factors for Family Environment: Family Interaction

Item	Response Rates and Percentages														
	Pre-Program					Post-Program					Follow-up				
	All the time	Often	Not very often	Never	N	All the time	Often	Not very often	Never	N	All the time	Often	Not very often	Never	N
You talk with your parents about school.	46	31	14	9	179	50	29	12	10	101	53	23	16	9	70
Parents help you with your homework.	36	36	21	7	180	41	33	17	9	100	41	30	22	7	69
The whole family eats dinner together.	27	32	30	11	178	24	33	34	10	101	20	30	37	13	70
You go to a movie or out to dinner with your parents.	25	40	29	7	179	25	40	26	10	101	24	41	24	10	70

Note: Percentages are rounded and may not add to one hundred.

Peer group

The second domain, peer group, is one of the more significant domains reflected in the research on risk and protective factors. It has been hypothesized that the peer group domain may determine drug use more than any other single risk or protective factor. Peer associations and the behavior and opinions of one's peers are strong influences on youth. Positive peer association, the first dimension, aims to measure the positive behaviors among the friends of NYSP respondents, as shown in table 4.14. The questionnaire asked whether most, some, or none of their friends exhibited the illicit behaviors. "Studying hard at school" was the most commonly cited characteristic of most of their friends while "liking school a lot" being the least commonly cited characteristic of the positive items. The last three items are an indication of abuse of alcohol or other drugs among peers. Here we see that clearly about three-fourths of the respondents have no friends that drink beer and wine, smoke cigarettes, or try drugs like marijuana or cocaine. Pre-program, post-program, and follow-up waves indicate similar patterns over time with subtle variations on specific items occurring. This tells us several things about NYSP respondents. First, the youth are not isolated from ATOD use and although most respondents don't have friends that engage in these behaviors, they are far from removed from it. Secondly, that of those who do have friends who use tobacco, alcohol, and other drugs, most use "some" of the time. Additionally, most youth have friends who attend NYSP. This indicates that NYSP is a widely accepted activity among the communities of youth that participate in the program. These findings mirror the

Table 4.14. Risk Factors for Peer Group: Positive Peer Association

Item	Response Rates and Percentages											
	Pre-Program				Post-Program				Follow-up			
	Most	Some	None	N	Most	Some	None	N	Most	Some	None	N
Study hard at school.	56	37	7	177	53	44	4	101	54	39	7	69
Get along with their parents really well.	53	37	10	175	51	38	11	102	50	46	4	68
Go to church.	46	41	13	175	43	50	7	100	36	54	10	69
Like school a lot.	26	53	21	175	31	52	17	100	35	46	19	69
Go to NYSP.	39	30	31	178	33	41	26	97	22	46	32	68
Drink beer and wine once in a while.	6	19	75	177	8	20	72	96	5	20	76	66
Smoke cigarettes.	4	14	82	174	4	17	79	101	0	16	84	69
Try drugs like marijuana or cocaine once in a while.	4	11	86	172	3	14	83	97	6	9	85	68

Note: Percentages are rounded and may not add to one hundred.

initial study conducted by EMT Group (1992c). ANOVA reveals a significance score of .377 and an F factor score of .979 indicating that these findings are not statistically significant.

The second dimension within the peer group domain is peer AOD use. Table 4.15 presents more direct information concerning the degree to which NYSP respondents were exposed to alcohol and other drug use in their daily living environment. The items refer to the degree to which the respondents had been around other kids who were drinking alcohol, been in a car with an adult who was drinking, or been around other kids who were using illegal drugs. Clearly, the majority of respondents selected “not at all” during all three waves. However, there is still quite a bit of risk behavior occurring in this area for NYSP respondents. For example, the item “been around other kids who were using illegal drugs” found 12 percent had reported behavior of 3 or more times, post- program this dropped to 10 percent and stayed consistent at 10 percent during the follow-up wave. Regardless, ANOVA results indicate a significance score of .887 and an F factor score of 120. These scores indicate that this dimension is not statistically significant.

Environment

The third domain, environment, refers to risk factors that exist for youth in their neighborhoods. Table 4.16 demonstrates the distribution of responses. Recent literature on risk factors has indicated that environmental risk factors may increase the use of drugs. Hawkins et al. (1992) indicated that laws and norms, availability, extreme economic deprivation, and neighborhood disorganization are significant risk factors for

Table 4.15. Risk Factors for Peer Group: Peer AOD Use

Item	Response Rates and Percentages											
	Pre-Program				Post-Program				Follow-up			
	3 or more times	Once or twice	Not at all	N	3 or more times	Once or twice	Not at all	N	3 or more times	Once or twice	Not at all	N
Been around other kids who were drinking.	13	15	72	180	7	26	67	99	11	23	66	70
Been in a car with an adult who was drinking.	2	6	92	180	1	2	97	101	1	6	91	70
Been around other kids who were using illegal drugs.	12	11	77	180	10	15	75	99	10	16	74	69

Note: Percentages are rounded and may not add to one hundred.

Table 4.16. Risk Factors for Environment: Neighborhood Environment and AOD Use Exposure

Item	Response Rates and Percentages														
	Pre-Program					Post-Program					Follow-up				
	All the time	Often	Not very often	Never	N	All the time	Often	Not very often	Never	N	All the time	Often	Not very often	Never	N
You talk to your neighbors.	41	28	20	11	178	32	33	21	15	101	39	23	27	11	70
People help each other.	33	36	20	11	177	30	34	27	9	97	34	37	20	9	70
You see a fight.	33	20	29	18	177	23	21	30	25	99	33	21	19	27	70
You see people drinking alcohol on the street.	39	19	18	24	180	35	18	25	23	101	39	17	17	27	70
You eat at a friend's house.	11	24	41	24	176	10	18	44	27	99	17	23	32	28	69
You see the police arrest someone.	30	16	27	27	176	18	14	38	30	98	21	16	28	35	68
You see someone using drugs.	21	12	19	48	176	17	8	19	55	98	17	18	18	47	66
Someone gets robbed.	18	13	26	43	178	11	6	39	44	98	11	14	30	44	70
Someone offers you alcohol.	8	5	11	77	177	5	4	14	77	100	4	12	7	77	69
Someone offers you drugs.	9	3	13	75	178	5	5	12	78	99	6	4	9	81	70

Note: Percentages are rounded and may not add to one hundred.

youth. This table shows that the positive items such as “talking to your neighbors”, “people helping each other” are positive interactions among people in neighborhoods. Most respondents, over one-half, reported positive behaviors. Other items such as “you see a fight”, “you see people drinking alcohol on the street”, and so on are negative behaviors. Results showed over half of the respondents indicated ‘not very often’ or ‘never’ responses in the pre-program wave. Fortunately, most participants indicated that they never have had experiences with someone offering them alcohol or drugs. However, there still are youth that are experiencing this anti-social behavior in their neighborhoods. With respect to differences in responses over time, there does not appear to be significant shifts in reporting patterns. ANOVA results support this statement with a significance measure of .227 and an F factor measure of 1.491.

Personal behavior

The final domain for discussion within the risk factor IPFI section is personal behavior. This domain captures the dimension of risk behaviors and self-reported AOD use. Specifically in terms of this project, this discussion is one of the most important. Table 4.17 displays responses to items concerning problematic behaviors reported by youth. These behaviors include discipline and acting out types of behaviors at school or at home and early involvement with the criminal justice system. Specifically, during the pre-program testing phase, we observe that the majority of respondents indicated early anti-social or risk behavior. For example, 68 percent of youth had been sent to the principals’ office or had detention, 56 percent had been in a fist fight, 53 percent had

Table 4.17. Risk Factors for Personal Behavior: Self-reported Risk Behavior

Item	Response Rates and Percentages											
	3 or more times	Pre-Program Once or twice	Not at all	N	3 or more times	Post-Program Once or twice	Not at all	N	3 or more times	Follow-up Once or twice	Not at all	N
Got sent to the principal's office or had detention.	36	32	33	180	33	39	29	101	30	37	33	70
Got into a fist fight.	32	24	45	179	33	29	38	96	28	22	51	69
Argued with your parents.	23	30	47	180	17	37	46	98	21	32	47	68
Talked back to a teacher.	26	32	42	179	28	31	40	99	23	39	39	70
Stole something.	14	23	63	177	12	25	63	99	13	30	57	67
Purposely damaged other people's property.	11	16	73	179	11	15	74	98	10	19	71	70
Got stopped by the police.	12	11	76	177	4	13	83	101	6	19	75	69
Skipped school for a whole day.	15	9	76	178	8	11	81	101	7	10	82	68
Broken into a house or store.	3	4	93	179	3	3	94	99	7	3	90	70

Note: Percentages are rounded and may not add to one hundred.

argued with their parents, and 58 percent had talked back to a teacher during the pre-program wave. Again, over time, these responses did not change significantly, although you will note subtle variation among specific items. ANOVA measures determined a .796 significance and .228 F factor score supporting the statement that there was a lack of statistical significance for this dimension.

The final dimension for discussion is self-reported AOD use. The items in this dimension referred to the use of alcohol and other drugs. In table 4.18 when combining the categories “3 or more times” with “once or twice”, we find that pre-program 31 percent of youth had a little bit of beer, wine or wine coolers, one or two drinks, post-program 31 percent, and follow-up 29 percent. The item “sniffed glue or paint to get high” shows that 3 percent selected the response “3 or more times” during the pre-program test, 1 percent during the post-program test, and 3 percent during the follow-up program test. Although we observe a decrease between the pre-program and post-program wave, there does not seem to be a significant difference in sustaining this behavior. The other items show a similar pattern without statistical significance. This indicates that NYSP is not having a significant impact on youth through the current ATOD prevention education component. ANOVA scores support this statement with a significance score of .303 and a F factor score of 1.198.

In summary, the discussion on the risk factor domains and dimensions show limited change over time. The family supervision dimension was statistically significant however this finding is surprising due to the fact that NYSP does not offer a family supervision or parenting program. Something must account for this change and perhaps

Table 4.18. Risk Factors for Personal Behavior: Self-reported AOD Use

Item	Response Rates and Percentages											
	Pre-Program				Post-Program				Follow-up			
	3 or more times	Once or twice	Not at all	N	3 or more times	Once or twice	Not at all	N	3 or more times	Once or twice	Not at all	N
Had a little bit of beer, wine or wine coolers, one or two drinks.	11	20	69	179	7	23	70	99	12	17	71	70
Had a lot of beer, wine or wine coolers, more than two drinks.	7	10	83	179	2	11	87	100	6	7	87	69
Sniffed glue or paint to get high.	3	6	91	179	1	1	98	100	3	1	96	70
Gone to class high on alcohol or drugs.	3	7	89	179	3	3	94	101	3	3	94	70
Tried drugs such as marijuana, cocaine, or LSD.	5	9	86	179	3	7	91	101	3	4	93	70

Note: Percentages are rounded and may not add to one hundred.

what occurred was that a number of parents of NYSP respondents were enrolled in parenting programs offered in the community. The lack of a control group makes it difficult to interpret the rationale behind this change. Regardless, most dimensions within the risk factor domains and dimension failed to show a significant change over time.

The following table 4.19 demonstrates each domain and dimension with their corresponding F factor and statistical significance measure (p). Again, measures less than .05 are considered significant while measure over .05 are considered not statistically significant. In regard to F factor scores, the larger the F factor, the more likely the statistical significance.

It can be observed that family supervision had the most significance, which is indicated by print in bold italics. However, the protection factor dimension of pro-social norms came quite close to establishing statistical significance. Although this information indicates that NYSP did not effect change in all seventeen dimensions, it did produce significant change in the family supervision dimension. Further comment on these statistics will be provided in chapter five.

This chapter presented information on the data collected from the self-administered questionnaire entitled the IPFI. A description of the reliability of the domains and dimensions used in this study were provided along with demographic characteristics of the respondents. A detailed discussion ensued on the risk and protective factor domains and dimensions and included definitions on each appropriate term. Additionally, it was demonstrated that the hypothesis formulated for this study was not

Table 4.19. Statistical Significance by Dimension

Domain	Dimension	F factor	Significance
Protective Factors			
Social Bonding	School	.576	.563
	Family	.005	.946
	Pro-social Norms	2.444	.088
Personal Competence	Self-concept	1.864	.175
	Self-control	.252	.777
	Self-efficacy	.575	.564
	Positive Outlook	.775	.462
Social Competence	Assertiveness	.541	.583
	Confidence	1.793	.168
	Cooperation / Contribution	.627	.535
Risk Factors			
Family Environment	Family Supervision	3.402	.034
	Family Interaction	.040	.961
Peer Group	Positive Peer Association	.979	.377
	Peer AOD Use	.120	.887
Environment	Neighborhood AOD	1.491	.227
Personal Behavior	Self Reported Risk Behavior	.228	.796
	Personal Behavior	1.198	.303

Note: Significance determined at 0.05 or below.

achieved. The interpretation and discussion on programmatic implications will be presented in the following chapter.

CHAPTER 5

DISCUSSION AND CONCLUSIONS

This study is a replicated evaluation of a substance abuse prevention program. The theory of risk and protective factors contends that youth with a greater number of risk factors and lesser protective factors may be more prone to substance use than youth with lower risk factors and greater protective factors. Seventeen risk and protective factor dimensions were identified in the theory and tested with the IPFI. The hypothesis tested in this study was that NYSP should positively change the risk and protective factors over time in favorable directions. This hypothesis was not confirmed as the majority of dimensions were not statistically significant.

The statistical analysis revealed that sixteen of the seventeen dimensions were not statistically significant. The dimension of family supervision was the most significant. Categorical distributions and ANOVA tests were conducted to determine the degree of statistical significance. This study aimed to determine if NYSP increased protective factors and decreased risk factors over time because the theory suggests that positive changes may lead to a greater probability of drug free choices for youth in the future. However, the hypothesis was not supported. Chapter four presented a detailed discussion

the following; school, family, pro-social norms, self-concept, self-control, self-efficacy, positive outlook, assertiveness, confidence, and cooperation / contribution. The dimension of pro-social norms had an F score of 2.444 and a significance score of .088 which is close to the .05 statistically significant measure but still failed to establish the desired change. All other protective factor dimensions failed to demonstrate statistical significance. The risk factor dimensions, as discussed in Chapter four included the following; family supervision, family interaction, positive peer association, peer AOD use, neighborhood AOD use, self reported risk behaviors, and self reported AOD use. Family supervision was the only dimension that demonstrated statistically significant change. The family supervision dimension included the following specific items, “The rules in our house are clear”, “I have regular chores to do at home”, “I have a clear time when I have to be home”, and “I have a regular time and place to do homework”. Here we note that over time there was a significant improvement in responses, which indicates that NYSP is causing change in this dimension. This was a surprise because NYSP has no family supervision or parenting program that could account for this change. It is possible that the parents of NYSP attended a parenting program offered in the community, however, due to the lack of a control group, it is impossible to know what caused this statistically significant change. In terms of the remaining risk factor dimensions, no statistically significant results were achieved.

Several important points relevant resulted from this study regardless of the fact that the hypothesis was not supported. The first, is the IPFI questionnaire included measures of a large number of risk and protective factors most prominent in the

prevention field literature. This questionnaire was originally developed and refined, through a major research effort that produced a reliable and comprehensive set of measures suitable for the population of NYSP and was replicated in this study (EMT Group 1992c). The instrument adequately reflects and measures the theoretical constructs developed by Hawkins, et al. However, it may be the case that NYSP does not include programming to impact the seventeen dimensions identified in the literature and measured with the IPFI with their current curriculum. Changes in this area will be discussed in the following section.

Second, not unlike the research results from the original study, the findings are limited. The original study conducted in 1992 found few systematic patterns of positive change. Some sites evaluated in the original study showed improvement in only one or two dimensions, while other programs seemed to show change in a greater number of dimensions. This being the case, the UNLV NYSP is not unlike other evaluated NYSP's located at different university sites throughout the nation. This study, then, found similar results of ineffectiveness, as did the original study in 1992. This speaks to the external validity, or generalizability of this study. External validity "is concerned with whether the findings of one evaluation can be generalized to apply to other programs of similar type"(Weiss 1998: 184). Since this study was replicated from an earlier study and similar results were produced, external validity was achieved.

Third, NYSP relies heavily on a one hour per day prevention informational education unit that includes a wide variety of topics. This should be reconsidered to reflect the dimensions identified in the theoretical literature and measured with the IPFI.

A suggestion for a more carefully constructed and evaluated curriculum based on risk and protective theory should be implemented with themes reinforced during the sports component. Additionally, a specific number of risk and protective factors should be targeted instead of trying to address all seventeen dimensions. This may help produce more measurable results in the short term.

Fourth, and quite important, is the unreasonable expectation and grandiose assumption that prevention programs with sport components actually change deeply ingrained social attitudes concerning drug use in a short, five week time frame. Substance abuse prevention programs, more so than other social programs, are often expected to produce significant results with minimal time and money. The findings from this study support the common sense notion that short-term prevention programs cannot possibly offset years of other significant sociological constructs. Specifically, a five-week program cannot possibly change pro-drug use attitudes instilled in children since birth. Further, a five-week prevention program cannot change role relationships with negative role models, neighborhood disorganization, lack of family interaction, lack of school success and bonding, and other sociological elements occurring in most every society. Although the five week program can provide a “safe haven” to at-risk youth, it cannot change the multitude of risk factors occurring within their social community when they leave the program. This study provided a preliminary look at the effectiveness of NYSP. It may be worthwhile to strengthen the program before undertaking further expensive evaluations. Additionally, future research should look at more reasonable

expectations from short-term programs or develop a list of a few specific risk or protective factors targeted instead of all seventeen.

Fifth, this study implies that there is a dramatic disconnect occurring between prevention theory and program application. While it is true that the risk and protective theory of Hawkins et.al. 1992 is the predominant theory used to guide prevention program development, funding, and evaluation through out the nation, a significant number of prevention programs grapple with how to apply the risk and protective factor model in their local program. A large gap remains between what the theory advocates and what programs provide. The federal government has begun to address this need through prevention funding focused on this mission. The Western Center for the Application of Prevention Technology (CAPT), at the University of Nevada, Reno received a CSAP grant to begin helping prevention programs utilize theory and methods in programmatic planning and implementation. NYSP should consider requesting technical assistance from the Western CAPT to help bridge the gap between prevention theory and program application.

Sixth, in terms of family supervision, the statistically significant dimension, the program should be commended for work in this area. Clearly, most youth indicated that their family structure improved over time. NYSP may want to focus on this single area and perhaps add one other dimension, for example family interaction, in future programs. The NYSP respondents indicated that over time, family structure and supervision increased to a positive degree. NYSP could build upon this strength by involving parent volunteers in sporting events or other NYSP functions. Additionally, NYSP may want to

consider expanding program services to more than a five week summer session. Longer exposure and interaction with youth may provide more statistically significant findings.

Seventh, this study points to some important implications for the sociology of sports research on character development and juvenile delinquency. Specifically, the literature indicates that a gap exists in the research on youth involvement in sports programs and whether these programs actually decrease deviance and increase positive character development. This study found that the sports component did not significantly impact the majority of the seventeen risk and protective factor dimensions. A common myth in American culture exists that youth develop positive character attributes such as teamwork, goal setting, and pro-social skills through involvement in sports programs. Additionally, another common myth that sports programming decreases juvenile delinquent or deviant behavior was also not supported in this study. This study leads to the conclusion that sports programming does not lead to long range risk and protective factors behavior change. More research in this area is highly recommended. It would benefit the field of sociology to further research the correlation between risk and protective factors and sports programming to determine if youth sports programs really do positively impact youth.

Limitations

One of the major limitations of this study was the lack of a control group. Due to difficulties accessing a control group through the Clark County School District, a quasi-experimental design was selected. However, this design presented a number of problems.

First, due to the lack of a control group, it was impossible to determine outside factors that may have influenced real changes. For example, this design provides no answers to objections that maturation or outside events were responsible for what change occurred, especially in terms of the family supervision dimension. Due to this design, a number of internal sources of invalidity may have occurred including, history, maturation, selection, mortality, and testing (Campbell and Stanley 1963). Much of this is inherent in the design. Future work should consider a classical experimental design or other true experimental design.

Second, the instrument posed a number of problems. The first problem is that many of the youth had difficulty reading and understanding each question. They would ask the facilitator to define specific terms, such as “embarrass”. The facilitators were told not to provide this type of information as embellishing could bias the results. Secondly, the instrument was very long and took the younger age groups as long as 50 minutes to complete. The students had a hard time staying focused and behavior problems began to arise. Several respondents “gave up” and simply did not complete the surveys. Third, the instrument itself had a number of problems (See Appendix I). Item number 14i, page 6 had to be eliminated due to the fact that no answer boxes were provided. Additionally, item number 19f, page 7 had to be eliminated due to the fact that the selection boxes were not in proper alignment causing confusion among the respondents. Fourth, some youth responded emotionally and could not finish the survey. Some sensitive questions were asked concerning family members which caused distress for young people who did not have families. For example, a young boy began crying when he came across questions

concerning his family. Researchers must be sensitive to the impact and trauma that results from questionnaires for respondents, especially at-risk children. One cannot assume that respondents will be objective when completing questions that may evoke emotion. Fifth, the self-reporting process could have produced socially desirable responses. For example, drug use is not considered socially acceptable so many of the youth may have responded with more socially desirable responses than actually occurred.

Third, the small sample size was problematic and became a greater area of concern as it significantly diminished over time. During the pre-test, 181 respondents successfully completed the IPFI questionnaire. The total number of respondents dropped to 102 during the post-test wave. Finally, during the follow-up wave that occurred three months after program completion, only 70 respondents successfully completed the instrument. Several incentives were used during the follow-up wave to entice the program participants to return to the program. The following incentives were advertised and given after completion of the follow-up survey; two free bicycles, a free NYSP sweatshirt for each program participant, miscellaneous toys, and food. Regardless of these attempts, the follow-up phase still had a limited number of participants.

Fourth, data reduction and analysis were clearly difficult. It became challenging to determine how each item fit within each dimension. I relied heavily on the original evaluation conducted in 1992 and followed the same steps the original researchers advocated. When the results were initially discovered, I was reluctant to believe that this program was not more effective in a greater number of dimensions. As a researcher, I admit to bias because I believed this program was more effective than the results

indicated and really struggled with the findings. However, I eventually came to the conclusion that the evaluation findings were real and that there was nothing I could ethically do to impact the outcome.

Future Research

The theory of risk and protection is one that should be explored in further prevention program evaluations as the construct to frame an understanding of preventing drug use among youth. I would recommend further research in this area. Additionally, I believe the sociological scientific community should have an interest in helping prevention programs understand the value of scientific endeavors that evaluate programs. Clearly, a researcher should have responsibility in connecting theory with applied prevention programming and evaluation. Further research in this area might help address the disconnect between prevention theory and program work.

As indicated above, it would be worth while to work with NYSP to strengthen its prevention programming to focus on a few key risk and protective factors. This could be done through a specific curriculum which clearly trains prevention specialists to conduct effective prevention presentations. Additionally, NYSP could consider strengthening and expanding the length of its programming to see if short term results occur. Upon completion of program strengthening, future research could include another evaluation, based on a true experimental design.

Finally, as previously mentioned, further research exploring the relationship between character development, decreased juvenile delinquency, and sports programming

should be explored. Current research findings do not articulate if these relationships occur or if societal myths prevail. Research in this area would prove interesting and implications for programs like NYSP would ensue. If it was discovered through data and replicated studies that sports programs have little effect on positive character development and decreased juvenile delinquency, social programs could alter expectations of this nature.

These findings, limitations, and suggestions for future research have far reaching implications for substance abuse sports programs. The field of substance abuse prevention is one that is hungry for sociological insight. Few theories currently exist which truly attempt to explain why drug use continues to be a problem for young people and how to best go about preventing future use. The theoretical work of Hawkins, et.al. 1992 shows promise and should be applied, measured, and refined as time progresses. This study has contributed to the research on drug prevention program evaluation by attempting to bridge the gap between sociological substance abuse prevention theory and applied prevention programming.

APPENDIX I

INDIVIDUAL PROTECTIVE FACTORS INDEX

INDIVIDUAL PROTECTIVE FACTORS INDEX QUESTIONNAIRE

Before we begin:

Please write your birthdate:

[] []
Month Day

Please write your age:

[]
Age

And, please write your initials:

[] []
First Last
Name Name

When you are told, tear off this page and hand it in.

Roster Number

The following questions will take approximately 30 minutes to complete. In answering them, we are asking just two things of you.

First: We need you to listen carefully and read along as we go through some questions about you and your family. It is IMPORTANT that you answer every question we read.

Second: IT IS VERY IMPORTANT that you answer each question truthfully. The study cannot help unless you tell the truth. The people who are doing the study cannot know your name because it will not be on the questionnaire.

We are going to read a lot of sentences. For each of these sentences, please read along and check in the box in front of the answer that is closest to how you feel about what the sentence says.

Check YES! If you believe very strongly that the sentence is true for you, that it is the way you feel almost all of the time.

Check yes If you sort of agree that the sentence is true for you, that it is the way you feel most of the time.

Check no If you sort of believe the sentence is false for you, that you do not feel that way most of the time.

Check NO! If you believe very strongly that the sentence is false, that you almost never feel this way.

Let's practice by reading the following sentence:

I like pepperoni pizza.

[] YES! [] yes [] no [] NO!

If you really like pepperoni pizza, it is one of your favorite foods, you would check "YES!", if you really don't like it, you can't stand to eat it, you would check "NO!". If you sort of like it, you would check "yes", if you sort of don't like it, you would check "no".

Okay. We are ready to start.

1. I can tell my parents the way I feel about things.	[] YES!	[] yes	[] no	[] NO!
2. I like to see other people happy.	[] YES!	[] yes	[] no	[] NO!
3. Sometimes you have to physically fight to get what you want.	[] YES!	[] yes	[] no	[] NO!
4. I will probably die before I am thirty.	[] YES!	[] yes	[] no	[] NO!
5. I will always have friends.	[] YES!	[] yes	[] no	[] NO!
6. I like to help around the house.	[] YES!	[] yes	[] no	[] NO!
7. I might smoke cigarettes when I get older.	[] YES!	[] yes	[] no	[] NO!
8. I really want to graduate from college.	[] YES!	[] yes	[] no	[] NO!
9. I like the way I act.	[] YES!	[] yes	[] no	[] NO!
10. I get mad easily.	[] YES!	[] yes	[] no	[] NO!
11. I get along well with other people.	[] YES!	[] yes	[] no	[] NO!
12. Being part of a team is fun.	[] YES!	[] yes	[] no	[] NO!
13. Grown-ups seem to have fun when they drink alcohol.	[] YES!	[] yes	[] no	[] NO!
14. My family expects too much of me.	[] YES!	[] yes	[] no	[] NO!
15. People usually like me.	[] YES!	[] yes	[] no	[] NO!
16. Other people decide what happens to me.	[] YES!	[] yes	[] no	[] NO!
17. I think I will have a nice family when I get older.	[] YES!	[] yes	[] no	[] NO!
18. If I disagree with a friend, I can tell them.	[] YES!	[] yes	[] no	[] NO!
19. Drinking alcohol is bad for your health.	[] YES!	[] yes	[] no	[] NO!
20. Finishing high school is important.	[] YES!	[] yes	[] no	[] NO!
21. Sometimes I am ashamed of my parents.	[] YES!	[] yes	[] no	[] NO!
22. I can be trusted.	[] YES!	[] yes	[] no	[] NO!
23. I am afraid my life will be unhappy.	[] YES!	[] yes	[] no	[] NO!
24. I like being around people.	[] YES!	[] yes	[] no	[] NO!
25. I will probably drink alcohol when I am old enough.	[] YES!	[] yes	[] no	[] NO!
26. School is a waste of time.	[] YES!	[] yes	[] no	[] NO!
27. It is important to think before you act.	[] YES!	[] yes	[] no	[] NO!
28. Bad things happen to people like me.	[] YES!	[] yes	[] no	[] NO!
29. Helping others makes me feel good.	[] YES!	[] yes	[] no	[] NO!
30. My family has let me down.	[] YES!	[] yes	[] no	[] NO!
31. Following the rules is stupid.	[] YES!	[] yes	[] no	[] NO!
32. My life is all mixed up.	[] YES!	[] yes	[] no	[] NO!
33. I do whatever I feel like doing.	[] YES!	[] yes	[] no	[] NO!
34. If I have a reason, I will change my mind.	[] YES!	[] yes	[] no	[] NO!
35. It is hard for me to make friends.	[] YES!	[] yes	[] no	[] NO!
36. It's okay to use drugs if you don't get caught.	[] YES!	[] yes	[] no	[] NO!

37. I try hard to do well in school.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
38. I like to do things with my family.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
39. Most people can be trusted.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
40. I can do most things I try.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
41. If I study hard, I will get better grades.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
42. When I am mad, I yell at people.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
43. I think I can have a nice house when I grow up.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
44. If I don't understand something, I will ask for an explanation.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
45. My friends respect me.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
46. I always like to do my part.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
47. It is more important to play fair than to win.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
48. Sometimes I break things on purpose.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
49. I will probably never have enough money.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
50. I am often too embarrassed to ask questions.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
51. I often feel lonely.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
52. If I have a chance, I might try drugs.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
53. A lot of days I would rather not go to school.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
54. There is some good in everybody.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
55. When I try to be nice, people notice.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
56. I hate being in front of a group.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
57. It is important to do your part in helping at home.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
58. If you work hard, you will get what you want.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
59. Marijuana makes you happy.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
60. I would like to quit school as soon as I can.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
61. People usually drink alcohol at good parties.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
62. I can't wait to be old enough to drink.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
63. I am curious about alcohol and drugs.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
64. I enjoy talking with my family.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
65. Helping others is very satisfying.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
66. I like the way I look.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
67. If I feel like it, I hit people.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
68. To make a good decision it is important to think about what will happen afterwards.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
69. I often disappoint people.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
70. I don't like most people.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!
71. I am responsible for what happens to me.	<input type="checkbox"/> YES!	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> NO!

We will now start the second part of the questionnaire. We will be done soon. Remember that it is very important that you answer each question. The answers for these questions are different than those we just finished, so we have to read them very carefully. Okay, we are ready to start!

First, we need some information about you.

1. Are you a ☐ Boy ☐ Girl
2. What is your grade in school?
☐ Third ☐ Fifth ☐ Seventh ☐ Ninth
☐ Fourth ☐ Sixth ☐ Eighth ☐ Tenth
☐ Other _____
3. What is your age in years? _____ years
4. What is your race?
☐ African American ☐ Latino/Latina, Hispanic
☐ White ☐ Asian or Pacific Islander
☐ American Indian ☐ Other _____
5. Where you are living now, what adults live with you (check all that are true)?
☐ Your Mother ☐ Your Father
☐ Your Stepmother ☐ Your Stepfather
☐ Other Adult Relatives ☐ Other Adults
such as grandmother or aunt
6. How many brothers and sisters do you have? ☐]
7. How many children live with you at home? ☐]

Now, we would like some information about your family and your neighborhood.

8. Here is a list of things that are true in some families and not in others. Please answer "yes" if each statement is usually true of your family, and "no" if it is not.

The rules in our house are clear.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
I have a clear time when I have to be home.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
I have a regular time and place to do homework.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
My parents often do not know where I am.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
When I do something wrong,		
I don't know what my parents will do.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
I have regular chores to do at home.	<input type="checkbox"/> Yes	<input type="checkbox"/> No

9. Here are some other things that happen in some families and do not happen in others. Please indicate whether these things happen in your family all the time (that is, every day or almost every day); often (once a week or so); not very often (less than once a week); or never. If you do not live with your parents, think of the adult(s) who you do live with when we ask about parents.

	All the Time	Often	Not Very Often	Never
The whole family eats dinner together.	[]	[]	[]	[]
Parents help you with your homework.	[]	[]	[]	[]
You go to a movie or out to dinner with your parents.	[]	[]	[]	[]
Family members argue.	[]	[]	[]	[]
You talk to your parents about school.	[]	[]	[]	[]

10. How would your parents feel if you used alcohol and then he or she knew about it?

[] Disapprove Strongly [] Disapprove Some [] Would Not Care Much

11. How would your parents feel if you used drugs and then he or she knew about it?

[] Disapprove Strongly [] Disapprove Some [] Would Not Care Much

12. This year have you done the following?

Go to church or Sunday school	[]	Yes	[]	No
Play on organized sports teams for kids	[]	Yes	[]	No
Belong to any other clubs like Scouts, "Y", Campfire Girls	[]	Yes	[]	No
Belong to a gang	[]	Yes	[]	No

13. Have you ever wished that either one or both of your parents would drink less?

[] Yes [] No [] No, my parents do not drink

14. The following list indicates things that might happen to kids, or things that kids might do. Please indicate whether you have done these things three or more times in the last year, only once or twice or not at all.

	3 or More Times	Once or Twice	Not At All
Got sent to the principal's office or had detention	[]	[]	[]
Skipped school for a whole day	[]	[]	[]
Purposely damaged other people's property	[]	[]	[]
Stole something	[]	[]	[]
Got into a fist fight	[]	[]	[]
Tried drugs such as marijuana, cocaine or LSD	[]	[]	[]
Got stopped by the police	[]	[]	[]
Had a little bit of beer, wine or wine coolers, one or two drinks	[]	[]	[]
Smoked cigarettes	[]	[]	[]
Had a lot of beer, wine or wine coolers, more than two drinks	[]	[]	[]
Gone to class high on alcohol or drugs	[]	[]	[]
Been in a car with an adult who was drinking	[]	[]	[]
Chewed or dipped tobacco	[]	[]	[]

Sniffed glue or paint to get high	[]	[]	[]
Talked back to a teacher	[]	[]	[]
Argued with your parents	[]	[]	[]
Broken into a house or store	[]	[]	[]
Been around other kids who were drinking alcohol	[]	[]	[]
Been around other kids who were using illegal drugs	[]	[]	[]

18. Next, we have some questions about your closest friends, say your four or five closest friends. Would you say most of them, some of them or none of them do each of the following things.

	<u>Most</u>	<u>Some</u>	<u>None</u>
Study hard at school	[]	[]	[]
Go to church	[]	[]	[]
Smoke cigarettes	[]	[]	[]
Drink beer or wine once in a while	[]	[]	[]
Go to NYSP	[]	[]	[]
Try drugs like marijuana or cocaine once in a while	[]	[]	[]
Like school a lot	[]	[]	[]
Get along with their parents really well	[]	[]	[]

19. Here is a list of things that happen in many neighborhoods. Please indicate how often these things happen in your neighborhood. Do they happen all the time (that is, every day or almost every day); often (once a week or so); not very often (less than once a week); or never.

	<u>All the Time</u>	<u>Often</u>	<u>Not Very Often</u>	<u>Never</u>
You talk to your neighbors	[]	[]	[]	[]
You see people drinking alcohol on the street	[]	[]	[]	[]
Someone gets robbed	[]	[]	[]	[]
Someone offers you drugs	[]	[]	[]	[]
You see someone using drugs	[]	[]	[]	[]
Kids play sports together []	[]	[]	[]	[]
You see the police arrest someone	[]	[]	[]	[]
You eat at a friend's house	[]	[]	[]	[]
People help each other	[]	[]	[]	[]
Someone offers you alcohol	[]	[]	[]	[]
You see a fight	[]	[]	[]	[]

YOU ARE DONE!
THANK YOU VERY MUCH FOR HELPING!

Roster Number

APPENDIX II

CORRESPONDENCE



MEMORANDUM

TO: Marsha L. Green
Secretary, Institutional Review Board (IRB)
Office of Sponsored Programs

FROM: Dr. Porter L. Troutman, Jr.
Associate Professor

DATE: September 3, 1997

SUBJ: Protocol Title: University of Nevada, Las Vegas
National Youth Sports Program

Advisor: OSP Number: 311f1095-073/311f1096-113

Please extend our search project. The project is still active.

Thank you.

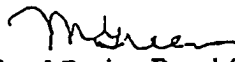
PLT:kd

College of Education
4505 Maryland Parkway • Box 453001 • Las Vegas, Nevada 89154-3001
(702) 895-3374 • FAX (702) 895-4068



DATE: September 2, 1997

TO: Porter Troutman
M/S 3005

FROM: Marsha L. Green 
Secretary, Institutional Review Board (IRB)
Office of Sponsored Programs (X1357)

RE: Status of Project Involving Human Subject
Protocol Title: University of Nevada, Las Vegas - National Youth Academic
Sports Program

Advisor:
OSP Number: 311f1095-073/311f1096-113

The protocol for the project referenced above was reviewed by the UNLV Institutional Review Board in October of 1996. The protocol was approved for a period of one year from the date of that approval notification.

According to Federal regulations, approvals may be given for a one year duration. If the project is still active, i.e., interaction with human subjects still being conducted, then the investigator must notify the Office of Sponsored Programs. If all interaction with human subjects is complete on the project, no notification is necessary.

Please submit to our office through your advisor a written request to extend your research project. In your memo please indicate whether there is a change or no change in your protocol. If there is a change in your protocol, i.e., research methods or procedures or subjects, please resubmit a protocol to this office for review.

If we do not receive any notification by way of memorandum requesting an extension of your protocol, then we will assume that the project is completed. Please submit your memo and/or protocol to our office as soon as possible (M/S 1037). Please reference the above name of project and the OSP number when submitting your memorandum.

If you have any questions regarding the above, please contact our office at Ext. 1357.

cc: Advisor
OSP File

Office of Sponsored Programs
4505 Maryland Parkway • Box 451037 • Las Vegas, Nevada 89154-1037
(702) 895-1357 • FAX (702) 895-4242



EMT Associates, Inc.
771 Oak Avenue Parkway, Suite 2
Folsom CA 95630-6802
(916) 983-6680 • (916) 983-6693 FAX ☐

408 North Euclid ☐
St. Louis MO 63108-1602
(314) 367-1300 • (314) 367-1116 FAX

May 23, 1997

Julie Hogan, M.A.
Department of Sociology
4505 Maryland Parkway Box 455033
University of Nevada-Las Vegas
Las Vegas, Nevada 89154-5033

Dear Ms. Phillips:

EMT Associates would be delighted to share the IPFI with you for your doctoral research. If you need any information on how the instrument is coded, please call our secretary, Sue Stroud at (314) 367-1300 for further information. We would also appreciate receiving your findings from the National Youth Sports Program at UNLV.

Good luck, and if you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Fred Springer".

J. Fred Springer, Ph.D.
Research Director

APPENDIX III

CONSENT FORMS

UNIVERSITY OF NEVADA, LAS VEGAS
NATIONAL YOUTH SPORTS PROGRAM
PARENT ASSENT FORM

I am Dr. Porter Troutman from the University of Nevada, Las Vegas, National Youth Sports Program (NYSP). Your child is being asked to participate in a research study as part of NYSP during his/her time in the program.

He/she will be shown educational presentations in AIDS, Substance Abuse, Gang Activity, and Suicidal Tendencies. Students will attend field trips and educational excursions either by bus, van or car. He/she will be chaperoned at all times while away from the UNLV campus and all necessary precautions will be taken to protect your child from harm or injury.

Students will be asked to complete a questionnaire at the beginning and end of the program. All information gathered in this study will be kept completely confidential and retained in the NYSP Office. All questionnaires completed by the participants will be identifiable to office staff only. No names will be written on the questionnaires.

There is no risk to the participant in this program. He/she is free to withdraw at any time. The NYSP believes that this program will be beneficial to your child in his/her future development. Your child's participation will also help to improve the program's effectiveness in the future.

For information regarding this research project, please contact Dr. Porter Troutman at UNLV at 895-4407. For questions regarding the rights of research subjects, please contact the Office of Sponsored Programs at UNLV at 895-1357.

I hereby give my consent for my child to participate in this research project.

Parent/Guardian Signature

Date

UNIVERSITY OF NEVADA, LAS VEGAS
NATIONAL YOUTH SPORTS PROGRAM
CHILD ASSENT FORM

I am Dr. Porter Troutman from the University of Nevada, Las Vegas, National Youth Sports Program (NYSP). You are being asked to participate in a research study as part of NYSP during your time in the program.

You will be shown educational presentations in AIDS, Substance Abuse, Gang Activity, and Suicidal Tendencies. You will be attending field trips and educational excursions either by bus, van or car.

You will be asked to complete a questionnaire at the beginning and end of the program. All information gathered in this study will be kept completely confidential and retained in the NYSP Office. All questionnaires completed by the participants will be identifiable to office staff only. No names will be written on the questionnaires.

There is no risk to you as a participant in this program. You are free to withdraw at any time. The NYSP believes that this program will be beneficial to you in your future development. Your participation will also help to improve the program's effectiveness in the future. Before signing this assent form, you should discuss the above information with your parent or guardian. Your parent or guardian will also be asked to sign a consent form on your behalf.

If you have any questions regarding this study, Dr. Troutman and the NYSP staff will be happy to answer them for you.

I hereby give my assent to participate in this research project.

Child's Signature

Date

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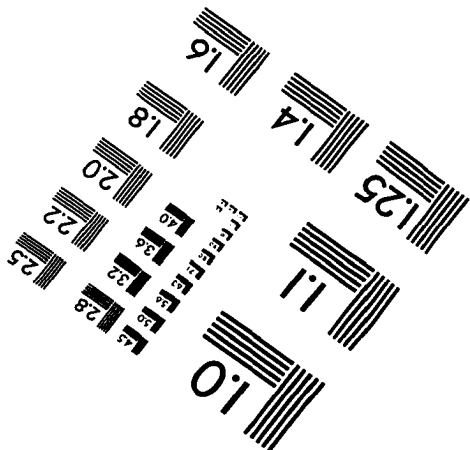
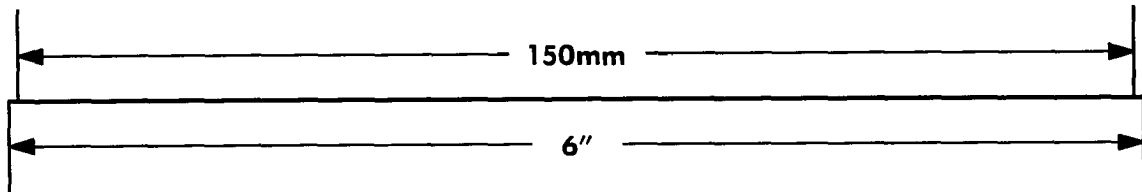
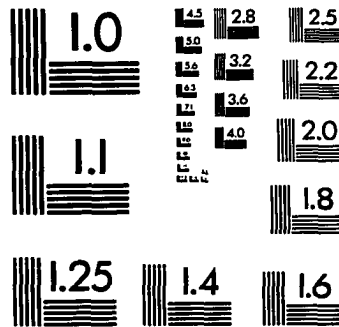
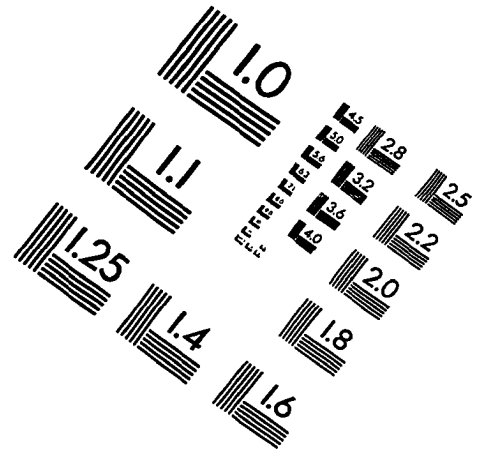
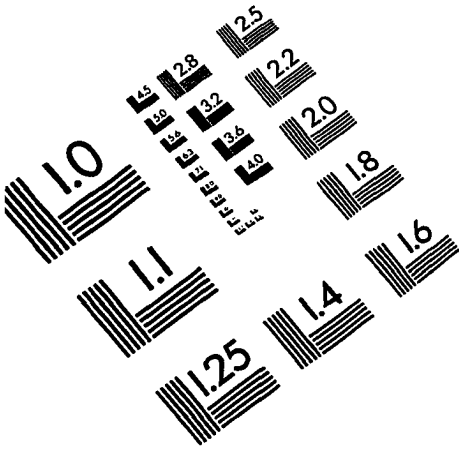
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