

PERCEPTIONS OF THE EFFECTIVENESS OF SCHOOL DRUG POLICY  
PROGRAMS AND POTENTIAL IMPLEMENTATION OF DRUG TESTING

by

Richard K. Maguire

A Dissertation Presented in Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Education in Educational Leadership

UNIVERSITY OF PHOENIX

December 2010

UMI Number: 3510724

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent on the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI 3510724

Copyright 2012 by ProQuest LLC.

All rights reserved. This edition of the work is protected against unauthorized copying under Title 17, United States Code.



ProQuest LLC.  
789 East Eisenhower Parkway  
P.O. Box 1346  
Ann Arbor, MI 48106 - 1346

© 2010 by Richard K. Maguire  
ALL RIGHTS RESERVED

PERCEPTIONS OF THE EFFECTIVENESS OF SCHOOL DRUG POLICY  
PROGRAMS AND POTENTIAL IMPLEMENTATION OF DRUG TESTING

by

Richard Kenneth Maguire

November 2010

Approved:

Florence Aitken, Ed.D. Mentor

Francis Wardle, Ph.D. Committee Member

Yohannes Mariam, Ph.D. Committee Member


Accepted and Signed:

  
Florence Aitken

11/17/2010

Date

Accepted and Signed:

  
Francis Wardle

11/17/2010


Date

Accepted and Signed:

  
Yohannes Mariam

11/17/2010

Date

  
Jeremy Moreland, Ph.D.  
Dean, School of Advanced Studies  
University of Phoenix

  
11/30/2010  
Date

## ABSTRACT

Juvenile drug use is a persistent problem that has negative effects not just the academic performance of students but also increases the likelihood of these students failing in life. Consequently, school officials in the United States have undertaken efforts to address this problem through the implementation of drug prevention programs such as Drug Abuse Resistance Education (*DARE*) and Substance Abuse for Educators (*SAFE*) programs. The instrument was sent to 276 middle school students, 307 elementary students, but only 37 K-8 school administrators responded and were examined regarding these programs and analyzed how the years of experience and knowledge of drug education policy affects their perceptions of these programs. The study investigated perceptions of these school administrators on the implementation of random drug testing as a means to combat the problem of juvenile drug use. The results of the regression analysis indicated that the years of experience had a significant effect on the perceptions of the school administrators on the *DARE* but not on the *SAFE* program. The results of the regression analysis also indicated that the knowledge of drug education policy has no significant effect on the perception of the *DARE* and *SAFE* programs. Descriptive analysis revealed that these school administrators find the current used program to be effective and the response to implementing random drug testing in schools was not positive. The perception of the school officials are instrumental in shaping drug policy in the education sector and can affect the formulation of policies to address the problems created by juvenile drug use.

## DEDICATION

I dedicate this dissertation to my nephew and niece: Sean and Shannon Maguire.

“Buddy, Buddy, Buddy....double loving.”

## ACKNOWLEDGMENTS

I want to acknowledge and thank Dr. Florence Aitken, Dr. Francis Wardle and Dr. Yohannes Miriam: for their time, constructive feedback, and dedication throughout this entire process. They are wonderful scholars and I am grateful for their help. I am grateful to my family for their patience and support. First, I would like to thank my brother and sister-in-law, Mike and Kathy Maguire for their assistance with the printing and labeling of this survey instrument. I would also like to thank David Carden and my brother Dale Maguire, who taught the 4<sup>th</sup> grade for a decade; who helped me formulate the concept of my proposal. I am also grateful for Dr. John Drew and Grant McNiff for their ideas and dedication to their field of mental health and substance abuse education. Finally I would thank my father and mother, Douglas and Theresa Maguire for their devotion and love.

## TABLE OF CONTENTS

LIST OF TABLES	ix
CHAPTER 1: INTRODUCTION.....	1
Background of the Problem.....	1
Statement of the Problem.....	5
Purpose of the Study.....	6
Significance of the Study.....	8
Significance to the Field of Study.....	9
Significance to Leadership.....	9
Nature of the Study.....	10
Research Questions.....	14
Hypotheses.....	15
Theoretical Framework.....	17
Definition of Terms.....	21
Assumptions.....	23
Scope, Limitations, and Delimitations.....	24
Scope.....	24
Limitations.....	25
Delimitations.....	25
Summary.....	26
CHAPTER 2: REVIEW OF THE LITERATURE.....	28
Documentation.....	29
Title Searches.....	30



Gaps in the Literature Related to the Study.....	31
Social Learning Theory.....	311
Role Theory and Social Learning Theory.....	34
Historical Overview of Drug Education Programs.....	35
Drug Abuse Resistance Education ( <i>DARE</i> ).....	37
Substance Abuse for Educators ( <i>SAFE</i> ).....	38
Life Skills Training.....	40
Drug Testing in the School Environment.....	42
Disregard for Drug Testing in Schools.....	43
Public versus Private School Commercialization.....	51
Drug Testing versus Educational Values.....	54
Drug Testing: Too Unreliable.....	56
Drug Testing: Too Costly.....	56
Drug Testing and Available Alternatives.....	57
Current Findings.....	59
School Administrators and Decision-Making.....	64
Conclusion.....	67
Summary.....	68
CHAPTER 3: METHOD.....	70
Research Method and Design Appropriateness.....	71
Research Method.....	71
Appropriateness of Design.....	72
Feasibility of Design.....	75

Analyzing the Data.....	76
Data Collection for the Pilot Study.....	77
Characteristics of the Study Population.....	<b>Error! Bookmark not d</b>
Research Questions.....	77
Hypotheses.....	78
Population.....	80
Sampling Frame.....	811
Informed Consent.....	<b>Error! Bookmark not c</b>
Confidentiality.....	83
Geographic Location.....	84
Instrumentation.....	85
Data Collection.....	86
Data Analysis.....	86
Validity and Reliability.....	91
CHAPTER 4: RESULTS.....	93
Pilot Study.....	94
Research Questions and Hypotheses.....	95
Data Processing and Analysis.....	97
CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS.....	116
Conclusions.....	118
Significance of the Study.....	121
Limitations.....	122
Recommendations of the Study.....	123

Recommendations to Leaders.....	123
Recommendations for Further Study.....	1244
Summary.....	126
REFERENCES.....	128
APPENDICES.....	144

## LIST OF TABLES

Table 1 Descriptive Statistics of the Participants.....	99
Table 2 Frequency of Programs.....	100
Table 3 Frequency of Ranks.....	101
Table 4 Frequency of Number of Years Served in School.....	102
Table 5 Multiple Regression Analysis Results for RQ1 - Model Summary.....	103
Table 6 Multiple Regression Analysis Results for RQ1 - ANOVA.....	104
Table 7 Multiple Regression Analysis Results for RQ1 - Coefficients.....	104
Table 8 Multiple Regression Analysis Results for RQ2 - Model Summary.....	105
Table 9 Multiple Regression Analysis Results for RQ2 - ANOVA.....	106
Table 10 Multiple Regression Analysis Results for RQ2 - Coefficients.....	106
Table 11 Multiple Regression Analysis Results for RQ3 - Model Summary.....	107
Table 12 Multiple Regression Analysis Results for RQ3 - ANOVA.....	108
Table 13 Multiple Regression Analysis Results for RQ3 - Coefficients.....	108
Table 14 Multiple Regression Analysis Results for RQ4 - Model Summary.....	109
Table 15 Multiple Regression Analysis Results for RQ4 - ANOVA.....	110
Table 16 Multiple Regression Analysis Results for RQ4 - Coefficients.....	110
Table 17 Descriptive Statistics of Responses Regarding Effectiveness of Programs.....	111
Table 18 Descriptive Statistics of Responses Regarding Random Drug Testing (RDT).....	114

## CHAPTER 1: INTRODUCTION

School officials in the United States have maintained a variety of drug education programs, which are of questionable usefulness, and as a result, possibly have ignored the most powerful option for controlling drug use among adolescents – drug testing (Jacobs & Morag, 1992). Drug use among adolescents has risen in 2009, largely propelled by the increase in use of marijuana among adolescents (Johnston, O'Malley, Bachman, & Schulenberg, et al., 2009). Alcohol consumption among adolescents generally has been declining for the past years including 2009, though there have been signs that this trend may be leveling off in the future (Johnston et al., 2009). The purpose of this current quantitative, descriptive study is to identify the perceptions of kindergarten through grade eight (K-8) public school administrators in Orange County, California, regarding the state-mandated drug policy programs in schools, the effects of these programs on youth, and the use of random drug testing to augment state-mandated drug education programs in public schools.

Chapter 1 provides the background of the problem, the reasons the problem exists and why the problem is of social concern, the problem statement, the purpose of the study, and the significance of the study. This chapter presents the nature of the study, hypotheses, and research questions, theoretical framework, definitions, assumptions, scope, limitations, and delimitations.

### Background of the Problem

Schoolchildren exposed to illegal drugs and the uses of drugs have a greater propensity to fail not only in school but also in life (Broman, 2006). Juvenile drug use has negative consequences on the different aspects of development of an individual.

Drug use can prevent a person from acquiring learning and memory skills can lead to various psychiatric conditions and can be a risk factor for truancy, delinquency, suicide, pregnancy, and drug dependency during adolescent and adult years. Annually, 8,000 Americans die because of excessive drug use (Boyd, 2009). Furthermore, psychoactive drug use destroys not only the users but also their families and the societies in which they belong. Drug use also has an effect on the nation's economy. In 2002, \$180.8 billion was spent on juvenile and adult drug treatment, drug law enforcement, and insurance (Boyd, 2009).

The most popular choice of psychoactive drugs by American adolescents is cannabis (includes marijuana and hashish). The amount of use has doubled relative to usage of cannabis in the 1990s. In a 2007 survey conducted by the Survey Research Center in the Institute for Social Research at the University of Michigan, the reported rate of cannabis use for students was 42% for high school seniors, 31% for grade 10 students and 14% for grade eight students (Regents of the University of Michigan, 2007). The survey also reported an increase in the high school seniors' usage of heroin and cocaine from 2.8% in 1992 to 6.2% in 2007.

Drug prevention programs in schools date back to the second half of the 19<sup>th</sup> century when the Women Christian Temperance Union (*WCTU*) urged all states and territories to include scientific drug prevention programs in high school health classes (Tracy & Acker, 2004). After World War I, mostly because of evolution of the media portraying the affluent personalities using illicit drugs, teenagers began to smoke tobacco and sniff heroin in schools (Tracy & Acker, 2004). This continued until the 1960s as the new generation of youth tried different and new forms of drugs. A handful of legislators

espoused drug education programs in an effort to gain support on the *War on Drugs*. The implementation of these drug education programs also promoted conducting sparse program-based research to understand drug education and prevention programs through the lens of elementary and secondary school administrators charged with the program's implementation. Historically, school administrators have hesitated to apply random drug testing in the school environment and have turned to other means of control (Jacobs & Morag, 1992). One of America's most visible drug education programs in schools is the Drug Abuse Resistance Education (*DARE*) program. According to its website, the aim of the *DARE* program is to teach children how to resist peer pressure and live productive drug and violence-free lives (*DARE* website, 2008). The website also stated that the program, developed in 1983, was designed for grades K-12 in the United States. *DARE* aims to "equip kids with the tools that will enable them to avoid negative influences and instead, allow them to focus on their strengths and potential... it establishes positive relationships between students and law enforcement, teachers, parents, and other community leaders" (*DARE*, n.p.).

Neuman (2003) identified a study conducted by Wysong, Aniskiewicz, and Wright (1994) that "evaluated the effectiveness of the *DARE* program found in 10,000 plus schools in the United States and in 42 other countries" (pp. 24-25). The study found that "*DARE* participants were no more successful saying no to drugs than the comparison group who did not participate in the drug-prevention training" .... "The *DARE* program is widely used, well funded, and popular with police departments, school officials, parent groups, and others..." The authors suggested "that the program's" large following "may be" because of "its political symbolic impact." *DARE* "may be effective for the latent

group who is helping politicians, school officials, and others may believe they are morally good and involved in anti-drug actions,” but the program may be ineffective for its symptomatic group in terms of “reducing illegal drug use by teenagers” (Neuman, pp. 24-25).

The discovery of a large body of negative research results led to the implementation of minimal changes in the *DARE* in 1994. However, three events considered to be critical for the *DARE* curriculum took place years after the modifications on the curriculum. Published evaluations and review papers further confirmed the ineffectiveness of *DARE*. Institutions and organizations including the National Institute of Justice, the surgeon general and the National Academy of Sciences released results that suggest the lack of effectiveness in *DARE*'s approach to drug education. Several communities in the country reviewed *DARE*'s drug education program and considered more effective options (Rosenbaum & Hanson, 1998).

Substance Abuse for Educators (*SAFE*) is another well-known drug prevention-training program. In contrast to *DARE*, the *SAFE* training includes presentations by professionals and the establishment of an action-oriented Student Assistance Program (*SAP*) prevention and intervention team. *SAFE* training is generally seen as broader than the earlier *DARE* programs because it encompasses major components that address public health, stages of chemical use, youth, and recovery, risk-resiliency-asset building, the family system, use of community resources, and the development of *SAP* substance abuse prevention strategy (Beacham, 2008). Researchers have yet to determine the long term effects of the *SAFE* program (Beacham, 2008).



Health literacy curriculum in elementary and secondary schools in Orange County, California, commonly include the *DARE* and *SAFE* programs. These drug education programs aim to promote prevention and awareness of the negative effects of drug abuse and prevent the onset of drug use (Beacham, 2008). As part of California's Health Framework, the state's drug education is meant to instill health literacy in all students.

### **Statement of the Problem**

Studies have found that there is still a high frequency of recreational drug and alcohol use by young people, and the effectiveness, especially in the long term, of drug-prevention programs such as *DARE* and *SAFE* are questionable (Rosenbaum & Hanson, 1998). School children exposed to drugs and drug use in their lives have a greater propensity to fail not only in school but also in life (Broman, 2006). Research conducted to identify the long-term success of drug education programs in schools have neither produced sufficient evidence of success nor produced an understanding of the perceptions of these programs among the school administrators who have the greatest impact on the programs' implementation (Broman, 2006).

This current quantitative study aimed to examine the perceptions of K-8 public school administrators regarding the effectiveness of the *DARE* and *SAFE* programs and other current drug prevention programs implemented in schools. Several communities in the country have reconsidered the implementation of the *DARE* program in schools to educate its youth because of its insignificant effect on students' use of drugs (Rosenbaum & Hanson, 1998). Institutions such as the National Academy of Sciences have found *DARE's* approach to drug education ineffective (Hanson, 2007). The study also

examined the political influences and arguments that in their perception have the capacity to influence efforts to implement alternative drug policy programs in schools. The conclusions gleaned from this study may serve as a catalyst for change in the methods public school systems use to address drug prevention and education among youth in the United States

The current study used a quantitative method with a descriptive research design. It examined the data gathered through a written survey instrument given to a purposeful selection of school administrators to examine their perceptions regarding existing drug education programs and the barriers they perceive for the implementation of random drug testing as a new drug prevention program to educate youth. A quantitative, descriptive approach is appropriate for this study in that the purpose of a quantitative descriptive research design is to use numerical data to explore current events, situations, or conditions (Picciano, 2004). Quantitative data provides the statistical information and is an appropriate design in the collection of data when measuring attitudes and examining the perceived relationship between and among variables (Creswell, 2005). School administrators representing 307 elementary schools and 276 middle schools in Orange County, California, composed the study population. The study population included the participation of both principals and assistant principals currently implementing the *DARE* or *SAFE* programs.

### **Purpose of the Study**

The purpose of the current quantitative method study with a descriptive research design is to identify the perceptions of public school administrators in Orange County, California, regarding the state-mandated drug policy programs in schools, the effects of

these programs on youth, and the potential for the implementation of random drug testing to augment state-mandated drug education programs in public schools. A written survey instrument, administered to a purposeful sampling of elementary and middle school administrators in Orange County, California, is the most appropriate instrument for the proposed study because of its ability to reach a greater number of participants and the probability of obtaining honest and unbiased responses from school administrators regarding an issue surrounded by social stigma and political pressures (Creswell, 2002). As part of a larger effort to uncover and demystify ordinary events, the current study used the strategy of disseminating a confidential survey based on a Likert-type scale (Neuman, 2003). The instrument will be used to measure school administrators' perceptions of drug education effectiveness, perceptions of political and other constraints on decision-making, and perceptions of the usefulness and feasibility of existing and alternative drug-prevention strategies.

The appropriate method for this study is a quantitative method with a descriptive design because numeric data collected to describe group perceptions of *DARE* and *SAFE* and other viable drug prevention program options related to drug use among youth rather than to explore phenomena based on administrators' perceived beliefs (Neuman, 2003). A quantitative, descriptive approach is consistent with the aim of identifying the perceptions of key individuals regarding the effectiveness of the currently employed substance abuse programs in schools and uncovering school administrators' perceptions of obstacles when considering other substance use interventions. Creswell (2002) and Neuman (2003) asserted that a quantitative design is a practical method in examining the perceived relationship between and among variables, and this approach adheres to the

practical method of statistical analysis to describe frequency, correlation, and distribution.

The current study used two independent variables: (a) the respondent's tenure as a school-based administrator and (b) the respondent's level of expertise in drug education policy. The current study's dependent variables include the scales represented by the survey instrument, which measured the strength by which the administrators perceive *DARE* and *SAFE* as effective drug education programs and the strength by which administrators foresee various barriers to introducing drug testing in their schools.

### **Significance of the Study**

#### **Significance to the Field of Study**

Interest in drug education is growing, as reflected in the work of Loesevitz (2007) who has examined "the constitutionality of random drug testing in schools" in the United States and evaluated the effectiveness of random drug testing in schools as well as the challenges encountered by the government in implementing such a solution (Loesevitz webpage, 2007, para 2). The significance of the study derives from the role of management in an organizational culture and the role of leaders in managing and influencing the organization to accomplish objectives. School administrators are responsible for shaping drug policy in schools as it affects the health, well-being, and scholastic achievement of school children under their care, and others need to understand the attitudes and perceptions of these school administrators as they wrestle with one of the most important issues affecting society. Dupont and Bradey (2005) argued that school policy should help students recognize the dangers of drug use. The decisions of school leaders can greatly impact the growth and success of youth, and the insight gained

from this study has the possibility of encouraging current school leaders to revisit present policies put in place to educate and inform children about the negative effects of drug use.

From a leadership perspective, the results will inform community understanding of the existing beliefs of the present generation of decision makers in Orange County, California, and explore potential explanatory variables, which could be helpful to improving the quality of school leadership, and school decision-making practices, which ultimately affect children's lives. This study presented an opportunity to gain insight about the current perceptions of K-8 public school administrators regarding the effectiveness or ineffectiveness of the drug prevention programs, *DARE* and *SAFE*, widely used in the state of California. The significance of this study embodies the tenets of critical social science methods as described by Neuman (2003) who wrote that

”critical research can be best understood in the context of the empowerment of individuals. Inquiry that aspires to the name critical must be connected to an attempt to confront the injustice of a particular society or sphere within the society. Research, thus becomes a transformative endeavor, unembarrassed by the label “political” and unafraid to consummate a relationship with an emancipatory consciousness” (p. 82).

### **Significance to Leadership**

A careful review of the existing literature indicated that no survey of this type has been conducted and published with the population of school administrators outlined in this study. A gap in the literature exists concerning the internal and external political

forces facing school administrators, a gap that leaves unexplained reasons they may be slow to adopt research-based approaches including the same random drug testing techniques that have been so successful in military, security, and corporate sectors (Jacobs & Morag, 1992).

The results of the current study add to the body of leadership literature related to drug education in schools. The current study's research into the existing literature indicated that little concrete information is available regarding how school administrators perceive various alternative strategies to prevent drug use among youth. Educational leaders strive to improve student wellbeing and increase the likelihood of students' success in life. The current study's conclusions may offer educational leaders insights into alternative strategies to help combat the use of recreational drugs among youth. It can also assist in providing school administrators with data supporting the need to improve drug education programs currently implemented in K-12 school settings. The current quantitative, descriptive research study could contribute to the efforts to bridge the gap between research and practice on issues related to drug education in schools and drug use prevention among youth.

### **Nature of the Study**

The current study has a quantitative, descriptive methodology that will be used to describe the perceptions of public school administrators from 307 elementary and 276 middle schools regarding the effectiveness of the *DARE* or *SAFE* programs currently implemented at their schools. Rather than qualitative methods that include efforts to interview administrators, perhaps face-to-face, and to compile their comments in an orderly fashion or a mixed research method that combines anecdotal evidence with an

investigation of some sort of measurable quality in the life histories of the respondents, the purely quantitative approach provided the most value because of the greater possibility of acquiring adequate data to generalize results for this research (Creswell, 2009). The quantitative approach is the most valuable and efficient method given the objectives of the study and the nature of the research questions aimed at discovering causal factors that may influence the feedback given by the study's respondents. Quantitative research, using a survey instrument, permits the collection of data in a manner unblemished by the bias created in either a telephone or face-to-face interview research design. The aspect of privacy is particularly important because of the highly politicized and stigmatized environment surrounding the study of drug use among schoolchildren.

A pilot study was conducted using the survey to determine the validity and reliability of the survey questions, the difficulty of understanding and answering the questions, and the content validity and reliability of the instrument. The pilot test enabled critical information to be ascertained regarding the survey design and analysis thereof determine if the feedback is reliable and valid to support worthy findings. Two phases of pilot testing occurred prior to the study. First, a panel of experts examined the questions that provided validation and input. Before conducting phase two, necessary changes were made to the survey instrument based on the input of an oral survey conducted with substance abuse and mental healthcare counselors and educators. Phase two included a target of 20 enlisted participants in the trial. The requirements for participation include the following: employment in a public school that incorporates the *DARE* or *SAFE* programs and service as an assistant principal or principal. To determine the reliability of

the survey instrument, the researcher noted the questions unanswered and questions that had too many answers noted. The trial research participants were asked to write comments on the side of the survey to elicit feedback. The researcher also focused on the average length of time; which was ten minutes; to complete as trial participants, to finishing the survey.

The survey instrument with a Likert-type scale will be used to measure the relative effectiveness of drug education programs based on the perceptions of the respondents and view of the political landscape surrounding policy-making in the educational environment (see Appendix A). The survey contained elements related to the respondent's current administrative position, years of administrative experience, and personal perceptions of the current drug prevention program and other viable drug intervention alternatives. The researcher collected data by sending the survey via United States mail to all school-based principals and assistant principals currently employing the use of *DARE* or *SAFE* in Orange County, California, elementary and schools. The respondent ranked each survey element on a scale representative of strongly agree to strongly disagree.

Neuman (2003) asserted that a quantitative, descriptive research paradigm describes two or more variables related to a study's subject. Descriptive statistics will be used to illustrate the demographic information received from all respondents. The data analysis method of choice is multiple regression analysis because it enables consideration of more factors and allows estimates than are possible with simple linear regression. Multiple regression analysis studies the relationship of a dependent variable  $y$  to two or more independent variables.



An analysis of the survey responses revealed the degree of relationships between the independent variables (the respondent's tenure as a school-based administrator and the respondent's level of expertise in drug education policy) and the study's dependent variables (the scales represented by the survey instrument, which measures the strength by which the administrators perceive *DARE* and *SAFE* as effective drug education programs and the strength by which administrators foresee various barriers to introducing drug testing in their schools).

The current study's descriptive design is consistent with research that sees advantages in the use of quantitative methodology to study problems requiring "an explanation of trends and relationships among variables" (Creswell, 2005, p. 45). Creswell's suggestion that research should be "...an inquiry process of understanding a social or human problem, based upon building a complex, holistic picture, formed with words, reporting detailed views of information, and conducted in a natural setting" guided this research study (Creswell, 2002, p. 52). The philosophical understanding of human ability to describe internal experience and the usefulness of this sort of description formed the premise for this current research study. Oswell (2005) used an empirical phenomenological modified van Kaam method. Moustakas (1994) defined this method by stating that "the empirical phenomenological approach involves a return to experience in order to obtain comprehensive descriptions that provide the basis for a reflective structural analysis that portrays the essences of the experience" (p. 13). Moustakas asserted that "perception is regarded as the primary source of knowledge, the source that cannot be doubted" (p. 44). Moustakas' modified van Kaam Method focuses on attitudinal perception can be used to help understand school administrators' perceptions

of current drug education policies in Orange County, California. The survey instrument served as the tool for identifying the level of school administrators' perceptions regarding the effectiveness of the drug education programs, based on the theoretical perspective of Moustakas (1994) who stated that past personal experiences led to current perceptions.

The current study has a research design advanced the research goals for this study in a number of ways. The confidential nature of the responses encouraged the respondents to provide accurate information not influenced by fear of disappointing the interviewer or offending more powerful constituencies or employers in the district. Because the survey instrument is written in such a way to avoid influencing the respondent in any particular direction, the research also benefitted from more honest and straightforward responses to the inquiries. The result may fulfill the goal of making this study immediately useful to drug policy and drug program activists and possible vendors seeking to introduce more powerful and effective programs.

### **Research Questions**

The intent of this current quantitative, descriptive study is to identify the perceptions of K-8 public school administrators in Orange County, California, regarding the state-mandated drug policy programs in schools, the effects of these programs on youth, and the potential for the implementation of random drug testing to augment state-mandated drug education programs in public schools. To understand better the relationships between the various variables and school leader perceptions, the current study sought to measure the participants' levels of drug policy expertise, and the positions they occupy within the school district.

The following research questions guided this study to reveal school administrators' attitudes and perceptions regarding drug education:

1. To what extent do the years of experience as a school administrator affect the perception of school administrators in Orange County, California, toward Drug Abuse Resistance Education?
2. To what extent do the years of experience as a school administrator affect the perception of school administrators in Orange County, California, toward Substance Abuse for Educators?
3. To what extent do the levels of school administrators' knowledge of drug education policy affect the perception of school administrators in Orange County, California, toward Drug Abuse Resistance Education?
4. To what extent do the levels of school administrators' knowledge of drug education policy affect the perception of school administrators in Orange County, California, toward Substance Abuse for Educators?
5. To what extent do the school administrators consider the drug-prevention programs to be effective in deterring drug use among youth?
6. To what extent do the school administrators consider the potential for the implementation of random drug testing to augment state-mandated drug education programs in public schools?

### **Hypotheses**

The use of null hypotheses indicates that no differences exist between variables in the study (Creswell, 2005 & Neuman, 2003). The lack of support for a null hypotheses leads to the probability that the alternate hypotheses is true and that differences between

variables in the study are evident (Creswell, 2005 & Neuman, 2003). In this study each set of independent and dependent variables became the basis for the null ( $H_0$ ) and alternative ( $H_A$ ) hypotheses.

*Hypothesis One and Alternative*

$H_{1_0}$ : The number of years served as a school administrator does not significantly affect the perception of the effectiveness of the Drug Abuse Resistance Education program.

$H_{1_A}$ : The number of years served as a school administrator does significantly affect the perception of the effectiveness of the Drug Abuse Resistance Education program.

*Hypothesis Two and Alternative*

$H_{2_0}$ : The number of years served as a school administrator does not significantly affect the perception of the effectiveness of the Substance Abuse for Educators program.

$H_{2_A}$ : The number of years served as a school administrator does significantly affect the perception of the effectiveness of the Substance Abuse for Educators program.

*Hypothesis Three and Alternative*

$H_{3_0}$ : A school administrator's knowledge of drug education policy does not significantly impact the perception of the effectiveness of the Drug Abuse Resistance Education program.

$H_{3_A}$ : A school administrator's knowledge of drug education policy does significantly impact the perception of the effectiveness of the Drug Abuse Resistance Education program.

*Hypothesis Four and Alternative*

H<sub>40</sub>: A school administrator's knowledge of drug education policy does not significantly impact the perception of the effectiveness of the Substance Abuse for Educators program.

H<sub>4A</sub>: A school administrator's knowledge of drug education policy does significantly impact the perception of the effectiveness of the Substance Abuse for Educators program.

**Theoretical Framework**

Existing theories regarding the way human beings in leadership positions assimilate and apply new knowledge provided the foundational basis for conducting this survey research. A broad understanding of how the attitudes of school administrators will most likely impact society through the influence they have on day-to-day procedures, which influence adolescents in school; is another basis of this study. The proposed research build on the literature regarding the connections between perceptual and cognitive aspects of experience and the results of leadership and change management. Perception has significance to the field of role theory because the interaction and resultant behaviors of human beings is the main concern of role theory. Bradley wrote, "in addition to self-perception, position incumbents often act and react, in carrying out their role, to the perceptions of those around them and to the anticipation of certain perceptions of those around" (Bradley, 1973, p. 22).

Penlington, Kington, and Day (2008) indicated that the leadership of the school makes a difference in qualitative analysis of school performance. Penlington et al (2008) suggested that a previous case study of 20 schools that participated in the "Impact of

School Leadership on Pupil Outcomes” project demonstrated that the perceptions of head teachers and school administrators concerning aspects of leadership can have an explicit or implicit influence on the student results in the schools. McGreevy (2006) quoted that standard accountability also knocks on the door of the school business officials as introduced by the association of school business officials international (2006):

“Public trust is built when written standards are in place, professional development supports the standards and the performances of members of the profession are judged in concrete terms against the standards. Being judged as a ‘professional’ is critical to the school business official. The term engenders an image of expertise, trust, and dedication (McGreevy, 2006, p. 25; ASBO, 2006, p.6)”.

Bass (1990) quoted Goffman (1959) as pointing out, “through perceptual and cognitive aspects of leadership social behavior can be analyzed as theater. Behavior should be evaluated through roles, membership, and phenomena of groups in terms of actors, audience, and front and backstage (Goffman, 1959, p. 25).” Previous research has focused on the impact that different types of managers will make on leadership activities. According to Bass (1990), analysts can type and subtype managers. Social learning creates a disparity between the leaders’ intentions and the followers’ understanding of what the leader is trying to do. “There is a consistent linkage between one’s thought process and the tendency to be directive or participative” therefore one’s decision-making style may be affected (Bass, 1990, p. 445). Anecdotal evidence gathered that high levels of knowledge concerning the workings of an educational institution are a strong determinant of the success of the institution (Trachtenberg, 2007).

Likewise, Perhats, Oh, Levy, Flay, and McFall (1996) identified the administrators as gatekeepers in school-based drug prevention and “sexuality education programs.” A cross-sectional survey study reveals a number of concerns vital in understanding the relationship between possible obstacles to an effective prevention program and the functions of administrators as gatekeepers within schools. The analysis included five essential roles, namely: “principals, district prevention program administrators, school board members, teachers, and parents” (Perhats, et al., 1996; *NIDA*, 2008). Kellner (2007) investigated the school culture of one mid-western urban elementary school that had success in raising student achievement. Kellner (2007) reported that interviewees believe leadership, depicted primarily in this case study by a principal of 16 years, was the key factor in shaping the culture that led to increased student achievement. The positive relationships that developed from the strong leader and the empowered teachers became the catalyst for shared decision-making and effective collaboration.

Another branch of the literature on school leadership has looked at similar issues in the way that the attitudes of school administrators impacted school truancy issues. Researchers have suggested that beliefs concerning the importance of the various casual factors form the basis of efforts to remediate the problem of truancy. Ziesemer (1984) reported that individual, family, and community factors were thought to be outside the control of school personnel. This perception led to a sense of hopelessness and a lack of effort by school personnel to change the variables, but Ziesemer’s data showed school factors to be the most important variable (Bennett, 2001). To that end, Bennett (2001) and Hardiman (2008) believed that given the appropriate delivery of drug education and

properly executed policies, children will not succumb to the pressures of drug use or dysfunctional behavior.

Placed in the context of these studies, a facet of this research is to build on the work conducted by previous researchers on the impact of administrators' perceptions on bringing about positive changes in the school environment. This research will add to existing knowledge by focusing on the role that school administrators play in their school systems. The study includes more critical detail to investigate the possible correlations between the status and level of knowledge of an administrator and the evaluation of the program alternatives, including the political feasibility of random drug testing. In the process, the current study may highlight an important controversies in the study of drug-control efforts in schools, which is the surprising consistency of school administrators' choices in neglecting drug testing as an important and useful tool for reducing drug use among schoolchildren (DeMitchell, Kossakoski & Baldasaro, 2008; Jacobs & Morag, 1992). Previous research reviewed the statements made by top school officials who opposed the introduction of school drug testing; however, previous research lacks current perceptions of school administrators making decisions today.

Different branches of the literature, including the study of adolescent psychology and learning, educational leadership, and previous studies investigating the perceptions of school administrators' attitudes on the choice of programs to prevent addiction form the basis of the theoretical legacy on which the construct of this research project was based. The conclusions of the current study may assist current and future school leaders in determining program effectiveness and may provide a basis for introducing a more proven and viable option of drug education and prevention – drug testing.



### Definition of Terms

In an effort to conduct this study and avoid a misrepresentation of facts and data, the following definitions were used as the working terms in this study.

*Drug Abuse.* The abuse of a drug that leads to unhealthy, illegal, or self-destructive patterns of behavior or causes emotional, physical, social, and mental harm to oneself or others (California State Department of Education, 1981; Salazar & Seifert, 2008).

*Drug.* The term drug includes a variety of mind altering substances (any particular kind of matter, whether element, compound, or mixture; any chemical matter) such as alcohol, opiates, narcotics, marijuana, volatile chemicals, and other medications that may be used for either medical or non-medical reasons (California State Department of Education, 1981).

*Drug Abuse Prevention Efforts.* After many years of the drug abuse prevention programming in the schools, groups of prevention professionals still report confusion about the precise nature and scope of prevention programming. To clarify this critically important aspect of prevention, the California State Department of Education developed the following definition of alcohol and drug abuse prevention as it applies uniquely to school-base programs: Drug abuse prevention efforts are aimed at forestalling the consequences of drug misuse (California State Department of Education, 1981). This is the definition to be used in this study.

*Drug Abuse Resistance Education (DARE).* Because this program has been around since 1983 (DARE, 2008) it has undergone numerous changes and the typical

content of the program has evolved even as the name has remained the same in the public sphere. For the purpose of this study, the definition used for Drug Abuse Resistance Education is the version of the program that Orange County, California, currently implements, according to the guidelines established by the Orange County Sheriff's Office.

*Human Health.* Blacksher (2007) defined human health as normal, symptomatic, dissatisfied, diseased, and ill states as well as characteristics associated with the production health or its absence (Blacksher, p. 10). These definitions tend not to specify where, on the spectrum from health to disease, one ends and the other begins (Patrick, Bush & Chen, 1973).

*Health Literacy.* Understanding life choices from healthy and unhealthy living as defined in the California Health Framework (CDE, 2007).

*Random Drug Testing.* For the purposes of this study, random drug testing will include any effort in a systematic manner by a school or school district to test students, periodically and at random, to measure traces of drugs in their bodies (Blacksher, 2007).

*School-Based Prevention Programming.* This study uses the following definitions: (a) governed by or located primarily in an educational setting and is accountable to a local educational agency and (b) operated in accordance with Education Code provisions for drug and alcohol abuse and prevention education (California State Department of Education, 1981; Salazar & Seifert, 2008).

*Substance Abuse for Educators (SAFE).* Similar to *DARE*, this program has been around since the 1990s, but it has also undergone numerous changes and the typical content of the program has evolved even as the name remained the same in the public

sphere. *SAFE* addresses risk through drug prevention education dealing with stakeholders and interventions (Beacham, 2008). This study uses the definition of *SAFE* as the version of the program currently implemented in Orange County, California, according to the guidelines established by the Orange County Department of Education.

*Perception.* For the purpose of this study, Mulcahey (1998) defined perception as “the process, act, or faculty of perceiving...insight, intuition, or knowledge gained through the capacity for such insight” (p. 9). Perception comes into transaction from the unique personal behavior centers of the perceiver. Perception occurs as the perceiver establishes a psychological state in which he or she relates or integrates aspects of his or her own experiences into the sensations of the environment that the perceiver believes exists outside of his or her own existence otherwise called externalization (Wallace, 1975).

### **Assumptions**

This quantitative study relied on the concept that assumptions are truths, which are assumed to be valid but may be open to debate. The first assumption was that the study’s respondents were aware that the implementation of the current drug education program in Orange County, California, aims to meet the requirements of the California Health Literacy Framework. Professional development is expected of school administrators and such development reasonably includes education on the California Health Literacy Framework standards. Second, it was assumed that the school administrators surveyed support the idea of promoting a *SAFE* and drug-free school environment. The reason for this assumption was that the task of analysis would be more difficult if it anticipated active and perverse resistance to social norms. Finally, the

current study also assumed that the respondents will provide honest and candid responses to the questions presented. The study employed a confidential survey that expects to yield valid responses from the participants.

### **Scope, Limitations, and Delimitations**

#### **Scope**

The scope of this research focused on drug education in K-8 public schools in Orange County, California, and the perceptions of school administrators held accountable for the implementation of drug policy programs. The current quantitative, descriptive study included data obtained from a survey instrument, and the scope of the study was restricted to a purposeful population of K-8 public school administrators in Orange County, California, implementing either the *DARE* or *SAFE* programs. The principals and assistant principals in each of the 307 elementary schools and 207 middle schools in Orange County, California, directly received the survey instrument, which consisted of Likert-type questions, through the mail. The Informed Consent and a self-addressed, stamped envelope was also included in the packet sent to the respondents because of the requirement of public schools to implement a drug policy program in the state of California, Orange County was found to be an appropriate target area.

The raw data obtained from the survey will be entered in and analyzed using the statistical software SPSS Package 17.0. The dependent variables of the study were the scale scores from the survey instrument and the independent variables in the study were the years served as a school-based administrator and level of expertise in drug education policy. A regression analysis will be conducted to determine the effect of the independent variables on the dependent variables and measure the extent to which the

study's population finds the *DARE* and *SAFE* programs as an effective means to prevent drug use among youth.

### **Limitations**

The requirement for voluntary participation limited the research study. Upon receiving the mailed survey, it is unlikely that all school administrators will take the time to complete the survey and mail the survey back to the sender. Second, only principals and assistant principals from Orange County public schools participated because of the limited financial resources available for this study. The results gathered from this study may not be suitable for generalized purposes because geographical limitations confined the survey. Third, the research participants' perceptions believed to be truthful limits the study because of deliberate misrepresentation of facts to please (Neuman, 2003).

Participants may act in a manner to please superiors or the institutions they serve. Last, the survey used to retrieve data regarding administrators' attitudes and "perceptions of the effectiveness of drug education programs" could not control for variables such as the quality of curriculum delivery by law enforcement officers and the influence of vocal opponents of drug testing who view the matter as a civil liberties issue (Coggans, Shewan, Henderson, Davies, 2006).

### **Delimitations**

The programs' immense broad-based popularity and acceptance within the target area and the cost effectiveness for the research confined the study to administrators' perceptions of the *DARE* and *SAFE* programs (Beacham, 2008). The study was able to purposefully select public school administrators serving in Orange County, California, from the ranks of assistant principal to superintendent. Although the purposeful sample

of administrators did not represent all administrators across the country, the sample aided in the generalizability of the results to school leaders across the United States. The need to focus on qualified personnel with expertise to make informed decisions when completing the survey limited the considerations for the study. This delimitation yielded more valid and reliable data because of the training and experience of the participants. The results of this research study are applicable to public school administrators, as the participants for the study belong to this group. The current study did not make assumptions regarding the perceptions of the other stakeholder groups in the issue, such as the parents, students and teachers, regarding the effectiveness of the *DARE* and *SAFE* programs. It also does not apply to private school administrators unrepresented in the study.

### Summary

There exists a paucity of research on understanding the effectiveness of drug education and prevention programs through the lens of elementary and secondary school administrators and the school administrators' perceptions of these programs (Jacobs & Morag, 1992; Broman, 2006). Furthermore, researchers have yet to determine the long term effects of the *SAFE* program (Beacham, 2008).

The still prevalent use of drugs among the American youth resulted in questioning the effectiveness of the drug prevention programs currently in use (Rosenbaum & Hanson, 1998). The current quantitative, descriptive study aimed to identify the perceptions of elementary and middle-school administrators in Orange County, California, regarding the state-mandated drug policy programs in schools, the effects of these programs on youth, and the potential for the implementation of random drug testing

to augment state-mandated drug education programs in public schools. The outcome of this study may provide possible alternatives for Orange County public schools in terms of what drug education and prevention programs they can implement to decrease the use of recreational drugs among youth.

Chapter 2 contains a discussion of relevant literature related to drug education programs in public schools. Historical research related to drug intervention programs and a review of literature related to teen drug use and drug testing in public schools is also provided. The role of school administrators in regard to school policies on drugs is also presented.

## CHAPTER 2: REVIEW OF THE LITERATURE

Three million of the American youth, within “the ages of 14 and 17, are experiencing an alcohol problem, and more than 50% of the country’s school-age children have sampled prohibited drugs by the time they were graduated from high school” (Bush, 2001, Bush webpage, 2008, para two; Rosenbaum, 2005). These facts and statistics are particularly important because other studies identified the positive relationship between premature uses of illegal substances to the likelihood to become substance abusers in later stages of their lives. Other researchers have studied the link between the adverse effect and consequences of marijuana use to be similar to tobacco use; and a person’s early marijuana consumption to association with peer substance users (Lynskey & Hall, 2000; McConihay, 2008; Rosenbaum, 2005). McConihay introduced data from the National Institute on Drug Abuse (*NIDA*, 2007) regarding self-reported drug use among “approximately 50,000 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders” using marijuana and other drugs. Evidenced by Figure 1, drug use can start early and become a lifetime problem (*NIDA* website, 2007).



Figure 1

*Teen Drug Use in United States Public Schools***Monitoring the Future Survey, 2006, Marijuana Use**

Percentage of 8 <sup>th</sup> -Graders Who Have Used Marijuana											
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Lifetime	23.1%	22.6%	22.2%	22.0%	20.3%	20.4%	19.2%	17.5%	16.3%	16.5%	15.7%
Past Yr	18.3	17.7	16.9	16.5	15.6	15.4	14.6	12.8	11.8	12.2	11.7
Past Mnth	11.3	10.2	9.7	9.7	9.1	9.2	8.3	7.5	6.4	6.6	6.5
Daily	1.5	1.1	1.1	1.4	1.3	1.3	1.2	1.0	0.8	1.0	1.0

Percentage of 10 <sup>th</sup> -Graders Who Have Used Marijuana											
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Lifetime	39.8%	42.3%	39.6%	40.9%	40.3%	40.1%	38.7%	36.4%	35.1%	34.1%	31.8%
Past Yr	33.6	34.8	31.1	32.1	32.2	32.7	30.3	28.2	27.5	26.6	25.2
Past Mnth	20.4	20.5	18.7	19.4	19.7	19.8	17.8	17.0	15.9	15.2	14.2
Daily	3.5	3.7	3.6	3.8	3.8	4.8	3.9	3.6	3.2	3.1	2.8

Percentage of 12 <sup>th</sup> -Graders Who Have Used Marijuana											
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Lifetime	44.9%	49.6%	49.1%	49.7%	48.8%	49.0%	47.8%	46.1%	45.7%	44.8%	42.3%
Past Yr	35.8	38.5	37.5	37.8	36.5	37.0	36.2	34.9	34.3	33.6	31.5
Past Mnth	21.9	23.7	22.8	23.1	21.6	22.4	21.5	21.2	19.9	19.8	18.3
Daily	4.9	5.8	5.6	6.0	6.0	5.8	6.0	6.0	5.6	5.0	5.0

Note. "Lifetime" refers to use at least once during a respondent's lifetime. "Past year" refers to use at least once during the year preceding an individual's response to the survey. "Past month" refers to use at least once during the 30 days preceding an individual's response to the survey.

From National Institute on Drug Abuse. (2007, June). NIDA InfoFacts, Marijuana, US

Department of Health and Human Services. Retrieved September 14, 2007 from

<http://www.drugabuse.gov>

## Documentation

The analysis of literature presents how researchers sought to investigate this issue and the way in which a paradigm hemmed in serious research. A broader awareness of the alternatives will enhance public debate and understanding drug prevention issues, this analysis of the literature draws correlations to give the study and its benefits a fuller dimension.

Exploring the perceptions of school administrators regarding the effectiveness and politics of current drug education practices could ultimately provide critical insight for the successful implementation of new, research-based initiatives to address drug abuse among schoolchildren. Chapter 2 reports on the results of title searches, review of articles, coverage of research documents, and listing of relevant journals. The review of

literature also provides a historic overview and current conclusions and studies related to drug education in schools. To make this broad analytical review more relevant and understandable, the current study provides a brief overview of the currently implemented drug education programs, *DARE* and *SAFE*. The chapter also includes a detailed discussion of *SAFE* because it is a newer program than *DARE*. The chapter also presents a discussion of the general history of drug testing to provide an analysis of appropriate techniques for reducing the incidence of substance abuse and to address the documented and traditionally expressed uneasiness of educators concerning the implementation of this alternative approach. Finally, the chapter provides a review of the available research regarding how administrators' perceptions traditionally impact the introduction of new programs into the public schools.

### **Title Searches**

For the purposes of this study, several databases online, such as EBSCOhost, ProQuest, and Eric were searched to determine the availability of information related to the research topic. Specifically, the study targeted the role of administrators in serving as enforcers of evolving policies regarding drug abuse among school children. Keyword searches included drug education, drug-education policy, *DARE*, *SAFE*, decision-making, health literacy, leadership, community programs, drug prevention organizations, drug addiction, youth and drugs as well as demographic and economic condition information. The online resources opened doors to title searches, articles, research documents, books, and journals. To illustrate a summary of the literature searched by categories, the terms used in the query include (a) substance abuse, (b) drug, (c) drug abuse prevention efforts, (d) *DARE*, (e) school-based prevention programming, (f) *SAFE*, (g) school administrator,

(h) student, (i) perception, (j) health literacy, (k) human health, (l) drug education, (m) drug testing, and (n) leadership from the scholarly journals, articles, books, and dissertations compendium of the ProQuest, EBSCOhost, and Eric databases. The scope of the study served as a limit to the literature review. Of the books found significant to the study, eight were specific to drug-prevention education programs. Of the peer-reviewed journals, 35 were relevant to drug education, drug abuse prevention, and school-based programming. Forty-two articles and 28 online sources provided additional insight into health literacy, drug testing, and leadership.

### **Gaps in the Literature Related to the Study**

Given the supporting documentation on the topic of drug education, there is a gap in the literature regarding school administrators' perceptions regarding drug education as part of curriculum in schools and the future effects of such programs on youth and its impact on society. The most recent sources available, preferably within the last five years, provided a historical perspective on the topic as well as past psychology research. Little detailed information was found regarding the effectiveness of various alternatives to the currently employed drug education programs in schools and no research on drug education and prevention alternatives in the Orange County, California, demographic region.

### **Social Learning Theory**

Social learning theory recognizes how the concepts of self-monitoring and “self-evaluation, self-reward and self-punishment, perception of responsibility,” control, and self-expectancy effects exert influences on an individual's behavior. The concepts of “learned helplessness or an individual's belief in the loss of control and abstinence of

violation effects also stem out from Bandura’s social learning theory” (Ogborne, 2010, p. 9; Center for Addiction and Mental Health website, 2008). Researchers in this field report that the use of a social learning framework can explain substance abuse, based on strong experimental and clinical evidence (Wilson, 1988). Experimental studies using a social learning analysis provide evidence that alcohol preventive use treatments are more effective than “other types of treatment for alcohol use” (Ogborne, 2010, p. 12; Hardiman, 2008; Health Canada, 1999). Treatment methods that have the social learning theory (with direct and indirect basis) include: (a) “aversion therapy (including covert sensitization), (b) cue-exposure training, (c) social skill training, (d) self control training, and (e) relapse prevention” (Ogborne, 2010, p. 10; Centre for Addiction and Mental Health website; Health Canada, 1999). Social learning theory provides an explanation for the reason some treatments are better for some people. An example is the 12-Step programs that aim to establish “drug-free environments,” to offer social reinforcement for “abstinence and related verbal statements,” and to offer clarification to problems. Using the social learning theory as framework, the *loss of control*, a product of alcoholism, is not a fixed mechanism within a person. Programs for alcoholism can resolve these problems with loss of control. The theory recognizes that an importance step for the recovery of some people is the acceptance for the label *alcoholic* and *helplessness* over alcohol (Ogborne, 2010, pp. 9 -10; Centre for Addiction and Mental Health website; Hardiman, 2008; Moore & Tudor-Smith, 2001).

The social learning model is evident in a significantly popular prevention programs; the asset-building model developed by Roehlkepartain (2001) called Service Learning. This program, based on research of the characteristics of the children who

avoided adolescent drug use, focuses upon prevention tools and interaction with clients to make a difference in their lives (Mulvaney, 2006; Roehlkepartain, 2001). These tools are meant to empower stakeholders including children, teenagers, families, businesses, and communities by stressing common sense activities, which tend to be protective factors for adolescents including active participation in constructive youth activities, participation in religious groups, greater communication of parental expectations, and the development of healthy, drug-free peer associations. On the positive side, these resources are helpful and credible because they acknowledge that adjustments in the environment of at-risk children can produce results. The danger is that they may underestimate the innate power of addiction (Mulvaney, 2006; Roehlkepartain, 2001; Search Institute, 2008). When a decision was made to change the approach from traditional to “social influence,” there was insufficient data to support its effectiveness (Gorman, 1997).

A study made in 1985 by “Robert Battjes of the National Institute on Drug Abuse” stressed on his published paper how “drug-prevention efforts in 1970 failed to address the problems.” The paper also reviewed social influence programs and their application to drug use (Gorman, 1997). Two significant reviews both examined two research studies and had similar and pointing conclusions. The first study evaluated an eight-session resistance-skills training program to determine its effect to seventh-grade pupils. A comparison was made between these students and students from another school that did not participate in the program. Results reflected that approximately 8% of the students from the intervention school, compared to the 15% of the other group, tried smoking marijuana after 20 months in the intervention program. The study did not use a baseline assessment of drug use among the students, thus it cannot be ascertained that

there may have been a difference between the two groups of students prior to participating in the program. The second study also focused on seventh-grade students who came from four different schools. A random assignment was done to determine who among the students will participate in a “20-session social-skills training program managed by classroom teachers. A comparison was made between the two groups of students from four other schools” (Gorman, 1997; *NIDA* website, 2008). The second group also received the same program. Peer leaders instead of teachers supervised this group. Students from two additional schools composed the control group. The research data reported a significant difference between the peer-led group and the control group. Lesser students from the peer-led group had marijuana use. Furthermore, no difference was found between the teacher-led group and the control groups (Gorman, 1997; *NIDA*, 2008). The conclusions from both studies were not convincing, though the social-influence model can be regarded as advancement.

### **Role Theory and Social Learning Theory**

The proposed research will build on the literature regarding the connections between perceptual and cognitive aspects of experience and the results of leadership and change management. Perception has significance to the field of role theory because the primary concern of role theory is essentially the interaction and resultant behaviors of human beings.

Role theory provides an explanation about how people who have specific roles in society and how they behave according to their roles and life situations. Hindin (1996) noted that people’s behaviors that can be predictable, context specific and based on their social positions; form the basis of theory observations. Studies on role theory focus both

on how people behave and how they should behave given their social positions. It is assumed in role theory that individuals occupy social positions and have certain expectations as regard to their behaviors and those of others (Biddle, 1986).

Social learning theory and role theory are connected, as social learning creates a disparity between the leader's intentions and the followers' understanding of what the leader is trying to do. The social learning theory originated by Bandura (1977) puts forward the idea that people learn behaviors from others through the observation, "most human behavior is learned observationally through modeling: from observing others, one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action" (p. 22). Social learning theory is the link to "behaviorist and cognitive learning theories because it combines concepts of attention, memory, and motivation" (Ormrod, 1999, p. 48). Bandura (1977) stressed on the reciprocal relationships of cognition, behavior, and environment, and introduced the term reciprocal determinism. According to Ormrod (1999), the first general principle in social learning theory was that people learn by observing other people's behaviors and the outcomes of those behaviors. Observation alone can signify learning and a person's behavior does not need to change to indicate learning. Finally, cognition plays a significant role in that expectations of future punishment or rewards for one's actions determine one's behavior.

### **Historical Overview of Drug Education Programs**

According to the literature on the evaluation and implementation of educational programs in schools, frequently correct decisions appear in larger districts, situations in which the state authorities routinely scan the environment for research-based programs,

and in which principals have influence and respect in schools. Substance abuse in America does not only have an effect on the societal level but may also inhibit individuals from realizing their capabilities as members of the society (Staff, 2003). The US Department of Health and Human Services reported that an estimated “14 million Americans” have illegal drug problems and “17 million Americans” have alcoholic problems (Bush, 2001). The Substance Abuse and Mental Health Services Administration estimated that nine million people abuse prescription drugs for non-medical and often recreational purposes (Bush, 2001). Children ages 12 to 17 comprise three million of the reported substance abusers (Staff, 2003). Alexander (2004) indicated that many forms of addiction and dependency resulting in an unhealthy nation and to improve the wellness of this Nation and to protect its citizens, continued efforts must be taken consider drug and alcohol abuse prevention and treatment as the nation’s main concern.

The primary roots of existing, popular drug intervention programs regarding drug use among schoolchildren are in the advances made by social learning theory in the 1960s and 1970s. The first volume of the annual drug control strategy was issued in 1989, and sought to approach recreational drug use in general, irreverent to the degree of intensity (Caulkins, 2005). “Other official objectives included reductions in hospital emergency department mentions of drug-associated admissions (a measure of harm to users); in the import, availability, and domestic production of drugs; and in adolescents’ approval of drug use” (Caulkins, p. 4). Throughout the following decade, the emphasis moved toward hindering recreational drug use and related consequences, and currently, emphasis is on measures of use, especially by adolescents (Caulkins). The emphasis of



these programs derived from the theory that individuals learn in groups that peers will be more effective in communicating messages and that individuals need to learn to be self-effective and powerful and that going it alone in drug education is harmful (Solomon, 2007). The challenge from the view of most professionals in the addiction medicine field is that such a perspective on substance use severely underestimates the powerful internal, chemical, and biological factors that produce the phenomenon of addiction (Pugh, 2004). If addiction is the issue, learning in groups may not be enough to address the addiction and restore a proper school-learning environment.

### **Drug Abuse Resistance Education (*DARE*)**

In a 2004 study, 19.9% of high school seniors reported using marijuana at some point in their lives and 2.3% had used cocaine. Of the high school seniors surveyed, students reported that drugs were easily accessible, an observation supported by their other comments including that 25% of the seniors reported cigarette use, 48% reported drinking, and 29.2% reported binge drinking (Center for Disease Control and Prevention, 2005). These percentages demonstrate a reduction of approximately 50% from a similar survey conducted in 1980, and it would be difficult to argue that the two most commonly implemented drug education programs in public schools initiated in the 1980s, *DARE* and *SAFE*, did not play a causal role in creating this improved situation (Center for Disease Control and Prevention, 2005).

Neuman (2003) argued that the *DARE*'s popularity stems from police officers delivering the drug education curriculum in early grades in a consistent manner across geographic boundaries. *DARE* attempts to address the problem of illicit drug use by providing greater knowledge on drugs, helping them develop anti-drug coping skills and

raising their self-esteem (*DARE*, 2008). Neuman (2003) wrote, that *DARE* “program may be effective for the latent group (e.g., helping politicians, school officials, and others think morally good and involved in anti-drug actions) but ineffective for official goals such as reducing, illegal drug use by teenagers” (Neuman, 2003, pp. 24 -25).

### **Substance Abuse for Educators (*SAFE*)**

The goals of *SAFE* include the following: (a) increase awareness of chemical use and its effects on individual, the family, the school and the community; (b) facilitate awareness of attitudes, feelings, and expectations as they relate to school programming; (c) increase participants understanding of intervention and the use of community resources; (d) build an interdisciplinary team of people to work on prevention issues regarding youth violence, chemical use, abuse, and dependency; and (e) provide participants with the necessary tools creating an effective alcohol, tobacco, and other drug prevention program (Beacham, 2008). *SAFE* is a foundation for effective prevention that assesses risk factors for youth, and buffers against exposure to risk. *SAFE* is a program designed to address the components of adolescence and chemical dependency, the family system, enabling, intervention, and core team development (Beacham, 2008).

One response to the federal initiatives targeting youth wellbeing is an anti-drug campaign launched in Palo Alto, California, schools aimed de-normalizing drug use by demonstrating to students the large number of their peers not consuming alcohol, taking drugs, or smoking (CDE, 2004; Wakefield, et al., 2000). A result of a Palo Alto, California, middle and high school survey reported that more than 90% of high school students made no alcohol consumption in a typical week, and 75% did not consume

alcohol in a typical month. The survey results also found that more than 70% of high school students who participated in the study never tried marijuana and 80% of the high school participants never used tobacco products (Wakefield, et al., 2000). The Community Drug and Alcohol Committee composed of comprised of the community's parents, school officials, and specialists on the field of health, assumed both students and their parents will find the research's conclusion to be a revelation (Wakefield, et al., 2000). As a reaction to this, the *CDAC* employed a consultant from Montana to develop a marketing campaign to focus on the peer drug use opinions of the pupils.

The same school administrators who control and provide essential support services and programs for students and classroom instruction are falling behind by providing drug education programs with little research support. Earlier than midyear of 2003, there was little scientific basis for the claim that school-based prevention programs are helpful in lessening of the youth's use of drugs. Goodstadt (1980), made a conclusion that the current data that time "indicated that 'negative' program effects were not an isolated phenomena, but occur frequently enough and affect self-reported behavior often enough to require more careful scrutiny" (Goodstadt, 1980, p. 94). Researchers began to discover that programs that sought to deter drug use by exposing children to the dangers and realities of drug use unknowingly may have encouraged drug use by building familiarity with the process of illegal drug usage. Further support for this view came from Trebach, president of the Drug Free Policy in 1995 who suggested that people have learned that drug education is not delivering on its promises to create a society with less drug use ("Carried Away," 1996).

Opinions differ regarding prevention efforts as a cause for strengthening the use of drugs. Some blame that the programs subject matters such as “knowledge-based programs of the 1960s and 1970s simply piqued students’ interest; others blame the values-clarification methods of the mid 1970s stating that it confused students by implying that if they failed to condemn drug use unambiguously,”... “(They) were at loss” (Hansen, 2003, p. 21). Bee (1998) contested that the “zero tolerance” message caused the disbelief and uncertainty among the youth.

### **Life Skills Training**

Another example of the social learning model is the Life Skills Training (*LST*) program by Botvin (2003). The *New York Times*, considered as the most notable longitudinal evaluator of the LST program, noted, “...showed that behavioral changes initiated by the program lasted the entire six years of the study” (Gorman, 1997, pp. 50-60).

Gorman further stated that... “The use of cigarettes, alcohol, and marijuana among teenagers who” had participated in “the program was half” of that similar to teenagers who had not participated in the program. “*The New York Times* concluded that” there was substantial need for the Life Skill Training programs to “be marketed and disseminated with the skill and aggression used for *DARE*” program that had already flourished into the nation schools (Gorman, 1997, pp. 50-60). As reported in this study, *NIDA* reported that,

“...there were no statistically significant differences in illicit drug use between those who received the program and those who did not. Thirteen percent of LST subjects reported monthly marijuana use compared to 14 percent of control

subjects; weekly use was 6 percent and 9 percent, respectively (Gorman, 1997, p. 22).”

The Center for Disease Control and Prevention can report a 50% decline in illegal substance “use among the nation’s high school” students largely because (Gorman, 1997, p. 22) of its use of an additional set of analyst based on what it refers to as its high fidelity sample. This means that to be a part of the study group, the person needs at least 60% of the interventions in the span of three-years when they received intervention. This requirement reduced the number of participants from the LST group (which includes pupils from six schools) by one-third from the research’s analyst and results (Gorman, 1997). A comparison of the filtered sample of the program participants resulted in significant differences between the groups. Lower weekly marijuana use was found between the LST (-5%) and control group (9%). This calculated 50% reduction of marijuana use in the LST study’s results as referred to in the New York Times (Gorman, 1997; *NIDA*, 2008). The results from this study were less than credible from the standpoint of providing reliable and valid results. Another key issue related to the study of drug prevention programs is the absence of independent evaluation. Usually, the same group does the development, implementation, evaluation, or marketing of the programs. The research done is usually biased because it pursued an objective to confirm the effectiveness of the program assessed (Botvin, Baker, Renick, Filazzola & Botvin, 2003; Rodgers, 2005).

In early 2000, there was a wide acceptance of the social-influence model by the federal government. However, empirical studies have not established fully the use of the model as an effective method in lessening the youth’s drug use. From the assessments

made, using highly self-selected sub-samples leads to the conclusion that the program is effective in decreasing teenage drug experimentation (Genaux, Likins, & Morgan, 2002).

“The primary purpose of alcohol and drug testing is not to catch the offender; it is to prevent the use of alcohol and other drugs. This deterrent effect is best achieved by calm thoughtful discussion, of the testing and a clear understanding of the purposes of the testing (Dupont, Skipper & White, 2008, p. 20).”

### **Drug Testing in the School Environment**

A traditional argument in favor of drug testing as a strong alternative to the social-based approaches is that, typically, parents and schools may not readily identify student drug users when suspicion arises. Apparently, there is greater usage of drug use (10 times greater) among the youth than what parents believed (US Department of Education, 1986). Barriers can be addressed through the expertise of trained family counselors or drug prevention specialists effective in communicating without expressing condemnation (Vandell, 2005). This gap between parental awareness and child reality suggests the possibility for improvements through simply implementing drug-testing in schools supported by counseling interventions.

To understand the pressures on school administrators, the efforts to introduce one key research-based alternative to existing drug education policies – drug testing in schools documented and analyzed. Multiple reasons suggest that secondary and even some primary schools would have already adopted some form of drug testing, appropriately tailored to the values, goals, and exigencies of the specific educational institutions. To illustrate the dimensions of this issue, studies examined the case of the

most controversial method for direct detection, specifically the highly developed field of urine testing. Highly accurate tests are available for a variety of substances, and yet such tests tend to be expensive whereas less expensive alternatives may be so unreliable that their results limited use. As technology improves these tests will become less expensive and multi-spectrum, testing for more than one substance, in addition to testing that establish a threshold that can eliminate false and inaccurate results (Dupont & Brady, 2005). “Most individuals who have been drinking (or using drugs know that they run the risk of being detected...therefore ...they are encouraged to ‘get honest’” (Dupont et al., 2008, p. 20).

With fear of detection of drug use by youth so strong and with drug testing becoming so widespread, the educational establishment and many individual schools must have considered adopting a drug-testing program including advanced urine testing. A search of the literature indicated that it was difficult to find any systematic discussion of the pros and cons of school drug testing or a discussion of what makes drug testing inappropriate for schools. This study’s review of positions on drug testing will highlight the representative comments of key educational leaders including statements from the National Commissions on Education, the US Department of Education, higher education advocates, and statements from individual school districts and schools.

### **Disregard for Drug Testing in Schools**

When he was Secretary of Education, Bennett espoused the view that school officials should use urine testing if deemed necessary. When Bennett subsequently became National Drug Policy Director, a title colloquially known as *Drug Czar* and was vigorously advocating user accountability and drug testing in the workplace and other

societal sectors, his enthusiasm for drug testing in the schools apparently waned (Jacobs & Morag, 1992).

As Drug Czar, Bennett stated that drug testing was necessary for federal employees in sensitive positions but was not necessary for high school students (Jacobs & Morag, 1992). His successor, Martinez, was likewise moderate in his support for school testing. After the fraternity drug scandal at the University of Virginia, Governor Wilder suggested that a commission consider drug testing students, and not “arbitrarily dismiss any tool that might assist us in our anti-drug efforts” (Jacobs & Morag, p. 214). Director Martinez flatly rejected Governor Wilder's suggestion in apparent contradiction of the federal “demand-side” drug strategy and in contradiction of the Reagan and Bush administrations' position that school drug testing is a state and local issue (Jacobs & Morag, p. 214).

In an interview, Commissioner Martinez opposed drug testing for college students for reasons that are opaque. He observed that “it is ironic that they don’t ask professors to take [drug] tests” (Teachers College Record, 1992, p. 215) He offered the following observation:

“They want to get the retailers... the ones that are going to buy the services--to take the test. That would be like you and I going to a department store, and they want to test you, as a customer, rather than the employee (Jacobs & Morag, 1992, p. 215).”

Testing consumers for drugs does not necessarily imply criminal prosecution or any other sanction because most work-place drug testing is strongly linked to counseling



and treatment. The drug-enforcement wing of the anti-drug effort and the drug-education leaders removed school drug testing from the subjects of policy analysis.

Commissions studying problems in United States education, including drug abuse, have refrained from recommending drug testing as the Final Report of the White House Conference for a Drug-Free America equivocated on the general use of drug testing (Jacobs & Morag, 1992). An important point raised in the conference is to consider drug testing as a precautionary method. Drug testing helps identify drug use much earlier than through other means, and earlier identification means a greater likelihood of derailing drug use. The *Final Report* did not recommend drug testing in its suggestions to the education community, nor did it explain why this “effective mechanism for prevention” is inappropriate for schools (Jacobs & Morag, 1992, p. 216).

The National Commission on Drug-Free Schools offered hundreds of recommendations for mobilizing parents, students, teachers, school administrators, religious organizations, government agencies, the media, and business leaders to fight illicit drugs use (Jacobs & Morag, 1992). The Commission concluded that a discussion of drug testing “did not fit within any of the previous parts” of its report (Jacobs & Morag, 1992, p. 216). The Commission report devoted only two paragraphs to drug testing (Jacobs & Morag).

The use of tests to determine whether students or school staff members are using drugs is an evolving area of the law (Jacobs & Morag, 1992). The Commission recognizes that schools and colleges must maintain a balance between students’ and staff members’ “right to privacy” and the “schools’ responsibility to provide” a *SAFE* learning environment. The decision of whether to test students or staff members for drug use

should be made by individual school districts, but the Commission supports drug testing for students and staff, including testing for alcohol use, only when individual circumstances give rise to a reasonable suspicion of drug use (Jacobs & Morag, p. 216).

Supreme Court rulings have upheld the requirement that students voluntarily participating in competitive, extracurricular activities be subjected to drug testing, based on the decision in Board of Education of Independent School District Number 92 of Pottawatomie County versus Earls. Prior to this, drug test was only limited for student athletes (Meier, 2002). In addition to this, public schools can also perform drug tests on students driving within school property or students with school parking passes (Buffett, 2005).

The Commission also finds pre-employment drug testing acceptable for school job applicants (Jacobs & Morag, 1992). The Commission did not explain whether its privacy concern had to do with visual monitoring, which is not a requirement of most work-place drug-testing programs, or with the student's interest in keeping drug use secret. To ferret out drug use, many school districts have supported suspicion-free searches (sometimes using dogs) of lockers, desks, and students themselves, apparently unmoved by sensitivity about intrusive school searches (DeMitchell, et al., 2008; Jacobs & Morag, 1992).

Jacobs and Morag (1992) discussed an unexpected conclusion in their article: despite frequently pointing to drugs as a major problem for schools, “none of the leading educational associations has encouraged the use of drug testing” (p. 217). In 1990, the National Education Association passed a resolution in opposition to random drug testing, stating that “mandatory drug and alcohol testing of students without probable cause is an

unwarranted and unconstitutional invasion of privacy” (Jacobs & Morag, 1992, p. 217). The American Association of School Administrators (*AASA*) expressed strong opposition to the Coats Amendment because drug tests are searches, they ought to be undertaken only on the basis of probable cause whereas the National School Boards Association (*NSBA*) resolved that student drug testing should not be undertaken unless the school can guarantee the protection of the students’ constitutional rights and the testing program is effective in achieving its goals, though the *NSBA* did not discuss how to protect these rights or what criteria to use in judging the effectiveness of drug testing (Jacobs & Morag, 1992).

Critics of drug testing identify reasons such as the method invades privacy of students, demand resources and serve as a deterrent for students to participate in extracurricular activities (Hudlow, 2005). Other reasons cited for the suggested discontinuing of drug testing includes: (1) drug testing is ineffective form of deterrence of the youth’s drug use; (2) drug testing can expose educational institutions to costly lawsuits; (3) drug test can damage the trust between students and their teachers and between parents and children; (4) drug testing can falsely accuse students as drug users; (5) drug testing cannot effectively determine students who have substance abuse problems; and (6) drug testing can lead to unintentional results such as students turning to alcoholic drinking and more dangerous forms of drugs (Kern et al., 2006).

The Council for American-Private Education, an umbrella organization representing 15,000 military academies, private schools, and parochial institutions, has not addressed the topic of student drug testing. None of the council's largest constituent members, such as the National Association of Independent Schools, the National Catholic

Education Association, the National Association of Episcopal Schools, the Seventh Day Adventist Board of Education, and the Association of Military Colleges and Schools of the United States, has an official position on drug testing Council for American Private Education, (2004). The national governing body for high school sports, the National Federation of State High School associations, has not endorsed drug testing, choosing instead to promote drug-education programs (DeMitchell, et al., 2008; Jacobs & Morag, 1992).

Medical practitioners also contest the use of drug testing in schools. Physicians studying problems of substance abuse among adolescents maintain the need for to identify these problems among the youth but oppose drug testing as a method and instead suggest the use of confidential interviews (Levy, Harris, Sherritt, Angulo, & Knight, 2006). Random drug testing can be used to examine if a person has abstained from the use of any substance but cannot detect substance abuse problem itself. Furthermore, regular drug testing used in schools cannot detect Ecstasy, nicotine, alcohol, inhalants, and OxyContin (Levy et al., 2006)

Another Department of Education publication informs the reader that the school drug problem should be top priority. “The biggest threat that now stands in the way of achieving the kind of educational system we know is needed is the widespread use of illegal drugs by our nation's young people” (Jacobs & Morag, 1992, p. 218). Jacobs and Morag write that the reader, “...might expect that a drug-testing program, even one that is completely treatment-oriented, would be found among the scores of recommendations packed into the 80 pages, but no such recommendation appears, nor does any explanation for its omission” (Jacobs & Morag, 1992, p. 218).

The United States Department of Education maintains an absolutist approach against all drug use, but it treats drug testing as taboo. The department has told schools what should be taught about drugs and mandated the delivery of the curriculum to students. The Office of Substance Abuse Prevention of the Department of Health and Human Services, which publishes drug and alcohol information for educators and parents, has announced what words should be used when speaking about drugs. All these messages sound the unwavering theme that “drug, alcohol, and tobacco use will not be tolerated” (Jacobs & Morag, 1992, p. 218). At the same time, the Department of Education has refused to endorse or encourage any form of drug testing even on a trial or experimental basis (DeMitchell, et al., 2008; Jacobs & Morag, 1992).

The opposition to drug testing among leading figures in education, as represented through the above organizations and reports, should be of interest to educational and school analysts as well as to analysts of drug policy. One approach may be to suggest drug testing is not that much different from the battery of standardized testing designed to determine appropriate academic placement or counseling needs. These types of standardized tests could also be attacked as a violation of privacy and potentially harmful, at least to some students, even though the educational establishment relies on a whole host of testing vehicles to help address a student's needs and to distribute school resources efficiently. If experts have developed adequate *SAFE*guards to protect against the misuse of these tests, perhaps similar *SAFE*guards are found to protect against possible abuse of drug tests (Dupont & Brady, 2005; Dupont, Skipper & White, 2008).

Jacobs and Morag (1992) pointed out another school drug-testing program implemented in Tippecanoe County, Indiana, that attracted considerable attention. The

drug testing program, designed to be educational, diagnostic and preventive rather than punitive or disciplinary, provides for random testing of student athletes and cheerleaders in grades 9-12. Officials justified the program by claiming a special need for *SAFETY* in interscholastic athletics and by claiming the desire to consider student athletes as ideal models for conduct, sportsmanship, and training, including drug and alcohol usage avoiding behaviors. The testing does not involve visual monitoring of the urine collection. For greater reliability of test results, standard practice requires that a second test must confirm an initial positive result. Confirmed drug users are recommended for counseling and further testing. Subsequent positive tests result in suspension from escalating percentages of competitive events. The federal court that heard the case upheld this drug-testing program, ruling that the school's interests in health, *SAFETY*, and learning outweighed the students' legitimate privacy interests (Jacobs & Morag, 1992, p. 219).

In the private school sector, drug testing is not any more popular than in the public schools, despite the absence of any constitutional constraints. Elmquist (2004) observed in surveys of independent schools' that use of drug testing raised concerns similar to those in the public schools. Surveys provoked powerful negative responses frequently rooted in concerns for privacy and with the importance of trust. Given previous legal decisions, some expect that independent boarding schools have a greater interest in drug testing because they are in *loco parentis* role is clear and explicit, but of the 17 boarding schools in the survey, none conducted random drug tests (Benard, 2004).

Random drug testing does appear to be making an impact into school systems (Office of National Drug Control Policy [ONDCP], 2006). The Office of National Drug

Control Policy reported a survey done in April 2005 with 56 principals as participants. The research focuses on random student drug testing and its benefits. According to this study, the implementation of drug testing caused a reduction on the use of drugs by students from 58% of the responding schools. However, 42% of the schools did not experience any changes. To highlight the cost effectiveness of this strategy, the study reported that 91% of principals indicated that the price per test used in the drug testing program is \$30 or lesser. Other positive effects were also noted by the respondents including that the drug-testing program succeeded in decreasing the consequences of peer pressure in relation to drug use and that the program did not decrease participation in athletic programs or extracurricular activities. The program appears to have been well-received since 100% of responding principals recounted that the implementation of a drug-testing program for students did not cause a decline in the morale of the students (ONDCP).

### **Public versus Private School Commercialization**

Private and public schools in Indiana have gone through significant decision-making processes to adopt and implement prevention programs. Bosworth and Cueto (1994) addressed “drug abuse prevention curricula in public and private schools” funded by the Drug- Free Schools and Communities Act (1986) that provided the schools with the funds to acquire the programs for drug prevention (NIDA, 2009; Journal of Drug Education, 2004, pp. 21-31; Bosworth and Cueto, 1994). For “elementary grades (K-6), commercial programs were adopted by 17.3% of private schools and 36.8% of public schools.” On the contrary, 34.5% of private schools established independent programs as

opposed to 29.5% of government schools. For example, “Law enforcement programs were more common in private schools (16.5%) than in public schools (10.0%).” For (K-8), “middle and junior high schools, commercial programs had been adopted by 46.6% of public schools and 39.8% of private schools.” Interestingly “35.5% of public schools claimed to have locally developed programs which was comparable to 29.3% of private schools; and few middle schools,” respectively “(1.1% of public, 5.3% of private) had law enforcement delivered programs” (Bosworth & Cueto, 1994; *NIDA* website, 2008). For high schools, “public institutions were more likely than private to have adopted commercial programs (28.0% versus 18.2%) and have locally developed programs (47.7% versus 31.8%).” Law enforcement programs were rare in high school (0.3% and 4.5%) (Bosworth & Cueto, 1994; *Journal of Drug Education*, 2004, pp. 21-31; *NIDA*, 2008).

Military academies have not adopted random or universal testing despite their role in preparing students for the armed forces in which drug testing is universal. The US Department of Education, various national commissions, and other educational leaders have not produced a study or report whose results can provide a reason for the rejection of drug testing (Jacobs & Morag, 1992). The main arguments behind drug testing were ascertained from legislative reviews. Either objectionable aspects of drug testing or lack of a need for drug testing because of alternative strategies equivalent to or better than drug testing compose the two arguments against drug testing (DeMitchell, et al., 2008; Dupont & Brady, 2005; DuPont, Skipper & White, 2008; Jacobs & Morag, 1992).

After a review of the literature regarding the reasons educational leadership has invested in opposing student drug testing, it does not appear to explain the overwhelming



negative consensus, reveal detailed research to explain the attitudes of school officials toward drugs, nor provide insights about educational politics, values, and organizational dynamics. The review of the literature identified explanations for inaction on this front, including administrators' perceptions that there would be legal problems associated with drug testing that this testing would be inconsistent with the standard educational environment and that the tests are unreliable.

### **Administrators' Perceptions of Legal Discouragement Concerning Drug Testing**

The federal and state court decisions both uphold and strike down school drug testing (Ringwalt, et al., 2009), suggesting that it could not primarily be legislation that has been influencing the opinions of educational administrators. Numerous academic commentators, including school officials, and American Civil Liberties Union (*ACLU*) leaders, assert that the Fourth Amendment is an insuperable barrier to universal or "random drug testing of high school" or elementary school students, despite that "the Supreme Court has not ruled" on school drug testing and that the Seventh Circuit Court of Appeals has upheld "random drug testing of high school athletes and cheerleaders" (Knight & Levy, 2010, website; Walsh, 1994). The Fifth Circuit has rejected the extension of drug testing to all pupils involved in non-school related activities ("Editorial", 2007; Falco, 2002).

The Supreme Court and lower federal courts, in numerous cases, have dispensed entirely with probable cause and even with suspicion to uphold government searches dealing with important problems. In *New Jersey V. T.L.O.*, the Court, after weighing the student's rights to privacy and of the need for the school to preserve a systematic and educational environment for its students, came up with a decision that only reasonable

suspicion of a violation of law or school policy was necessary to carry-out a search of a student's personal possessions ("Editorial," 2007; Falco, 2002).

In 2004, the Supreme Court took a big step toward upholding drug testing without probable cause or individualized suspicion. It upheld drug testing in the US Customs Service and in the federally regulated railroads. The Supreme Court analyzed the legality of both testing programs according to their *reasonableness* in relation to the interests of the testing agency balanced against the intrusion on individual privacy. Given, in some schools, a serious drug problem with virulent impact on discipline, learning, and the educational atmosphere, the case for random drug testing is very strong.

### **Drug Testing versus Educational Values**

Some litigators involved in challenging school drug testing programs believe that drug testing is too punitive to be compatible with humanistic and liberal educational values (Jacobs & Morag, 1992). Drug testing is a technology, not an agenda, or a specific program. School officials are free to adopt whatever drug-testing program they think would make a positive contribution to the health of their students. Schools that have sought to implement drug testing have designed treatment-oriented programs. If a student tests positive for illegal drug use, school officials and the parents of the student can consider the best remedial strategy, the goal being to minimize harm and to maximize the child's welfare, an approach that seems compatible with humanistic and liberal education values.

The intrusiveness argument encompasses two points. The first is that the collection of the urine sample invades privacy just the way a strip search would, and yet urine collection can be done without observation. The Supreme Court in Von Raab noted

that the non-observed procedures for obtaining the urine sample coupled with chemical analysis for only a limited number of substances “significantly minimize the intrusiveness” of a drug-screening program so designed (Jacobs & Morag, 1992, p. 222).

The second component to the intrusiveness objection is that it intrudes on privacy for school officials to obtain knowledge about student drug use that is not voluntarily revealed or discovered on the basis of reasonable suspicion. If this information were used to penalize, stigmatize, or in any other way discipline the student, such an argument would have significant force, but testing and collecting information to determine aptitudes, predispositions to violence, mental illness, and other problems regularly involves school officials.

Recent research indicates that students may be more comfortable with random drug testing than expected (Evans, Reader, Liss, Wiens, & Roy, 2006). The authors noted that there is an increase in the participation of school districts with the use of random drug-testing (*RDT*) programs. However, no studies have explored the students’ attitudes toward the programs, and documented possible barriers to recognition and usefulness of a program. “The authors surveyed 1,011 grades nine through 11 students in two rural high schools in North Florida and discovered that significant majority of students expected that usefulness of *RDT*” (*ONDCP*, 2008, p. 54). The perception on the fairness and accuracy of testing differed among the students. The authors found that student perceptions of a drug problem are more significant than substance use rates in assessing the fairness of the policy (Evans et al., 2006).

### **Drug Testing: Too Unreliable**

In the early days of drug testing, there were many horror stories about how drug testing falsely identified individuals as drug users. By the mid-2003s, the Department of Health and Human Services had promulgated standards for drug-testing laboratories, which many public and private drug testers quickly adopted. By late 2004, five years after the requirement of universal drug test in the armed forces and one year after the President Bush's executive order mandated drug testing in all federal agencies, the U.S. Department of Education questioned the accuracy of drug tests. By the time of its 2004 report on the success of drug prevention efforts, scientific and administrative advances in drug testing had reduced to negligible the risk of false positives. Rare false positive needs have very minimal negative consequences. The Supreme Court's decision in *National Treasury Employees versus Von Raab*, the accuracy question has become a virtually dead issue (DeMitchell, et al., 2008; Jacobs & Morag, 1992; Swisher et al., 2004).

### **Drug Testing: Too Costly**

The price of the least expensive testing procedure, low-cost immunoassay urine test, is US\$14–30 per test (Gerada & Gilvarry, 2005). Drug-testing packages vary in costs depending on the number of tests needed, the kinds of drugs to be screened, and a Medical Review Officer's opinion for test interpretation (DeMitchell, Kossakoski, & Baldasaro, 2008; Dupont, Skipper, & White, 2008; Swisher, Smith, Vicary, et al., 2004; Jacobs & Morag, 1992).

Cost must be a consideration for any school district thinking about drug testing because school districts are already investing funds in drug-prevention programs and

curricula. Whereas \$25 for each person may not be a significant expense for private companies, it may be prohibitive for fiscally strapped school districts whose budgets are already stretched to the breaking point. The availability of federal funds under the 2004 Coats Amendment undermines the fiscal explanation for disinterest in drug testing. Private foundation money would probably become available for schools interested in drug testing. In some communities, parent groups and local businesses have raised money to support other antidrug initiatives, and the drug-testing industry has been eager to expand its business by underwriting drug testing in schools (Swisher, Smith, Vicary, Bechtel, & Hopkins, 2004).

If a sound drug-testing program would be upheld in court, the threat of expensive litigation deters many school districts, especially the small ones: “This seems like a serious concern that cannot be lightly dismissed. Whether it accounts for the overwhelming disinclination of school districts to launch any kind of drug testing, even “for cause,” is hardly clear” (Jacobs & Morag, 1992, p. 224). Since the 2002 Court ruling of the *Earls* case, various litigations have been filed against drug testing policies of school districts. School districts expend thousands of dollars used to battle these proceedings, even if the probability of success is low (Kern, Gunja, Cox, Rosenbaum, Appel, & Verna, 2006).

### **Drug Testing and Available Alternatives**

The Department of Education exhorts school officials to, “determine the extent and character of alcohol and drug use and monitor that use regularly” (US Department of Education, 1992, p. v), expecting schools to fulfill this obligation by holding meetings with parents and by using anonymous surveys to assess the extent and nature of drug use.

Although parent conferences and anonymous questionnaires undoubtedly provide useful information, these methods are not nearly as informative as random drug testing (DeMitchell, et al., 2008; Dupont et al., 2008; Dupont & Brady, 2005; Jacobs & Morag, 1992; Swisher et al., 2004).

In one suburban Chicago school, administrators, suspecting that students were not filling out substance-abuse surveys seriously, included two distracter or bogus drugs in the survey; more than one hundred students reported regularly use or experimentation with “orthotoxamine” and “cognadil” (Jacobs & Morag, 1992, p. 224). Reliance on data supplied by high school seniors to determine the extent of drug use in the school-age population understates the problem because the rate of drug use by school dropouts is significantly higher, especially in the case of crack or heroin use. The characterization of drug testing as an unnecessary research tool fails to recognize drug testing's potential role in channeling individual students into drug counseling and treatment, and fails to acknowledge the deterrent effect produced by drug testing's heightening the risk of getting caught (Dupont et al., 2008 “Editorial,” 2007; Dupont & Brady, 2005).

Another argument suggests that observers would be practical to assume that drug tests are not always used in a strict and inflexible fashion. Paik (2007) suggests that courts in the country advocated legal mandates concerning compulsory drug testing policies in school and work settings because it can expose a person’s use of drugs considered as a threat to the public. However, Paik (2007) also describes the lack of an understanding and emphasis on the use of drug testing in the United States justice system. This, then, affects interpretation of the drug test results. Paik (2007) employs ethnographic methods to analyze the manner a southern California juvenile drug court

staff interprets drug test results. The article identifies interactional and institutional processes, which are reliant on constructed meanings within the context of a local organization, as the components of the staff's understanding of the drug testing results.

### **Current Findings**

Surveys of student drug indicate there are encouraging signs illicit drug use is declining in the United States. In 2003 National Survey on Drug Use and Health, "66% of high school seniors reported that they had ever used any illicit drug (other than alcohol), and by 2003 that figure had dropped to 48%. Cocaine and crack use has declined steadily since 2003, when 6.7% reported use within the previous 30 days, to 2.8% in 2004" (United States Department Health Human Services, 2004 website; Elmquist, 2002). Louis Sullivan, secretary of the Department of Health and Human Services (2004), noted that these data support the conclusion that substantial progress has been made against drug use in the schools. While encouraging, these statistics should be kept in perspective. Until the Navy implemented a urinalysis program in 2004, which showed that 47.8% tested positive for marijuana, commanders had no way to confirm the reliability of anonymous surveys (Elmquist, 2002). Despite positive trends, most schools still report a drug problem, and some schools report an extremely serious problem (Dupont & Brady, 2005; Dupont et al., 2008; Swisher et al., 2004).

Until September 1991, educators and policymakers in New York State did not know that students in rural areas used marijuana, cocaine, crack, and alcohol. Prior to the publication of this study, the lieutenant governor said, "Particularly after the advent of crack, it was felt this was primarily a city problem. Now we know that the incidence of

drug use is at least as high and may be higher outside the city than it is in the city” (Jacobs & Morag, 1992, p. 225).

The control of drugs among students is something of a moving target because evidence suggests students are turning to other forms of self-medication. The Office of National Drug Control Policy (*ONDCP*) (2007), cite a number of national studies that show the intentional abuse of prescription drugs are a concern, particularly among teens. *ONDCP* suggests that the youth have started consuming prescription drugs rather than street drugs. *ONDCP* reports new users of prescription drugs match new users of marijuana. Teens, *ONDCP* suggests, are experimenting with prescription drugs because of the expectation that these produce a *SAFER* high than street drugs. Unlike previous drug abuse situations, there is an easier access for the prescription drugs, including “pain relievers such as OxyContin and Vicodin” by most of the teens. They can freely acquire it from friends or relatives (*ONDCP* website, 2007).

Secretary Sullivan's stated aim is to “finally and completely” eradicate drug use from our country (Jacobs & Morag, 1992, p. 225). A trend toward less drug use by high school senior, should not necessarily lead to a rejection of drug testing. The schools have not been able to reduce the rates of drug use to the low levels in the federal workforce or the armed forces. Even if drug testing were not currently necessary because other solutions have been found successful, it is reasonable to understand why schools did not experiment with drug testing in mid-2003 when drug testing became common in other societal sectors and institutions (Dupont & Brady, 2005; Dupont et al., 2008).

Another approach is to argue that a drug-testing program reduces drug use by its deterrent effect on students tempted to use drugs, but fearful of their drug use exposed,



even without punitive sanctions. Drug testing can also offer a justification or excuse for students who want to resist peer pressure to take drugs (Brook, Gordon, Whiteman & Cohen, 2002). When offered a voluntary drug-testing plan completely underwritten by local businesses, the president of the Antelope Valley (California) School Board rejected the plan, saying, "I am not in favor of adding another layer of responsibility on the school system... We are up to our necks already in other things" (Jacobs & Morag, 1992, p. 228).

The primary objective of the literature review was to locate empirical studies, both theoretical and methodological, to further discuss both the rewards and difficulties in the adoption and implementation of a prevention program. The literature concentrates on three major areas. Decision-making, policy setting, and program adoption and implementation-related issues comprise the first area. A focus on politics' nature and decision-making functions, prevention policies and programs' composition, and incentives and difficulties in the organization gives a political tone to the literature. The second area of focus of the literature points in relation to the diffusion of innovations literature particularly on the assessment of the adoption, implementation, and preservation of specific prevention programs. The third and final area of concentration of the literature tackles the issue of attaining the full potential of the programs disseminated or have passed the efficacy trial stage. The literature emphasized the essential training and support function, the goal of achieving results, for both the adoption and implementation of programs. There remain many facets of community-based program adoption and implementation that literature could not be found (Dupont & Brady, 2005; Swisher et al., 2004). A majority of the literature identified school-based programs. A

logical explanation for this is that issues with school-based programs are easier to identify because there are schools in each community, yet not all communities have created prevention programs. Funded research studies are also done more with schools than with community programs because there is more ease in randomizing and intervening with school-based programs. *DARE* presently reports emerging literature about effectiveness and has little research in regard to issues of adoption and maintenance of *DARE* programs. The literature review revealed little coverage in relation to communities that discontinued *DARE* because of statements regarding its ineffectiveness or maintenance issues with those experiencing poor evaluation findings. The literature also reflects a lack of research efforts concerning other commercially available projects.

Historically, there has long been a theme in the literature, which identified the slow pace of positive change in the education industry. Keeve (1967) stated that “overcoming obstacles to a creative school health program” is slow in forthcoming (pp. 26-32). Mounting evidence suggests problems with the adoption and implementation of programs have been present for a long time, so long that Keeve’s research suggested that there are number of existing problems: an ongoing tension among competing groups, issues with centralized or localized decision-making, legal barriers, use of outdated laws and shortage of the availability of proper diagnostic tools. The article emphasizes the existence of early problems even if obstacles with adoption and implementation of the programs were already addressed. In the previous section, a historical case study depicted the way school administrators and other leaders apparently ignored the benefits of drug testing as a means of effectively combating drug use in schools. Drug testing is not the only example of this resistance to organizational innovation in the drug area

because groups within the school community have reacted negatively to the proposed introduction of student assistance counselors to the school environment. In New York and other states, guidance counselors have unsuccessfully brought proceedings against hiring certified substance-abuse counselors, claiming that substance-abuse counselors do not qualify as certified guidance counselors under state law. Though the substance-abuse counselors, funded by federal dollars, were meant to serve in a supplemental role, guidance counselors objected to them, apparently for encroaching on their turf (Jacobs & Morag, 1992). One approach will be to suggest the explanation of the role of substance-abuse counselors to include responsibility for implementing student drug-testing programs would engender even greater resentment. Research by Palmer and Boyd in North Carolina supports the idea that schools resist intervention strategies that make organizational demands on schools. Palmer and Boyd also suggested that schools were more interested in providing prevention activities, which are designed “to prevent or delay” the onset of drug use than they were in developing programs designed to identify young people “who are already experiencing problems as a result of their drug use” (Jacobs & Morag, 1992, p. 227). Another possibility is that schools simply do not know how to develop programs, which identify those young people who are abusing drugs (DeMitchell, et al., 2008; Dupont & Brady, 2005; Dupont et al., 2008).

Subject to federal and state confidentiality regulations, appropriate school officials, professional counselors, parents, and the student could tailor an appropriate treatment plan after the identification of students with drug addiction problems. Students who continued to test positive throughout the academic year could have their drug use addressed more intensely, perhaps by the child social services agency. As an initial

matter, the almost unanimous explicit or implicit rejection of drug testing by educational institutions must be addressed because many public and private employers, who will soon be interviewing the schools' graduates, have adopted one or another type of work-place drug-testing program; student athletes will almost certainly encounter drug testing if students compete in intercollegiate sports (DeMitchell, et al., 2008; Dupont et al., 2008; Jacobs & Morag, 1992).

### **School Administrators and Decision-Making**

In order for educators to stay involved with the current efforts to promote student welfare, educators must be constantly adapting to this ever-changing climate of battling drug addiction and alcoholism on school campuses. The future success of drug education programs will rely heavily on the experiential learning capacity. During tenure in this field, educators developed and implemented successful programs and practices. This study sought to understand the perceptions of the decision-makers themselves as a tool for understanding these well-documented patterns of organizational limitations and bureaucratic inertia among the administrators regarding illicit drug and alcohol use by high school students in particular.

Perhats et al. (1996) described the administrative “role differences as gatekeeper perceptions of school-based drug education programs” and emphasized the connection between the roles of the gatekeepers within schools to issues involving barriers to effective prevention programs. Among the five roles discussed in the *NIDA* website, Dupont (2008) quotes Perhats (1996) in that “principals, district prevention program administrators, school board members, teachers, and parents” that only teachers and parents can provide an analytical assessment of the adopted programs. This article

suggested administrators act as gatekeepers, permitting programs that they are involved with so that they can make decisions related to the use of the program. The question of whether these individuals are capable of performing their expected decision-making responsibilities then becomes debatable. Administrators' decisions may be limited because of lack of access to evaluation data, use of an ideological instead of practical standpoint, or exclusivity on programs supported by marketing and public relations undertakings. Problems of research-based programs arise. This includes little efforts to market it, few efforts to the establishment of the programs and lack of assistance with its management. Realistically, feedback from program users can be a basis for the removal of ineffective programs. Within the school setting, administrators' opinions overpower the users' feedbacks, so the decisions are largely on the hands on the administrators and the participation of the users in making the decision is minimal (*NIDA*, 2008; Dupont et al., 2008; Perhats, et al., 1996). Perhats et al. (1996) concluded that the lack of inputs from other makes the programs unsound. Both the teacher and parent populations show uncertainty with school administrators.

Inconsistent school administrator's leadership, qualities relevant to inconsistent decision-making, which penalizing disobedience for violating school's drug policies, which also can manifest some leniency by the administrators depending on the age of the violator. A stricter punishment policy given to younger violators can set a double standard... "more middle/junior high than senior high schools in the United States responded to tobacco use violations with out-of-school suspension (38.8% versus 24.3%), whereas more senior high school responded with in-school suspension or detention (48.0% versus 40.5%)" (Ross, Einhaus, Hohenemser, Greene, Kann, & Gold, 1995, p.

334; Evans-Whipp, Beyers, Lloyd, Lafazia, Toumbourour, Arthur & Catalano, 2004).

An explanation of this data may be that administrators expect younger offenders to gain more from the treatment than their older counterparts thus resulting in more firm consequences with the younger pupils.

“More middle or junior high school than senior high schools gave referrals to an assistance program for tobacco use (16.4% versus 7.1%) and required participation in an education or counseling program for tobacco use (13.9% versus 8.3%) and AOD possession (50.1% versus 42.9%)...”

(Evans -Whipp, et al., 2004, para. 10).

White (1998) stated that “Government funded academic studies all too often generate reports whose implications are absorbed into bureaucratic black holes without ever reaching treatment practioners” (p. 329). The danger is that a temporal fix has been applied through ineffective drug education paradigms. White argued health literacy should be aligned with modern scientific research-based educational material and supported by drug testing to ensure compliance (Dupont et al., 2008; White, 1998). Positive reports on the efficacy of drug testing are becoming more prominent in the substance abuse literature because of studies of high schools applying this technology (McKinney, 2004), individual case studies (Drug Free Schools Coalition, Inc., 2003), statewide effectiveness studies (McKinney, 2003), school health studies on high school populations (Yamaguchi, Johnson, & O’Malley, 2003), the deterrent effective of drug testing (Goldberg, Elliot, Moe, & Kuchl, et al., 1999), and procedures associated with best practices (DuPont, Skipper, & White, 2005).

## **Conclusion**

The conclusion derived from this analysis of the related literature is that there is a lack of information in the existing resources concerning the perceptions of the educational leaders in charge of choosing and implementing drug prevention programs in their schools. The existing literature documented a pattern of rejection among school officials regarding drug testing as a viable option for drug prevention in schools. Given the effectiveness of drug testing in other environments, business and industry, addiction treatment programs, criminal justice systems, child protective systems, government and the military, professional and school sports, the literature analysis conducted unearthed much resistance to this concept at the school level, especially compared to the public support for drug testing in general (Dupont et al., 2008). The analysis of the literature documented a fairly persistent pattern in which schools have adopted ineffective strategies and held on to them despite objective research on their relative ineffectiveness, for example, “Drug and alcohol tests could be administered by school officials, at school parties and events” (Dupont et al., 2008, p. 9). Given the critical importance of delivering a drug-free environment for learning, the ability of schools to adapt to change presents an important area to study and analyze in greater detail.

The emphasis of programs derived from the theory that individuals learn in groups that peers will be more effective in communicating messages and that individuals need to learn to be self-effective and powerful and that going it alone in drug education is harmful (Solomon, 2007). The challenge from the view of most professionals in the addiction medicine field is that such a perspective on substance use severely underestimates the powerful internal, chemical, and biological factors that produce the

phenomenon of addiction (Pugh, 2004). If addiction is the issue, learning in groups may not be enough to avoid addiction and restore a proper school-learning environment.

The existing literature raised the possibility that large institutional forces are actively influencing the approach to illicit drug and alcohol use by students in learning institutions. Potential strategies that leaders want to adopt may not be compatible with the existing structures and cultures of the larger organization. The chapter also presented the identified gaps in the literature regarding how decision makers in schools process information presented, what pressures they face, and to what extent their inflexible patterns of behaviors affect the needs of children.

### **Summary**

Drug testing may represent an organizational burden of unknown dimensions that schools are not prepared to undertake, suggested by the cost of drug-testing weighed against any potential benefits. This conclusion does not mean that schools have done a thorough analysis of the merits of drug testing or of the appropriate involvement of schools in combating teen-age drug use. This conclusion does suggest there are general concerns among school officials about being overloaded with social responsibilities, and specific concerns about implementing a complex anti-drug strategy with significant organizational consequences. School officials essentially have ignored drug testing or dismissed it with cursory or vague references to legality, cost, and accuracy as indicated above in the literature review.

There may be a better explanation for why educational institutions have not attempted even to experiment with drug testing especially adapted to the needs of secondary (and perhaps some primary) schools. Public opinion supports student drug



testing (Elmqvist, 2002), so any explanation stressing the unique cultural definition of schools and the sensibilities of students is dubious (Elmqvist, 2002). The paucity of private school drug testing programs undermines the explanation that schools would rush to embrace drug testing if only its legality were certain. A unanimous anti-drug position of the educational establishment, disinterest in or opposition to drug testing clearly does not reflect a positive or neutral view toward illicit drugs. The explanation sought must have something to do with the technology or procedures of drug testing, not with ambivalence toward drugs (Dupont et al., 2008).

Chapter 2 contained the literature review beginning with a historical overview of drug education programs in public schools. Specifically, the *DARE* and *SAFE* programs were addressed. The literature review took an in-depth look into the possible acquisition of drug testing policy in schools. The chapter also included a discussion on the legal ramifications, educational values, unreliability of drug testing, and the costs attached to implementing a drug testing policy. The current study addressed the gap found in existing literature by producing information based on the study's conclusions that may contribute to incorporating a more reliable method of drug prevention in today's public schools, specifically drug testing. Chapter 3 includes an explanation of research method and rationale of the proposed study. Presented in this chapter are the methodology design, research questions and hypotheses, procedures and rationale for the study's population, sampling, data collection, internal and external validity, and the proposed method of data analysis.

### CHAPTER 3: METHOD

The purpose of the current quantitative method study with a descriptive research design is to identify the perceptions of public school administrators in Orange County, California, regarding the state-mandated drug policy programs in schools, the effects of these programs on youth, and the potential for the implementation of random drug testing to augment state-mandated drug education programs in public schools. The objectives of the study included discovering whether the current curricula, which use the *DARE* or *SAFE* programs, provides appropriate and effective education leading to the prevention of drug use among schoolchildren and in addition, if school administrators charged with the successful implementation of drug education programs foresee obstacles when considering or proposing other viable options including drug testing. In the context of this research, Mulcahey (1998) defined perception as the insight, intuition, or knowledge gained through the capacity for such insight. The effectiveness of the currently employed drug education and prevention programs in public schools will be assessed by the school administrators' perceptions of the curricula and their self-reported insight into the long-term effectiveness of the programs on youth. The study focused on schools currently implementing either the *DARE* or *SAFE* program with current school administrators as the target population in the identified schools serving at the rank of principal or assistant principal.

## **Research Method and Design Appropriateness**

### **Research Method**

The current research study examined the perceived effectiveness of the *DARE* and *SAFE* drug education programs through the lens of public school administrators from a quantitative perspective. The quantitative approach is appropriate, as it allowed for the collection of data to identify the perceptions of public school administrators. A survey is the most appropriate means to achieving the identified goals and collecting the quantitative data required to measure the perceptions of drug education program effectiveness by respondents and their view of the political landscape surrounding policy-making in the educational environment. The study's design is consistent with research that reveals advantages in the use of quantitative methodology to study problems requiring "an explanation of trends and relationships among variables" (Creswell, 2005, p. 45). The reason for using the quantitative research design is that it provided the ability to compare variables to determine if there are significant statistical relationships (Cozby, 2001). The researcher can quantitatively assign numerical values to the variables to determine associations (Yaremko, Harari, Harrison & Lynn, 1986). The ability to assign numerical values to the variables in the study allowed the quantification of the results by using different statistical procedures. The quantitative research design is more appropriate for the proposed study than a qualitative design because with a qualitative design the researcher would not be able to assess a direct relationship between two variables using open-ended questions (Cozby, 2001).

The current study used a quantitative method with a descriptive research design because quantitative designs are used to measure relationships or differences between

variables through the use of statistical analysis (Black, 1999). This indicates the need for the quantification of the gathered data to determine relationships or differences between a set of variables. Quantitative research is interested in determining causal relationships between a set of variables, rather than explaining why or how certain concepts affect the general population. In this regard, the quantitative research design is used to measure different aspects of interest in the proposed study.

### **Appropriateness of Design**

Depending on an analysis of competing standards and plausible values, quantitative, qualitative or mixed research methods could have been used to conduct the current research. The decision to pursue a quantitative research method is carefully made, considering the possibility that this research may generate public interest in this research. Without a quantitative research method, observers would find it easier to dismiss the results of the study as simply the judgment of the person conducting the study, instead of as the result of an objective and balanced report of survey research data. Qualitative methods, in contrast, would have relied on less reliable results derived from efforts to interview the administrators, perhaps face-to-face, and to compile their comments in an orderly fashion. A qualitative approach would have required less expertise in the implementation of quantitative methods of data analysis, and less study of the appropriate development of Likert-type survey instruments, the public interest in the general topic seemed to demand this kind of extra effort. A mixed research method may have combined anecdotal evidence with a less intensive and less focused investigation of some sort of measurable quality in the life histories of the respondents. This choice may have been appropriate for this study, except it would have weakened the persuasive

power of using purely quantitative approach and introduced a level of subjectivity, which would have undermined the potential results of the study.

The purely quantitative approach is the most worthwhile manner in which to improve the ability of future researchers to learn from this study and apply its lessons themselves in the interest of improving public understanding of the sensitive issues surrounding drug education policy in the U.S. The greater possibility of generalizing from this research; provided it is quantitative, and the simplicity of maintaining a focused, quantitative only approach resulted in being the least expensive and most powerful way to test the specific hypotheses developed over the course of this study through the analysis of the literature review. To discover causal factors that may influence the choices of the respondents, the quantitative approach is the most valuable and efficient alternative given the objectives of the study and the nature of the research questions. In the context of the research questions, neither the qualitative nor mixed approach promised to produce significant results in this research project, given the resources invested in it. Quantitative data provides the statistical information and is an appropriate design in the collection of data when measuring attitudes (Creswell, 2005). Because quantitative data enabled the statistical analysis needed for the current study's purpose, the construction of a survey provided a mechanism for such an investigation.

The descriptive survey instrument intended for use with a highly select population is the preferred research method for this project because the purpose of the current study is to identify the perceptions of school administrators related to drug education and prevention (Creswell, 2005). The importance of generating quantitative results would best be served as a contribution to future policy-making in the field of drug education and

prevention. It includes a greater number of respondents directly involved in the two drug education programs and retrieves statistical data related to the research questions. The use of a survey is also the tool used to collect data related to behavior, attitudes, and beliefs (Creswell, 2005). A traditional face-to-face, focus-group type survey might inadvertently bias the responses made by the respondents and would be less likely to garner a set of true and honest answers. Because the current study would be used to determine the role that tenure in office plays in policy making in this field, traditional face-to-face or other qualitative study techniques would not produce valid and compelling results because of the possible inhibited reactions from participants.

Many advantages are associated with the use of the survey method. According to Babbie (2004), these advantages include that one can collect a large amount of data in a fairly short time, surveys are easier and less expensive than other forms of data collection, questionnaires can be used to research almost any aspect of human perceptions regarding the variables under study, and surveys can be easily used in field settings. In the context of existing theory, the descriptive survey approach is best suited to accomplish the study goals.

The quantitative, descriptive survey included a simple design to obtain the perceptions of participants currently serving as school-based administrators serving in the capacity of assistant principal or principal. The survey instrument, mailed to this purposeful sampling of school administrators in Orange County, California, is most appropriate for the proposed study because its reasonable approach to data collection, reaching greater numbers of participants, and the probability to obtain honest and unbiased responses from school administrators regarding an issue surrounded by stigma

and political pressures (Creswell, 2005). The use of a quantitative method with a descriptive design is also appropriate because the researcher intended to collect numeric data to describe group perceptions (Neuman, 2003) of *DARE* and *SAFE* and other viable drug prevention program options related to drug use among youth. This approach is consistent with the intended outcome of identifying the effectiveness of the currently employed drug education programs in schools and uncovering school administrators' perceptions of obstacles when considering other drug prevention policies and programs.

### **Feasibility of Design**

In anticipation of the environment in which the survey will be administered, the researcher conducted a pilot study of the survey to test the ease with which respondents can understand and answer the questions, eliminate questions that pose difficulty, and help bolster reliability and validity of the instrument. Two phases of pilot testing occurred prior to the study. First, prior to using the instrument, a panel of experts examined the questions for validation and input. The researcher used the input to make changes to the survey before implementation of phase two. In phase two, a target of 20 participants enrolled in the trial, ensuring that each participant has similar characteristics to those who eventually completed the survey; this means that each participant must be employed in a public school that incorporates the *DARE* or *SAFE* programs and serves as an assistant principal or principal. For reliability purposes, this research is cognizant of questions that go unanswered or questions that garner too many answers. The trial research participants were asked to write comments on the side of the survey to elicit feedback. The researcher gave attention to the length of time trial participants take in finishing the survey. If participants take 20 minutes to complete a 10-minute survey, then

revisions were made to make the survey shorter. The pilot test enabled critical information to be ascertained regarding the survey design and analysis thereof determine if the feedback is reliable and valid to support worthy findings.

### **Analyzing the Data**

The data analyzed in this study included scores derived from the survey instrument in which the unit of analysis is the public school administrator. The scale scores from the survey represented the dependent variable in the study, and the independent variables in the study were the years served as a school-based administrator and level of expertise in drug education policy. The researcher analyzed the raw data obtained from the survey using the statistical software SPSS Package 17.0. The researcher also conducted a correlation analysis test to determine whether any of the variables exhibit a positive or negative relationship. The results of this test identified significantly related variables and identified whether these relationships are direct or inverse. Analysis using regression intended to identify the impact of the independent variables on the dependent variables and measure the extent to which the study's population finds the *DARE* and *SAFE* programs as an effective means to prevent drug use among youth. The regression analysis also identified the independent variables that have the most significant impact on the dependent variable as well as how much the independent variables affect the dependent variable as specified by the R-squared values that resulted from the analysis. These were the most appropriate analysis procedures for the research study because these analyses identify relationships between variables, which fulfilled the objectives of the current quantitative, descriptive research study.



### **Data Collection for the Pilot Study**

Prior to the administration of the survey instrument, the researcher conducted a pilot study to determine if changes are necessary to administer a valid and reliable instrument to the study's population. The use of purposeful sampling identified the study's participants, which means that participants were intentionally selected so the central phenomena can be found and understood (Creswell, 2005). For the pilot study and prior to using the instrument, a panel of experts analyzed the survey questions for validation and input. The researcher made changes to the survey based on input from the panel before the implementation of phase two, which included the identification and involvement of 20 participants meeting specific criteria related to the study's population. The survey will be administered to the 20 participants of the pilot study. These participants were encouraged to provide feedback about the survey questions. Based on the participants' input, final changes were made accordingly.

### **Research Questions**

The intent of the current quantitative study is to determine how school administrators rate the effectiveness of various drug education programs implemented in their schools, and their perceptions of potential barriers to the implementation of random drug testing in their schools. To examine the relationships between the various variables and school leader perceptions, the current study sought to measure the participant's levels of drug policy expertise and the number of years experience the participants have had serving as a school-based administrator. The following research questions guided the current study to reveal school administrators' attitudes and perceptions regarding drug education:

- RQ1: To what extent do the years of experience as a school administrator affect the perception of school administrators in Orange County, California, toward Drug Abuse Resistance Education?
- RQ2: To what extent do the years of experience as a school administrator affect the perception of school administrators in Orange County, California, toward Substance Abuse for Educators?
- RQ3: To what extent do the levels of school administrators' knowledge of drug education policy affect the perception of school administrators in Orange County, California, toward Drug Abuse Resistance Education?
- RQ4: To what extent do the levels of school administrators' knowledge of drug education policy affect the perception of school administrators in Orange County, California, toward Substance Abuse for Educators?
- RQ5: To what extent do the school administrators consider the drug-prevention programs to be effective in deterring the drug use among the youth?
- RQ6: To what extent do the school administrators consider the potential for the implementation of random drug testing to augment state-mandated drug education programs in public schools?

### **Hypotheses**

The use of null hypotheses indicates that no differences exist between variables in the study (Creswell, 2005 & Neuman, 2003). The lack of support for a null hypotheses leads to the probability that the alternate hypotheses is true and that differences between variables in the study are evident (Creswell, 2005 & Neuman, 2003). In this study each

set of independent and dependent variables became the basis for the null ( $H_0$ ) and alternative ( $H_A$ ) hypotheses.

$H_{10}$ : The number of years served as a school administrator does not significantly impact the perception of the effectiveness of the Drug Abuse Resistance Education program.

$H_{1A}$ : The number of years served as a school administrator does significantly impact the perception of the effectiveness of the Drug Abuse Resistance Education program.

$H_{20}$ : The number of years served as a school administrator does not significantly impact the perception of the effectiveness of the Substance Abuse for Educators program.

$H_{2A}$ : The number of years served as a school administrator does significantly impact the perception of the effectiveness of the Substance Abuse for Educators program.

$H_{30}$ : A school administrator's knowledge of drug education policy does not significantly impact the perception of the effectiveness of the Drug Abuse Resistance Education program.

$H_{3A}$ : A school administrator's knowledge of drug education policy does significantly impact the perception of the effectiveness of the Drug Abuse Resistance Education program.

$H_{40}$ : A school administrator's knowledge of drug education policy does not significantly impact the perception of the effectiveness of the Substance Abuse for Educators program.

H4<sub>A</sub>: A school administrator's knowledge of drug education policy does significantly impact the perception of the effectiveness of the Substance Abuse for Educators program.

### **Population**

The study population consisted of participants who have knowledge, interest, and responsibility to oversee the implementation of drug education programs in Orange County, California, public schools. The participants were purposefully identified as principals and assistant principals currently serving in elementary or middle schools that implement the *DARE* or *SAFE* program. At the time that the current study will be conducted, 307 elementary and 276 middle schools implementing the drug programs were found in Orange County, California.

### **Characteristics of the Study Population**

The study consisted of participants who have knowledge, interest, and responsibility to oversee the implementation of drug education programs in Orange County, California, public schools. School administrators who currently implement the *DARE* or *SAFE* programs in Orange County, California, public schools served as the population from which the study participants were chosen. Students in the fifth and sixth grades undergo the *DARE* and *SAFE* programs, respectively; therefore, elementary and middle school site-based administrators were the targeted population for the study. This ensures that the study receives the most effective and worthwhile feedback to produce more valid and meaningful results. This study focused only on administrators working in Orange County, California, which means it will be administered to staff at 307 elementary schools and 276 middle schools. After the pilot study purposeful sampling

identified the study participants, which intentionally selected participants so the central phenomena can be found and understood (Creswell, 2005). Data collection will be accomplished by sending the survey via United States mail to all school-based principals and assistant principals currently employing the use of *DARE* or *SAFE* in Orange County, California, elementary and middle schools. A total of 307 elementary schools and 276 middle schools exist in Orange County, California.

### **Sampling Frame**

The purpose of the current study was to explore the perceptions of public school administrators concerning the effectiveness of the *DARE* and *SAFE* programs in Orange County, California. *DARE*, taught at grade five, and *SAFE*, commonly taught at grade six, justified the decision to use principals and assistant principals from elementary and middle schools as the study's subjects. The method used to disseminate the survey to each participant makes it economically feasible to implement the survey instrument to every member of the population. From a census, 307 elementary schools and 276 middle schools existed in Orange County, California, at the time that the current study will be conducted; therefore, assuming that each school has one principal and one assistant principal, 1,166 surveys were distributed. The selected sample is complete in regard to obtaining the true representation of the perceptions of school administrators across Orange County, California, and should provide adequate information on attitudes and perceptions of the entire population.

The researcher used purposeful sampling to select expert individuals (Neuman, 2003). The selected population allowed a controlled study based on similar professional attributes. This purposeful population included participants identified as public school

administrators who have the greatest interest and authority within the community on the topic of substance abuse among school children.

As explained by Trochim (2004), in purposive sampling, the researcher samples with a purpose in mind from one or more specific and predefined groups, believed to be representative of the larger population of interest. Trochim (2004) noted that a benefit of purposive sampling is that it is very useful for situations in which the researcher wants to reach a targeted group who otherwise might not be readily available. Creswell (2005) identified purposeful sampling as an attempt to acquire rich information. In the current study, the population of public school administrators represented the key figures in the school system that is accountable for the adoption of drug education curricula in their buildings. The population group represented, formally and informally, the important decision makers and communicators in their field, as they are those working in the trenches. Better understanding of their perceptions may give insight regarding the promotion and implementation of key new programs in the schools and open the door to improved understanding of the strengths, weaknesses, opportunities, and obstacles facing any policy entrepreneur or pioneer working in the critically significant field of drug education and prevention.

### **Informed Consent**

To ask for participation of the population group, a letter was sent through United States mail requesting each administrator's participation (see Appendix B and C). The letter informed participants about the study, reiterated the need for voluntary participation, and emphasized that confidentiality clause regarding the information provided on the survey. In the interest of fairness and obtaining additional useful

information in a systematic manner, the researcher provided opportunities for the participants to ask questions regarding the research. Informed consent ensured ethical practice. An informed consent form (see Appendix B) provided a detailed explanation of the study and gave potential respondents written information to decide whether to participate in the study or not to participate in the study. The letter also disclosed the title of the study, purpose of the survey, procedures to be followed, potential risks and benefits, and confidentiality procedures. The informed consent form and survey instrument were mailed together with an enclosed self-addressed, stamped envelope for simple and *SAFE* return. A period of five weeks will be allotted to ensure timely collection of the material.

### **Confidentiality**

To reduce the fear of respondents that information from the surveys will be used inappropriately, the respondents in the sample were guaranteed confidentiality and the Informed Consent document provided information on the nature and purpose of the proposed survey. The language in the Informed Consent document was written to ensure the respondents that their answers are important to the study and because of the anonymity of their responses, no connection can be made to their self or position in the district. The fact that the identity of the respondent is unquestioned guarantees this level of confidentiality. Only rank in their profession was asked of the Orange County, California, school administrators. Also, all the survey questionnaires for the data collection and analysis of all surveys would be shredded after 3 years. An informed consent form gave potential respondents written information to decide whether or not to participate in the survey. The initial letter sent to the participant also included

information regarding the title of the study, purpose of the survey, procedures to be followed, potential risks and benefits, and confidentiality procedures.

### **Geographic Location**

Orange County, California, was the appropriate site for the study targeting school administrators' perceptions of drug education and its effectiveness. In California, local government units support federal efforts to prevent drug use among the youth, in part, through the implementation of what is widely known among school administrators as the State of California Health Framework. This framework includes the full range of drug education and health literacy service-based programs. In the state of California, the State Board of Education creates subject-centered curriculum frameworks every so often to issue a general minimal criteria and guidelines for programs in the educational sector. "Subject area frameworks describe the *scope and sequence* of what students learn in a given subject area. The frameworks provide guidance regarding effective teaching strategies and assessment of student learning" (Fisher & Wood, 1996, para. 3).

"The central goal of California's Health Framework is to develop health literacy in all students" (CDE, 2003, p. 30). Health literacy demonstrates one's ability to acquire, explain, and comprehend basic health information and health-related education. More health-educated persons are meant to expand their "mastery of knowledge, skills, and behaviors in four key areas critical to healthy living: (a) recognition of lifelong health as a product of personal responsibility; (b) value and support for other people's health; (c) knowledge of growth and development processes; and (d) awareness on the applications of health-related information, and products and services" (CDE, 2003, p. 6). The four content areas integrate mental and emotional health ideas. The content areas and four



unifying ideas cannot be separated from each other, but instead, the content areas should be treated as connected by the unifying areas. Furthermore, the programs stress the advancement on attitudes and behaviors concerning lifelong positive health (CDE, 2003).

Elementary and secondary schools commonly introduce both the *DARE* and *SAFE* programs as a facet of the health literacy curriculum Orange County, California, and remain instituted since 1983. These drug education programs aim to promote prevention and awareness of the negative effects of drug abuse and prevent drug use (Beacham, 2008). Therefore, it is logical to conduct this study in this geographic location because at least decades of knowledge and information that will help make inferences about the impact of *DARE* and *SAFE*.

### **Instrumentation**

The survey method will be used as the means by which the researcher collected data for the study. A well-designed survey is critical for achieving the purposes quantitative research. Concerns with validity (that is, the degree to which an instrument measures what it was intended to measure) and reliability (that is, the degree to which an instrument provides consistent and accurate measurements) were at the forefront of the questionnaire selection/construction process. For the current quantitative study, the use of a validated survey instrument facilitated data collection (See Appendix A).

The data collection instrument for measuring school administrators' perceptions regarding drug education and its effectiveness is a carefully designed survey. The use of Likert-type survey questions helped with data collection. Likert-type questions require minimal thought and are used to garner the participation of a higher number of participants compared to qualitative studies using interview questions. To maximize the

response rate, the survey will be designed to take no more than 10 minutes to complete (Neuman, 2003). The results of the surveys, received back from participants through United States mail, revealed the extent to which the respondents perceive the existing drug education programs as effective curricula.

### **Data Collection**

All principals and assistant principals at elementary schools and middle schools in Orange County, California, directly received the surveys through mail. Each administrator received a packet containing the letter of explanation of the study (Informed Consent), the survey instrument, and a self-addressed, stamped envelope to be used for the survey instrument return. The first document, the letter of explanation (Informed Consent), explained the details of the study requesting their participation, advised potential respondents of the anonymity associated with participation in the survey, and expressed the necessity for the collection of data. The second document, the survey instrument, included a brief explanation of the process, and the last item, the return envelope, included all postal requirements for simple return.

### **Data Analysis**

The descriptive research is quantitative in design and evaluation. It used correlation and regression tests to answer the study's research question. To ensure statistically valid results, the study required a minimum sample size of 134. This figure was derived using G-Power 3.1, taking into consideration that the analysis made use of two-tailed significance, with a medium effect, 95% power and an alpha level of .05. Descriptive statistics were used to illustrate the demographic information received from all respondents. The data analysis used multiple regression analysis because it enabled

the consideration of more factors and allowed better estimates than are possible with simple linear regression. Multiple regression analysis studies the relationship of a dependent variable  $y$  to two or more independent variables. The study's multiple regression models took on the following form:

$$y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \varepsilon$$

In this model, the researcher related the study's dependent variable  $y$  to the independent variables  $x_1$  and  $x_2$  and an error term  $\varepsilon$ . In the multiple regression models,  $\beta_0$ ,  $\beta_1$ , and  $\beta_2$  are the parameters and  $\varepsilon$  is a random variable. The error term refers to the variability in  $y$  that the linear effect of the independent variables cannot explain. One of the assumptions for the multiple regression models is that the mean or expected value of  $\varepsilon$  is zero. A consequence of this assumption is that the mean or expected value of  $y$ , denoted  $E(y)$ , is equal to  $\beta_0 + \beta_1x_1 + \beta_2x_2$ . Thus, the equation that describes how the mean value of  $y$  is related to  $x_1$  and  $x_2$  is expressed in the following equation:

$$E(y) = \beta_0 + \beta_1x_1 + \beta_2x_2$$

Because the parameter values are not known, they were estimated from the sample data collected from school administrators during the survey process. The sample statistics  $b_0$ ,  $b_1$ , and  $b_2$  were used as the point estimators for the parameters  $\beta_0$ ,  $\beta_1$ , and  $\beta_2$ . These sample statistics provided the following estimated multiple regression equation:

$$\hat{y} = b_0 + b_1x_1 + b_2x_2$$

where

$b_0$ ,  $b_1$ , and  $b_2$  are the estimates of  $\beta_0$ ,  $\beta_1$ , and  $\beta_2$

and  $\hat{y}$  = the estimated value of the dependent variable

The study used the least squares method to develop the estimated multiple regression equation that best approximates a straight-line relationship between the dependent and independent variables. The study used Excel software to obtain the estimated regression equation and other information. Procedurally, the researcher also used Excel spreadsheets to organize the data and to collate information on each observation regarding the dependent and independent variables. The data will be organized in the appropriate cells with the appropriate labels (Data management software such as Excel with - options that include statistical analysis methods – appeared to be the most easily accessible methods of performing the numerous computations required in multiple regression analysis). For example, for hypothesis one, the study used Excel's Regression tool to develop an estimated multiple regression equation in which the dependent variable  $y$  represented the score of the respondent for their evaluation of the effectiveness of the *SAFE* program, whereas the independent variables  $x_1$  referred to the years in the school district and  $x_2$  referred to self-reported level of knowledge.

The study produced a scatter diagram of the preliminary data for each relationship to be studied in this research. Next, the study used Excel's Regression tool to estimate the regression equation. The summary output included regression statistics such as Multiple R, R-Square, Adjusted R Square, Standard Error, and Observations. The regression included ANOVA statistics; residual and total sum of squares including the statistics  $df$ ,  $SS$ ,  $MS$ ,  $F$ , and *Significance F*. This allowed the study to report the intercept, years of experience, and level of knowledge as estimates of the population parameters including the Coefficients, Standard Error,  $t$  Stat, P-value, Lower 95%, Upper 95%

Lower 99.0%, and Upper 99.0%. In this model, using multiple regression analysis,  $b_1$  is an estimate of the expected increase in favorability of *SAFE* corresponding to an increase of one year in experience when the self-reported level of knowledge is held constant. Similarly,  $b_2$  is an estimate of the expected increase in the favorability of *SAFE* corresponding to a higher level of knowledge when the number of years of experience is held constant. The study used Excel to calculate the multiple coefficient of determination, which indicated the extent to the regression model explains the behavior of the data. The multiple coefficient of determination can be interpreted as the proportion of the variability in the dependent variable that can be explained by the estimated multiple regression equation. When it is multiplied by 100, it expresses the percentage of the variability in  $y$  that the estimated regression equation explains.

An adjustment on  $R^2$  for the amount of independent variables was done for the current study to prevent the overestimation of the effect of an additional independent variable on the number of variability justified by the estimated regression equation. Excel reported this as the adjusted multiple coefficient of determination. The  $t$  test and the  $F$  test have distinctive functions when multiple regression analysis is employed. The  $F$  test, a test for significance, is useful in determining the possibility of a significant relationship of the dependent variable with the group of independent variables used in the model. The  $t$  test, on the other hand, verifies if each of the independent variables in the study is significant. Every independent variable used a separate  $t$  test. The  $t$  test's function is to test the individual significance. The parameters of the multiple regression models are included in the hypotheses for the  $F$  test:

$$H_0: \beta_1 = \beta_2 = 0$$

$H_a: \beta_1, \beta_2 \neq 0$  one or more of the parameters is not equal to zero

If  $H_0$  is rejected, sufficient statistical evidence exists to conclude that at least one of the parameters is not equal to zero and there a significant relationship exists between the dependent and independent variables. If  $H_0$  cannot be rejected, it cannot be concluded that there is a significant relationship.

A  $t$  test can be employed to ascertain the significance of every independent variable if  $H_0$  is rejected in the  $F$  test. Excel also provided the  $t$  test values for the parameters. The study also tested for multi-collinearity or the correlation between the independent variable.

Descriptive statistical analysis will be used to address the four hypotheses and answer research questions one and two. Hypotheses one through four were tested using multiple linear regression analysis and indicated above. The multiple coefficient of determination quantifies the goodness of fit of the estimated regression equation. The multiple coefficient of determination provides a measure of the proportion of the variation of  $y$  explained by the estimated regression equation. The adjusted multiple coefficient of determination, a similar measure of goodness of fit, modifies corresponding to the amount of independent variables. This helped in preventing an overestimation of the effects of additional independent variables and adjusts for the number of independent variables and thus avoids overestimating the impact of adding more independent variables. An  $F$  test and a  $t$  test offered ways to determine statistically if the relationship among the variables is significant. The  $F$  test determined if the dependent and each of

the independent variables used in the study demonstrates a significant relationship. The  $t$  test verified if the dependent variable has a significant relationship and each of the independent variables in the regression model.

### **Validity and Reliability**

Validity is the degree to which a study provides quality data and results (Creswell, 2005). The current quantitative research study took the necessary steps to deduce meaningful conclusions from collected data. The current study also reduced the threat of internal and external validity by reviewing key points. The internal validity of a study relied on the logical connections between the theories tested and the wording used in the survey instrument itself. Based on a review of the theoretical concerns regarding the role of administrators in the process of evaluating new substance abuse systems and programs, it will be expected that internal validity is strong and that the survey tapped into the same issues and concerns that were raised by previous researchers in this field. Creswell (2005) stated that external validity means that accurate conclusions drawn from a study's results are a result of investigative consideration of persons, settings, situations, and history. Sampling a self-selected, purposive group of administrators also reduced the threats to external validity.

### **Summary**

Chapter 3 described the research methodology and design of the study and the appropriateness of such. A quantitative descriptive survey is the method of choice because of the aim of the study measuring the perceived effectiveness of the drug education programs, *DARE* and *SAFE*, by public school administrators. Participation in the study is voluntary and confidential, and the completed surveys will be shredded after

data collection and analysis. Results of the study were used to determine if school administrators perceive the currently employed drug education programs, *DARE* and *SAFE*, as effective components of the California Health Literacy Curriculum to reduce drug use among students and if school administrators believe that schools effectively implement these programs. Results were used to indicate the perceived barriers school administrators will encounter if they seek to implement drug testing in public schools.

Chapter 3 described the research design, research questions, procedures, and rationale for the study's population, sampling, data collection, internal and external validity, and the proposed method of data analysis. The succeeding chapter presents the results, analyzed using descriptive statistics and multiple regression analysis, to identify the school administrators' perceptions of drug policy programs in Orange County, California.



## CHAPTER 4: RESULTS

The current quantitative study with a descriptive design sought to identify the perceptions of public school administrators in Orange County, California, regarding the state-mandated drug policy programs in schools, the effects of these programs on the youth, and the potential for the implementation of random drug testing to augment state-mandated drug education programs in public schools. Because studies have found that there is still a high frequency of recreational drug and alcohol use by young people, it was necessary to gain an understanding of school administrators' perceptions of the drug prevention programs, *DARE* and *SAFE*, which schools across southern California currently implement. The variables included in the current study were: (a) the respondent's tenure as a school-based administrator; (b) the respondent's level of expertise in drug education policy; and (c) the scales represented by the survey instrument, which measures the strength by which the administrators perceive *DARE* and *SAFE* as effective drug education programs and the strength by which administrators foresee various barriers to introducing drug testing in their schools.

Based on the results yielded from the evaluation process, a determination was made about the perceptions of the school administrators' regarding the *DARE* and *SAFE* programs. A quantitative, descriptive design was used to gauge connections among the variables. Also multiple regression analysis was used to establish the relationship between the variables present in the current study, using the number of years of experience and knowledge of drug education policies as the independent variables. The dependent variable for the multiple regression analysis is the perception of the *DARE* and

*SAFE* programs. Chapter 4 provides a detailed description of the present research results with regard the association that exists between the *DARE* and *SAFE* programs and school administrators' perceptions.

### **Pilot Study**

Prior to the use of the survey instrument in the current study, the researcher conducted a pilot study with 20 participants excluded from the current study to determine if changes to the survey items were necessary. Purposeful sampling was used to identify the participants of the pilot study. The input received indicated that no changes were necessary for the survey instrument. A panel of experts also analyzed the survey instrument prior to administering the initial pilot test for the purposes of examination, validation, and input to ensure that the final study used a valid and reliable instrument.

### **Data Collection**

The current study involved a purposeful selection of participants who had the knowledge, interest, and responsibility to oversee the implementation of *DARE* or *SAFE* in Orange County, California, public schools. School administrators who implemented *DARE* or *SAFE* programs in their current school curriculum formed the population from which the study participants were selected. Schools implement the *DARE* program in grade five and the *SAFE* program in grade six; therefore, elementary and middle school site-based administrators were the appropriate population for the study to ensure that the study received the most effective and worthwhile feedback to produce meaningful results that could be generalized to the greater population.

The current qualitative, descriptive study only included school administrators working in the Orange County, California. The initial step in the collection of data was

the dissemination of the survey instrument via United States Postal Service to all school-based principals and assistant principals currently supervising the implementation of *DARE* or *SAFE* programs in Orange County, California, elementary and middle public schools. The survey instrument was sent directly to the administrators' schools, and each mailed packet contained an explanation of the study, informed consent, and statement of confidentiality. A total of 307 elementary schools and 276 middle schools exist in Orange County, California. Mailings were sent to all 307 elementary and 276 middle school administrators because all schools implemented either the *DARE* or *SAFE* drug prevention programs. Potential participants were allocated five weeks to complete and return the survey and informed consent forms. The response rate was 6.3% (37 total responses) for this study, which meets Creswell's (2005) minimum number of acceptable respondents, specifically, 30 respondents.

### **Research Questions and Hypotheses**

The following research questions guided the current study:

1. To what extent do the years of experience as a school administrator affect the perception of school administrators in Orange County, California, toward Drug Abuse Resistance Education?
2. To what extent do the years of experience as a school administrator affect the perception of school administrators in Orange County, California, toward Substance Abuse for Educators?
3. To what extent do the levels of school administrators' knowledge of drug education policy affect the perception of school administrators in Orange County, California, toward Drug Abuse Resistance Education?

4. To what extent do the levels of school administrators' knowledge of drug education policy affect the perception of school administrators in Orange County, California, toward Substance Abuse for Educators?
5. To what extent do the school administrators consider the drug-prevention programs to be effective in deterring drug use among youth?
6. To what extent do the school administrators consider the potential for the implementation of random drug testing to augment state-mandated drug education programs in public schools?

The hypotheses of the present study included:

H<sub>10</sub>: The number of years served as a school administrator does not significantly impact the perception of the effectiveness of the Drug Abuse Resistance Education program.

H<sub>1A</sub>: The number of years served as a school administrator does significantly impact the perception of the effectiveness of the Drug Abuse Resistance Education program.

H<sub>20</sub>: The number of years served as a school administrator does not significantly impact the perception of the effectiveness of the Substance Abuse for Educators program.

H<sub>2A</sub>: The number of years served as a school administrator does significantly impact the perception of the effectiveness of the Substance Abuse for Educators program.

H<sub>30</sub>: A school administrator's knowledge of drug education policy does not significantly impact the perception of the effectiveness of the Drug Abuse Resistance Education program.

H<sub>3A</sub>: A school administrator's knowledge of drug education policy does significantly impact the perception of the effectiveness of the Drug Abuse Resistance Education program.

H<sub>40</sub>: A school administrator's knowledge of drug education policy does not significantly impact the perception of the effectiveness of the Substance Abuse for Educators program.

H<sub>4A</sub>: A school administrator's knowledge of drug education policy does significantly impact the perception of the effectiveness of the Substance Abuse for Educators program.

### **Data Processing and Analysis**

The survey results were coded into numbers to fit the processing requirements of the program SPSS 17.0. The survey instrument used a Likert-type scale; the variables were coded 1 as strongly agree, 2 as agree, 3 as no opinion, 4 as disagree, and 5 as strongly disagree. After coding the variables, the data were processed through SPSS 17.0 and the results were then analyzed.

### **Findings**

The study used a survey instrument designed to identify the perceptions of K-8 public school administrators in Orange County, California, regarding the state-mandated drug policy programs in schools, the effects of these programs on youth, and the potential

for the implementation of random drug testing to augment state-mandated drug education programs in public schools. To facilitate a better understanding of the variables and school leader perceptions, the current study sought to measure the participants' levels of drug policy expertise as well as the positions they occupy within the district. The survey instrument served as the tool for identifying the level of school administrators' perceptions regarding the effectiveness of the drug education programs, based on the theoretical perspective of Moustakas (1994) who stated that past personal experiences led to current perceptions.

The survey instrument for the current quantitative, descriptive study requested demographic information. The descriptive statistics of the demographic scores are shown in Table 1. The two variables studied in the demographics of the population included the number of years the administrators have served at their respective schools and the current rank or position in the school. The mean score of the number of years administrators have been serving at the current school site was 2.92 years with a standard deviation of 1.70. This indicates that the administrators who participated in the survey had served for an average of approximately 3 years. The mean score of the administrators' current rank or position in the school was 1.16 with a standard deviation of .76. This indicates that most of the respondents are principals. Analysis of the years at the site and years in position indicates the demographic makeup of the current study's population of K-8 administrators. Table 1 and Table 4 indicate that of the 37 participants, 15 respondents are school principals and 14 are assistant principals. Out of the 37 participants, 9 respondents are school administrators have been with their school for at least 4-7 years.

Table 1

*Descriptive Statistics of the Participants*

	N	Mean	Std. Deviation
Years Served	37	2.9189	1.70585
Rank	37	1.1622	.76425
Valid N	37		

The demographic makeup of the responding individuals (Table 2) indicated that 13 administrators (35.1%) were responsible for the implementation of the *DARE* program at their school sites and 16 administrators (43.2%) were responsible for the implementation of the *SAFE* program at their school sites. The remaining eight participants (21.6%) did not indicate a specific program on this section of the demographic survey.

Table 2

*Frequency of Programs*

	Frequency	Percent	Valid Percent	Cumulative Percent
No Response	8	21.6	21.6	21.6
<i>DARE</i>	13	35.1	35.1	56.8
<i>SAFE</i>	16	43.2	43.2	100.0
Total	37	100.0	100.0	

The administrative rank of the responding individuals reflects that the majority of administrators who responded to the survey were school principals (40.5%). Fourteen (37.8%) participants were assistant principals, and the remaining eight (21.6%) respondents did not respond to the item.



Table 3

*Frequency of Ranks*

	Frequency	Percent	Valid Percent	Cumulative Percent
No Response	8	21.6	21.6	21.6
School Principals	15	40.5	40.5	62.2
Assistant Principals	14	37.8	37.8	100.0
Total	37	100.0	100.0	

Table 4 reflects the number of years the administrators served at their respective schools. The majority of the responding individuals served at their current sites for four to seven years. Twenty (54.1%) administrators served at their current work locations for more than eight years, indicating that the majority of the respondents have had enough time to familiarize themselves with the drug prevention program and have a solid opinion of the program's effectiveness. Two respondents did not provide a response to the item.

Table 4

*Frequency of Number of Years Served in School*

	Frequency	Percent	Valid Percent	Cumulative Percent
No Response	2	5.4	5.4	5.4
0-3 Years	6	16.2	16.2	21.6
4-7 Years	9	24.3	24.3	45.9
8-10 Years	7	18.9	18.9	64.9
11-15 Years	6	16.2	16.2	81.1
16-20 Years	3	8.1	8.1	89.2
20+ Years	4	10.8	10.8	100.0
Total	37	100.0	100.0	

*Research Question 1: To what extent do the years of experience as a school administrator affect the perception of school administrators in Orange County, California, toward Drug Abuse Resistance Education?*

Tables 5, 6 and 7 reflect the results of multiple regression analysis. This analysis examined the relationship between the number of years of service and the perceptions of the respondents regarding the *DARE* program. This analysis allowed the researcher to determine whether the number of years of service has an effect on the respondents' perceptions of the *DARE* program. This analysis only took into account the responses of

the participants who reported to implementing the *DARE* program in their respective schools, using the years of experience as the independent variable and the perception of the *DARE* program as the dependent variable. The results of the multiple regression analysis show that the years of experience significantly affects the respondents' perception of the *DARE* program. In the data shown in Tables 6 and 7, the significance value indicates that the independent variable significantly affects the dependent variable ( $p = .029$ ). As seen in Table 5, the results of the model summary indicate that although the years of experience significantly affect the respondents' perceptions of the *DARE* program, this model only accounts for 9.9% of the variance in the dependent variable (*Adjusted R-square* = .099). This indicates that although the number of years served by the respondents affects the respondents' perception of the *DARE* program, as a predictor variable, it only accounts for a small portion of the variation in the perception scores. Since the analysis yielded a statistically significant result, this can lead to the conclusion that there are other factors that cause the variations in the respondents' perception of the *DARE* program.

Table 5

*Multiple Regression Analysis Results for Research Question 1 – Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.351 <sup>a</sup>	.123	.099	1.03545

a. Predictors: (Constant), years

b. program = *DARE*

Table 6

*Multiple Regression Analysis Results for Research Question 1 – ANOVA*

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5.561	1	5.561	5.187	.029 <sup>a</sup>
	Residual	39.669	37	1.072		
	Total	45.231	38			

a. Predictors: (Constant), years

b. program = *DARE*

c. Dependent Variable: perception

Table 7

*Multiple Regression Analysis Results for Research Question 1 – Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.405	.384		8.860	.000
	years	-.223	.098	-.351	-2.278	.029

a. program = *DARE*

b. Dependent Variable: perception

*Research Question 2: To what extent do the years of experience as a school administrator affect the perception of school administrators in Orange County, California, toward Substance Abuse for Educators?*

Tables 8, 9 and 10 reflect the results of multiple regression analysis for the second research question. This analysis examined the relationship between the number of years of service and the perceptions of the respondents regarding the *SAFE* program. The

results of this analysis indicated whether the number of years of experience has an effect on the respondents' perception of the *SAFE* program. This analysis only took into account the responses of the participants who reported to implementing the *SAFE* program in their respective schools, using the years of experience as the independent variable and the perception of the *SAFE* program as the dependent variable. The results of the multiple regression analysis show that in this case, the years of experience do not significantly affect the respondents' perception of the *SAFE* program. In the data shown in Tables 9 and 10, the significance value indicates that the independent variable has no significant effect on the dependent variable ( $p = .260$ ). As seen in Table 8, the results of the model summary indicate that this model only accounts for 6% of the variance in the dependent variable (*Adjusted R-square* = .006). Since the results showed that there was no statistical significance between the variables, it can lead to the conclusion that the number of years served as a school administrator has no bearing on the respondents' perceptions on the *SAFE* program.

Table 8

*Multiple Regression Analysis Results for Research Question 2 – Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.166 <sup>a</sup>	.028	.006	.87239

a. Predictors: (Constant), years

b. program = *SAFE*

Table 9

*Multiple Regression Analysis Results for Research Question 2 – ANOVA*

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.991	1	.991	1.302	.260 <sup>a</sup>
	Residual	35.009	46	.761		
	Total	36.000	47			

a. Predictors: (Constant), years

b. program = *SAFE*

c. Dependent Variable: perception

Table 10

*Multiple Regression Analysis Results for Research Question 2 – Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.768	.239		7.386	.000
	years	.083	.072	.166	1.141	.260

a. program = *SAFE*

b. Dependent Variable: perception

Research Question 3: *To what extent do the levels of school administrators' knowledge of drug education policy affect the perception of school administrators in Orange County, California, toward Drug Abuse Resistance Education?*

The results displayed in Table 11, 12 and 13 indicate the results of the multiple regression analysis that used the knowledge of drug education policies as the independent variable and the respondents' perception of the *DARE* program as the dependent variable. As shown in Tables 12 and 13, the results indicate that there is no significant relationship between the independent and dependent variables ( $p = .082$ ). The adjusted R-squared, as shown in the model summary results, indicate that this model only accounts for 5.5% of the variance in the dependent variable (*Adjusted R-squared* = .055). Given that there are no statistically significant results, it indicates that the level of knowledge of the respondents regarding drug education policy has no effect on their perceptions of the *DARE* program. These results also suggest that other factors and not level of knowledge affect the way the respondents perceive the *DARE* program.

Table 11

*Multiple Regression Analysis Results for Research Question 3 – Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.282 <sup>a</sup>	.080	.055	1.06066

a. Predictors: (Constant), knowledge

b. program = *DARE*

Table 12

*Multiple Regression Analysis Results for Research Question 3 – ANOVA*

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.606	1	3.606	3.205	.082 <sup>a</sup>
	Residual	41.625	37	1.125		
	Total	45.231	38			

a. Predictors: (Constant), knowledge

b. program = *DARE*

c. Dependent Variable: perception

Table 13

*Multiple Regression Analysis Results for Research Question 3 – Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.063	.352		5.852	.000
	knowledge	.313	.175	.282	1.790	.082

a. program = *DARE*

b. Dependent Variable: perception

Research Question 4: *To what extent do the levels of school administrators' knowledge of drug education policy affect the perception of school administrators in Orange County, California, toward Substance Abuse for Educators?*



Tables 14, 15 and 16 display the results of the multiple regression analysis performed to resolve the fourth research question, which examines the relationship between the respondents' knowledge of drug education policy and their perceptions of the *SAFE* program. As shown in Tables 15 and 16, the significance values indicate that there is no statistically significant relationship between the independent variable and the dependent variable, which is knowledge of drug education policy and perceptions of the *SAFE* program, respectively ( $p = .157$ ). The results reflected in Table 14 indicate that this model only accounts for 2.2% of the variability in the dependent variable.

Table 14

*Multiple Regression Analysis Results for Research Question 4 – Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.207 <sup>a</sup>	.043	.022	.86542

a. Predictors: (Constant), knowledge

b. program = *SAFE*

Table 15

*Multiple Regression Analysis Results for Research Question 4 – ANOVA*

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.548	1	.548	2.067	.157 <sup>a</sup>
	Residual	34.452	46	.749		
	Total	36.000	47			

a. Predictors: (Constant), knowledge

b. program = *SAFE*

c. Dependent Variable: perception

Table 16

*Multiple Regression Analysis Results for Research Question 4 – Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.484	.359		6.920	.000
	years	-.258	.179	-.207	-1.438	.157

a. program = *SAFE*

b. Dependent Variable: perception

Research Question 5: *To what extent do the school administrators consider the drug-prevention programs to be effective in deterring drug use among youth?*

To determine the extent of the perception of effectiveness of the drug prevention programs implemented in their respective schools, the mean scores of the participants for

the items pertaining to the effectiveness of their respective programs were derived using descriptive statistics. Based on the results reflected below in Table 17, the mean score for perception of effectiveness is 2.2759, which indicates an average score of 2 for this item. Based on the *Likert-type scale* used for this study, the researcher concluded that the respondents agree that the drug prevention program implemented in their respective schools is effective. In connection to this, the mean score for the item pertaining to whether the respondents believe that there is a need to replace the drug prevention program they are currently using is 3.0690. This equates to a score of 3 in the *Likert-type scale* used, which means that they have no opinion regarding the matter.

Table 17

*Descriptive Statistics of Responses Regarding Effectiveness of Programs*

	Minimum	Maximum	Mean	Std. Deviation
effective	.00	4.00	2.2759	1.01946
replaced	1.00	5.00	3.0690	1.39595

Research Question 6: *To what extent do the school administrators consider the potential for the implementation of random drug testing to augment state-mandated drug education programs in public schools?*

Table 18 summarizes the descriptive statistics analysis results for the items pertaining to the potential of implementing random drug testing to augment state-mandated drug education programs in public schools. The analysis focused on the mean scores because these are used as the gauge for the average perception of the respondents for these items. The mean scores were rounded to the nearest whole number to assess the

responses using the *Likert-type scale* used for this study. Based on the information summarized below, the following conclusions were reached:

- When asked whether they would provide support for random drug testing, the average response was a 3 (*Mean = 2.6207*), which means that the administrators have no opinion.
- When asked whether random drug testing was invasive to student privacy, the respondents agreed (*Mean = 2.4828*).
- When asked whether they perceive that random drug testing is not possible because parents will be angry, the respondents indicated that they had no opinion (*Mean = 2.6207*).
- When asked whether they believe random drug testing is not feasible because of limited technology, the respondents indicated that they had no opinion (*Mean = 3.4828*).
- When asked whether implementing a random drug testing program is not reasonable because there are no resources, the respondents indicated that they had no opinion (*Mean = 3.3103*).
- When asked whether they think that random drug testing is the parents' responsibility, the average response of the participants indicated that they agreed (*Mean = 1.9655*).
- When asked whether they thought that various groups in the community will support the random drug testing program, the participants agreed that the sheriff's department would support random drug testing (*Mean = 2.0000*), but disagreed that the parent organizations (*Mean = 3.7241*), the school board (*Mean = 3.6207*)

and the teachers would support random drug testing (*Mean = 4.1034*). They had no opinion when asked whether the *DARE* and *SAFE* personnel would support random drug testing (*Mean = 2.4828*).

When asked about who has the most influence on whether or not to introduce random drug testing in the public school system, the respondents agreed that the superintendent (*Mean = 1.6552*), the parents (*Mean = 2.2069*) and the school administrators (*Mean = 2.1034*) are all capable of influencing whether to introduce random drug testing or not.

Table 18

*Descriptive Statistics of Responses Regarding Random Drug Testing (RDT)*

	Mean
I will provide support for RDT	2.6207
RDT is invasive of student privacy	2.4828
RDT is not possible, parents will be angry	2.6207
RDT is not feasible, limited technology	3.4828
RDT not reasonable, no resources	3.3793
RDT not practical, too many responsibilities	2.5862
RDT not feasible, programs don't work	3.3103
RDT is parents' responsibility	1.9655
Sheriff's Dept. will support RDT	2.0000
Parents organizations will support RDT	3.7241
School board will support RDT	3.6207
Teachers will support RDT	4.1034
<i>DARE &amp; SAFE</i> personnel will support RDT	2.4828
Influence lies with superintendent	1.6552
Influence lies with school administrator	2.1034
Influence lies with parents	2.2069

### Summary

The purpose of the current quantitative, descriptive study was to identify the perceptions of public school administrators in Orange County, California, regarding the state-mandated drug policy programs in schools, the effects of these programs on youth, and the potential for the implementation of random drug testing to augment state-mandated drug education programs in public schools. Chapter 4 provided an overview

of the research questions, data collection, analysis of data, and the results of the current study.

Chapter 4 provided an overview of the present research questions, data collection, and a full description of the results of the present study. Results of the data analysis indicated that the number of years of service as an administrator significantly affects the perceptions of the *DARE* program but not the *SAFE* program. Knowledge of drug education policies has no significant effect on the perceptions of the respondents for both programs. Given these results, this current study will recommend that future research studies focus on what other factors can affect perception of school administrators on the drug prevention programs implemented in their respective schools. Based on their mean scores, the respondents agreed that the drug prevention programs in place in their schools are effective and they had no opinion whether the school system should replace the program or not. The respondents also had no opinion regarding the barriers to implementing a random drug testing program, but agreed that random drug testing was the responsibility of the parents. The respondents also agreed that the sheriff's program would support random drug testing, but disagreed that the parents' organizations, school board, teachers would support random drug testing. Finally, the respondents agreed that the superintendent, parents and administrators all had influence on whether random drug testing would be implemented in the schools or not. Discussed in the next chapter are the present study implications, conclusions, and research recommendations based on the results of the present research.

## CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

Since 2009, the use of marijuana has propelled the drug use among adolescents (Johnson, O'Malley, Bachman, & Shculenberg, 2009). Studies have found that schoolchildren exposed to illegal drugs and the use of drugs has a greater likelihood of failing, not just in school but also in life. Juvenile drug use has detrimental aspects on the various developmental aspects of an individual (Broman, 2006). Drug use can also affect the relationships of these children, destroying the lives not only of the users but also of the people closely linked to them. On a larger scale, drug use also causes negative effects on the national economy. In 2002, the government spent \$180.8 billion on juvenile and adult drug treatments, drug law enforcement, and insurance (Boyd, 2009).

Because of the problem of juvenile drug use, school officials in the United States have implemented a variety of drug education programs. Two such programs are the Drug Abuse Resistance Education (*DARE*) program and the Substance Abuse for Educators (*SAFE*) program. According to their official website, the *DARE* program is a series of classroom lessons led by police officers. The ultimate goal of the *DARE* program is to teach children how to say no to drugs by resisting peer pressure and to live productive drug-free and violence-free lives (*DARE Website, 2008*). The *SAFE* program includes training programs led by professionals and the establishment of an action-oriented prevention and intervention team known as the Student Assistance Program (*SAP*). The results of studies conducted on the effectiveness of these programs lead to the question of whether these programs are the most effective means to address juvenile drug use. The results of a study conducted by Wysong, Aniskiewicz, & Wright (1994) indicated that the students who participated in the *DARE* program were not more



successful in saying no to drugs compared to another group of students who did not participate in any drug-prevention training. Beacham (2008) found that researchers have yet to determine the long-term effects of the *SAFE* program. These results indicate that the implementation of these programs might not be the answer to the juvenile drug problem currently plaguing the American society. Random drug testing is another option possibly more effective than drug intervention programs. The American school system was largely ignored as a means to control juvenile drug use (Jacobs & Morag, 1992).

Based on the problem, the current quantitative, descriptive study aimed to identify the perceptions of K-8 public school administrators in Orange County, California, regarding the state-mandated drug policy programs currently in effect in their respective schools, including their effectiveness as a means to address the problem of juvenile drug use in their communities. The study also examined the possible use of random drug testing to augment state-mandated drug education programs in public schools. The main purpose of this quantitative, descriptive study was to determine if the number of years served in their respective schools and their knowledge of drug education policy affects the perception of administrators regarding the two drug intervention programs discussed, specifically the *DARE* and *SAFE* programs. This chapter includes a discussion of the results of the study as a result of the quantitative analysis conducted on the data gathered, and the corresponding implications of these findings. This chapter also includes a discussion on the significance of the study, its limitations, and recommendations for future researchers.

A quantitative, descriptive approach was used to accomplish the main objective of the study. The next section presents the results of the statistical tests conducted to

answer the formulated research questions. Through the survey administered, the 37 participants provided their perceptions on the current drug-related education available on their respective schools in Orange County, California. Responses from the survey participants were also used to describe the current situation regarding drug education and the improvement of this drug-related education to both students and school personnel.

### **Conclusions**

The regression analysis indicated that the years of experience of school administrators did have an effect on the perception of the *DARE* program. The results of the analysis suggest that while the respondents' experience as an administrator affects their perception of the *DARE* program, is only one of many possible factors that affect perception. Tangible concerns such as the resources needed to keep the program running, the benefits returned by the program in relation to the costs, or the feedback generated from the community regarding the effectiveness of the program influenced the administrators' perceptions regarding drug testing. However, contrary to the results for the *DARE* program, the results of the multiple regression analysis for *SAFE* program revealed that the years of experience did not have a significant effect on the respondents' perceptions.

The results of the regression analysis conducted for this study indicated that the level of knowledge does not have a significant effect on the respondents' perception of the *DARE* program. In connection to the results from the regression analysis for effect of school administrators' experience on the perception of *DARE* program, the results conclude that while the years of experience had a minimal effect on the respondents'

perception of the *DARE* program, the level of knowledge of drug education policy is not one of the other factors that affect the respondents' perceptions of the *DARE* program.

Similar to the results for the *DARE* program, the results from the multiple regression analysis conducted using the data from the respondents who reported to implementing the *SAFE* program in their respective schools indicated that the level of knowledge of drug education policy does not significantly affect the respondents' perceptions of the *SAFE* program. These results indicate that other factors should be considered when determining what affects perceptions of the effectiveness of both the *DARE* and *SAFE* programs.

The participants gathered for this study responded that they find the drug intervention programs effective. The respondents are not in favor of replacing the program because they find it effective. However, they are open to the implementation of other drug intervention programs, such as random drug testing. This research was also able to examine whether years of service or level of knowledge of drug education policies affect the respondents' perception of the effectiveness of the *DARE* and *SAFE* programs. The findings of the analysis can lead to the examination of factors that affect perception of effectiveness of drug intervention and drug education programs. The belief of school administrators in the effectiveness of the drug prevention programs mirrors a finding by Bennet (2001) and Hardiman (2008), which stated that the appropriate delivery of drug education and the proper execution of policies are effective enough to prevent children from succumbing to dysfunctional behavior and to the pressures of drug use. The belief in the effectiveness of drug education programs can also be a motivating factor to the objection to the implementation of random drug testing.

The results of the descriptive statistical analysis indicated that the respondents had no opinion on providing support for random drug testing. The results of other items could lead to the conclusion that they are not in favor of implementing random drug testing of students because the respondents indicated that they believed that random drug testing was invasive to student privacy and that random drug testing is a responsibility that falls on the shoulders of the parents and not the school system. The scores also interpreted to mean that the support of the parents would be integral to the successful implementation of a random drug testing program because the respondents acknowledged that parents might be angered by random drug testing in schools.

The level of importance placed by school administrators on the opinion of the parents is an exemplification of Bradley's (1973) conclusion, which states that while carrying out their duties, those who are in the positions of power tend to base their actions and reactions on the perceptions of those around them, and in anticipation of the reactions and perceptions of those around them. In this case, school administrators are hesitant to implement random drug testing because they are afraid of possible retaliation, especially from the parents, who might constitute such a move as invasive to their children's privacy rather than as a means of protecting their welfare. The respondents believe that the responsibility for random drug testing falls on the shoulders of the parents; however, a finding by Ziesemer (1984) indicated that while individual, family and community factors were outside the control of the school personnel, it is the school community that has the greatest chance in creating a change in the lives of the students. This could mean that concerted efforts by the school to combat juvenile drug use could

be more effective than simply passing the burden onto parents or other community sectors.

Participant responses indicated reservations about random drug testing, e.g. invasion of privacy and costs. However, conclusions from previous studies have indicated that the reservations are based on misconceptions. Jacobs and Morag (1992) determined that there are ways of making drug testing non-invasive. Jacobs and Morag (1992) also asserted that well-designed and properly implemented drug testing programs can be educational, diagnostic and preventive, rather than punitive or disciplinary. Dupont & Brady (2005) and Dupont, Skipper & White (2008) stated that drug-testing is no more invasive than standardized testing methods used to measure students' academic capacities.

### **Significance of the Study**

The current study is significant because it presents an opportunity to gain insight about the perceptions of K-8 public school administrators regarding the effectiveness or ineffectiveness of the drug prevention programs, *DARE* and *SAFE*, which are widely used in the state of California. This study will contribute to the efforts to protect the health, well-being and academic potential of school children and also have an impact on the growth and success of the youth by identifying ways to help them understand the negative effects of drug use. The aforementioned positive effects can also be accomplished through widely used programs in the state of California like *DARE* and *SAFE*.

The current study will help create a better understanding of the perceptions of school administrators responsible for shaping drug policy in the schools. The discoveries

of the current study will be able to help formulate policies to prevent or lessen the usage of drugs in the state of California because it can be that juvenile drug use is one of the most important issues affecting society. The current study results will also help the leaders in understanding the existing beliefs of the present generation of the decision makers in the Orange County, California. This information can facilitate to the exploration of potential explanatory variables that can assist in improving the quality of school leadership that ultimately affects the children's lives.

In addition, the study sought to investigate the role of management in an organizational culture and the roles and responsibilities of school leaders educating today's youth. The information provided regarding the feasibility of implementing random drug testing in schools as a possible means to address the problem of juvenile drug use can also help guide policy makers in deciding whether to implement random drug testing or not. The survey instrument used by the study addressed various aspects of the issue, such as who are the influential people needed to support the program and should the school system choose to implement random drug testing in California public schools. The study also provided the perceptions of the school administrators regarding the barriers to the implementation of random drug testing, so that these barriers could be addressed prior to the implementation of the program. Addressing these barriers could increase the chances of success for the drug testing program.

### **Limitations**

The generalization of the current study is focused on the respondents who responded to and willingly participated in this study. The conclusions are also limited only to perceptions of two drug intervention programs, the *DARE* and the *SAFE*

programs. The geographical scope of the study, which only focused on the area of Orange County in California, limited the study. Therefore, the perceptions of other school administrators in other geographical locations were not considered in this study. Last, the study only examined the perceptions of the administrators regarding the effectiveness of the *DARE* and *SAFE* programs. The discoveries of this study do not reflect the effectiveness of these programs or the other factors that may affect these programs' effectiveness, such as the quality of the instructors who implement the *DARE* and *SAFE* program or the quality of the curriculum.

### **Recommendations of the Study**

#### **Recommendations to Leaders**

The results of the study provided added knowledge regarding the perceptions of school administrators regarding the *DARE* and *SAFE* programs. At best, perceptions regarding these programs are lukewarm, with no definite assertions regarding its effectiveness. In light of the conclusions reached by the study, random drug testing as a possible supplement to the drug education programs should be explored by policy makers. The *DARE* and *SAFE* programs serve as drug education programs, while the random drug testing program serves as a means of drug prevention for students. Conclusions reached by previous studies have already debunked many of the myths associated with random drug testing (e.g. issues), with cost and funding, violations of the students' constitutional rights. With these myths dispelled, random drug testing now becomes a more concrete option for addressing the problems presented by juvenile drug use. School board officials can also use the perceptions of the school administrators, as discussed in this study, to identify possible areas where they can generate support for

implementing a random drug testing program, such as, which community groups would be supportive of these programs.

### **Recommendations for Further Study**

The true perceptions of the school administrators, including guidance counselors that are more directly involved with students could be a recommendation for future researches. The inclusion of a more diverse population of participants may help the study generate the best conclusions regarding how these programs affect the perceptions of the administrators in terms of drug related programs. Demographically, the independent variable associated with school administrators need to be incorporated and expanded into future studies. Additionally, schoolchildren should be analyzed demographically. In connection to the previously stated recommendation, future studies could also examine other factors that may have an effect on the perceptions of school administrators on the effectiveness of drug prevention programs. School administrators help the school system on the decision of what policies and programs should be implemented. By focusing on the factors that affect their perceptions of the effectiveness of academic programs such as the drug intervention program, it can help policy makers or advocates in campaigning for better school policies and programs that will be more effective in serving the students and the community. The information from the study might be helpful for more schools in the Orange County, California, in handling programs like *DARE* and *SAFE*. Given the limitations of the study, future researchers may benefit if they use more comprehensive questionnaires that can address more issues in regard to drug prevention programs.

Future research could include a larger sample population, allowing researchers to gain a broader perspective of the topic. A broader understanding of the population of



school administrators and students need to be defined demographically. Due to the limitation of respondents who willingly participated in the study, acquiring a greater number of respondents to participate in the study strengthens the conclusions of future studies. Moreover, the conduct of it pre-tests and post-tests in terms of the programs might be beneficial so that the effectiveness of these said programs can be analyzed through Analysis of Variance (ANOVA) to see whether these drug intervention programs have been effective in terms of curbing juvenile drug use among schoolchildren. Future studies may also use the data to determine whether these programs are effective or not.

Future studies could also examine the perceptions of students regarding what works for them in drug education. This recommendation takes into account the importance of the students' perceptions of the implemented programs in their schools because these programs are targeted to the specific population. With this, the researcher will be able to determine how students perceive the two programs, Drug Abuse Resistance Education (*DARE*) and Substance Abuse for Educators (*SAFE*). It might be favorable for future researchers to get the perspective of the students because they are involved with drug use. Studies that consider the perspective of students could be conducted to prevent drug use among the youth.

An additional recommendation, if this study were to be repeated, would be to incorporate a mixed research methodology. More in-depth information from participants would support a qualitatively study. Therefore, more information can be gathered from all stakeholders to garner the insights of local community leaders, and national stakeholders.

### Summary

School administrators and policy makers need to find ways to address the problems of juvenile drug use. The implementation of drug education programs such as the *DARE* and *SAFE* programs discussed in this current study is one option, but researchers have yet to determine the effectiveness of these programs. This current research study sought to determine the perceptions of school administrators regarding the *DARE* and *SAFE* programs implemented in public schools in Orange County, California. The study also sought to determine if the years of experience and the knowledge of drug education policy affects the perceptions of the school administrators regarding these programs. The results of the study indicated that years of experience did account for variations in the perceptions of school administrators regarding the *DARE* program, but the effect of the years of experience is minimal. Years of experience did not have any significant effect on the perceptions of the *SAFE* program. Knowledge of drug education policy did not affect school administrators' perceptions of the *DARE* and *SAFE* programs.

The study used the data to determine if implementing a random drug testing program was a viable option in Orange County. The results of the study indicated that school administrators were largely against the idea of implementing random drug testing in schools, citing reasons such as lack of resources, possible retaliation from parent groups, and violation of students' constitutional rights. The literature on random drug testing addressed similar issues related to student privacy, and researchers asserted that these are no longer issues concerning drug testing of students. This study reached the key conclusion that the results of the study still did not provide support for the perceptions of

the effectiveness of the current drug education policies implemented in Orange County, California, public schools. The lack of tangible, evidentiary support for these programs could indicate that there is a need to explore other options which concern addressing the problem of juvenile drug use. The study suggests further exploration of random drug testing as a means to supplement the drug education programs by serving as the drug prevention arm of the campaign to curb juvenile drug use in Orange County, California.

## REFERENCES

- Babbie, E. (2004). *The practice of social research* (8th ed.). CA: Wadsworth.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Thomas, R.E. (2006). *Social learning theory and alcohol dependence*. Master's thesis
- Bass, B. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, & managerial applications* (3<sup>rd</sup> Ed). Free Press
- Bennett, D. L. (2001). *Vanishing acts: Why students choose to be truant from school*. MSW California State University, Long Beach.
- Beacham, W. (2008). *S.A.F.E. Substance Abuse for Educators: Training conference*. Center for Drug-free Communities. Red Hill Publishing Co.  
www.preventionimpact.com.
- Bee, M. B. (1998, February). Anti-drug efforts don't stop teen, studies indicate evaluator fears. One right decision, theory might further erode trust. *The Sacramento Bee*, A.13
- Benard, B. (2004). *Fostering resiliency in kids: Protective factors in the family, school, and community*. Portland, OR: Northwest Regional Educational Laboratory.
- Biddle, B. J. (1986, August). Recent developments in role theory. *Annual Review of Sociology*, 12, 67-92. Doi: 1146/annurev.so.12.080186.000435.
- Black, T.R. (1999). *Doing quantitative research in the social sciences*. Thousand Oaks, CA: Sage Publications.
- Blacksher, E. A. (2007). *A just society's duties to children's capabilities for health: An ethical investigation of the social gradient in developmental health*. Ph.D.

- dissertation, University of Virginia, United States -- Virginia. Retrieved February 28, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 3239964).
- Botvin, G. (2003). *Life skills training*. New York: Smithfield Press.
- Bosworth, K, Cueto, S. (1994) "Drug abuse prevention curricula in public and private schools in Indiana". *Journal of Drug Education*, 24(1): 21-31, 1994.B
- Botvin, G.J., Baker, E., Renick, N.L., Filazzola, A.D., & Botvin, E.M. (2003). A cognitive-behavioral approach to substance abuse prevention. *Addictive Behaviors*, 9, 137-147.
- Botvin, G.J., Renick, L.N., & Baker, E. (2002). The effects of scheduling format and booster sessions on a broad-spectrum psychosocial approach to smoking prevention. *Journal of Behavioral Medicine*, 6, 359-379.
- Boyd, R. J. Drug Use by Juveniles. *Encyclopedia of Race and Crime*. 2009. SAGE Publications. Retrieved from [http://www.sage-reference.com/raceandcrime/Article\\_n107.html](http://www.sage-reference.com/raceandcrime/Article_n107.html)
- Bradley, Leo. H. (1973). *Decision-making conflict and ambiguity between principal and director of curriculum and instruction*. Ph.D. dissertation, University of Cincinnati.
- Broman, C. L. (2006, Aug) "*The longitudinal impact of adolescent drug use on socioeconomic outcomes in young adulthood*". Paper presented at the annual meeting of the American Sociological Association, Montreal Convention Center, Montreal, Quebec, Canada. Retrieved May 7, 2008 from [http://www.allacademic.com/meta/p103823\\_index.html](http://www.allacademic.com/meta/p103823_index.html)

- Brook, J.S., Gordon, A.S., Whiteman, M., & Cohen, P. (2002). Dynamics of childhood and adolescent personality traits and adolescent drug use. *Developmental Psychology*, 22, 403-414.
- Buffett, C. (2005). Drug testing private schools. *NASN School Nurse*, 20, 9-11.
- Bush, George (2001). National red ribbon week for a drug free America proclamation. <http://www.red-ribbon-week.com/National-Red-Ribbon-Week-for-a-Drug-Free-America-Proclamation.html> published 2004- 2008
- California State Department of Education (1981). *Guidelines for School-Based Alcohol and Drug Abuse Prevention Programs*.
- Carried away in the war on drugs. (1996, October 12). *Atlanta Inquirer*, p.4. Retrieved April 19, 2008 from Ethnic News Watch (ENW) database.
- Caulkins, J. P. (2005). *How goes the "war on drugs"?: An assessment of U.S. drug problems and policy*. Santa Monica, CA: RAND Corporation.
- Centre for Addiction and Mental Health (2008). *Alcohol & Drug Problems: A Practical Guide For Counsellors*. Retrieved from: [http://www.camh.net/Publications/Resources\\_for\\_Professionals/Alcohol\\_and\\_Drug\\_Problems/ADP\\_Chapter\\_one.pdf](http://www.camh.net/Publications/Resources_for_Professionals/Alcohol_and_Drug_Problems/ADP_Chapter_one.pdf)
- Coggans, N., Shewan, D., Henderson, M., Davies, J.B. (2006). *Addiction* Volume 86 Issue 9, Pages 1099 – 1109 Published Online: 24 Jan 2006 Journal compilation © 2010 Society for the Study of Addiction. Retried January 20, 2010 <http://www3.interscience.wiley.com/journal/119360181/abstract?>

- Council for American Private Education, (2004). CAPE | Outlook 3/01. Retrieved date accessed, from <http://www.capenet.org> Website:  
<http://www.capenet.org/Outlook/Out3-01.html>
- Cozby, P.C. (2001). *Methods in behavioral research*. New York, NY: McGraw Hill.
- Creswell, J. W. (2002). *Educational research: Planning, conducting evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Pearson Education, Inc.
- Creswell, J.W. (2005). *Educational research: Planning, conducting evaluating quantitative and qualitative research*. (2<sup>nd</sup> ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- DeMitchell, T.A., Kossakoski, S. & Baldasaro, T. (2008). Drug Free Schools Coalition, Inc. (2003). Random drug testing of students reduces drug use: Data from the American drug and alcohol survey at the Hunterdon central regional high school, Flemington, N.J. *Teachers college record*. Volume 110  
 ID number: 14724 Date accessed 4/12/2008 2:08:59 PM
- Drug Abuse Resistance Education (2008). *About DARE*. Retrieved June 10, 2008 from [http://www.DARE.com/home/about\\_DARE.asp](http://www.DARE.com/home/about_DARE.asp)
- Dupont, R.L., Skipper, G.E., & White, W. L. (2008, April). Testing for recent alcohol use. *Counselor*, 9, 44-51.
- Dupont, R. L. & Brady, L. A. (2005). *Drug testing in schools: Guidelines for effective use*. Center City, MN: Hazelden.
- Dupont, R., Campbell, T. and Mazza, J. (2002). U.S. Department of Education Office of

Elementary and Secondary Education, *SAFE* and Drug-Free Schools Program.

*Report of a preliminary study: Elements of a successful school-based drug testing program.* Rockville, MD: Institute for Behavior and Health, Inc.

[Editorial]. (2007, June 24). *Daily Herald*, p.22. Retrieved April 19, 2008, from ProQuest Newsstand database. (Document ID: 1294463661).

Elmqvist, D.L. (2004). School-based alcohol and other drug prevention programs:

Guidelines for the special educator. *Intervention in School and Clinic*, 27, 10-19.

(2002). *Development and evaluation of a substance use prevention parent involvement program for parents of students with mild disabilities.* Unpublished doctoral dissertation, Utah State University, Department of Special Education.

Elmqvist, D.L., Morgan, D.P., & Bolds, P. (2002). Substance abuse among adolescents with disabilities. *International Journal of the Addictions*, 27, 1475-1483.

Evans, G. D., Reader, S., Liss, H. J., Wiens, B. A. & Roy, A. (2006). Implementation of an aggressive random drug-testing policy in a rural school district: student attitudes regarding program fairness and effectiveness. *Journal of School Health*, 76 (9), 452-458.

Evans-Whipp, T., Beyers, J.M., Lloyd, S., Lafazia, A.N., Toumbourou, J.W., Arthur, M.W., & Catalano, R.F. (2004 June). A review of school drug policies and their impact on youth substance use. *Health Promotion International*, 19(2), 227-

234. Falco, M. (2002). *The making of a drug-free America: Programs that work.* New York: Times Books.

Fisher, C. & Wood, D. N. (1996) Teacher-centered and discipline-based health education reform in California. *Education*. 116.( 4) 507-513.



- Genaux, M., Likins, M., & Morgan, D.P. (2002). *Teachers' desk reference: Alcohol, tobacco, & drugs*. Logan, UT: Utah State University, Department of Special Education.
- Gerada, C., & Gilvarry, E. (2005). Random drug testing in schools. *The British Journal of General Practice*, 55(516), 499-501.
- Goffman, E. (1959). *The presentation of self in everyday life*. New York: NY: Anchor.
- Goldberg, L., D. Elliot, E. Moe, K. Kuchl, et al. (1999). Acceptability and potential Deterrent effects of drug testing. *Medicine and Science in Sports and Exercise*, 31 (5), 122-123.
- Goodstadt, M. (1980). School-based drug education in North America: What is wrong? What can be done? *Journal of School Health*, 56, 278-81.
- Gorman, D. M. (1997). The Failure of Drug Education. *Public Interest*, 129, 50- 60.
- Gorman, D. M. (1998). The irrelevance of evidence in the development of school-based drug prevention policy 1986-1996. *Evaluation Review*, 22, 1.
- Hardiman, M. M. (2008, March 14). The keys to success for the site-based decision-making in city schools. *The Sun*, A.21. Retrieved April 19, 2008, from The Sun, Baltimore database. (Document ID: 1445709691).
- Hansen, W.B. (2003). *School-based substance abuse prevention: A review of the state of the art in curriculum, 2003-2003*. Winston Salem, NC: Department of Public Health Sciences, Wake Forest University.
- Hanson, D.J. (2007). *Drug abuse resistance education: The effectiveness of DARE*. <http://alcoholfacts.org/DARE.html>

- Health Canada (1999). *Best practices—substance abuse treatment and rehabilitation*. Prepared for Office of Alcohol, Drugs and Dependency Issues, Health Canada. Minister of Public Works and Government Services. Cat. No. H39-438/1998E.
- Hindin, M. J. (2006). Role theory. In G. Ritzer (Ed.), *The Blackwell Encyclopedia of Sociology*. (pp. 3951-3954). Oxford, England: Blackwell Publishing Ltd.
- Hudlow, R. (2005). What are the odds? Random drug testing of students: Two perspectives. *Journal of School Nursing, 21*, 179-81.
- Jacobs, J. B. & Morag, B.S. (1992). The curious rejection of drug testing by America's schools & responses. *Teachers College Record, 94* (2), 208-253.
- Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (December 14, 2009). "Teen marijuana use tilts up, while some drugs decline in use." University of Michigan News Service: Ann Arbor, MI. Retrieved January 07, 2009 from <http://www.monitoringthefuture.org>
- Keeve, J. P. (1967). Overcoming obstacles to a creative school health program. *International Journal of Health Education, 26-32*.
- Kern, J., Gunja, F., Cox, A., Rosenbaum, M., Appel, J., & Verma, A. (2006). *Making sense of student drug testing: Why educators are saying no*. NY: Drug Policy Alliance; CA: ACLU Drug Law Reform Project. Retrieved from [http://www.drugpolicy.org/docUploads/drug\\_testing\\_booklet.pdf](http://www.drugpolicy.org/docUploads/drug_testing_booklet.pdf)
- Knight, J., Levy, S. (2010) The National Debate on Drug Testing in Schools *Journal of Adolescent Health, Volume 41, Issue 5, Pages 419-420*  
<http://linkinghub.elsevier.com/retrieve/pii/S1054139X07003606>

- Levy, S., Harris, S. K., Sherritt, L., Angulo, M., & Knight, J. R. (2006). Drug testing of adolescents in general medical clinics, in school and at home: Physician attitudes and practices. *Journal of Adolescent Health, 38*(4), 336-342
- Levy, S., Harris, S. K., Sherritt, L., Angulo, M., & Knight, J. R. (2006). Drug testing of adolescents in ambulatory medicine: physician practices and knowledge. *Archives of Pediatrics & Adolescent Medicine, 160*, 146-150.
- Loesevitz, M. (2007). Random drug testing in public schools. *Journal of Law & Education, 36* (3), 453-460. Retrieved July 10, 2008 from [http://findarticles.com/p/articles/mi\\_qa3994/is\\_200707/ai\\_n19434020/](http://findarticles.com/p/articles/mi_qa3994/is_200707/ai_n19434020/)
- Lynskey, M., & Hall, W.(2000 November). The effects of adolescent cannabis use on educational attainment: a review. *Addiction, 95*(11), 1621-30. McConihay, J. J. (2008) *Accuracy of detained juveniles self report of substance use on the Massachusetts Youth Screening Instrument-Version 2*. Psy.D. dissertation, Adler School of Professional Psychology, United States -- Illinois. Retrieved April 13, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 3295369). McGreevy, J. S. (2006) *No school business official left behind. School business officials, superintendents, and role theory: Association of School Business Officials (ASBO) international professional standards and job proficiency*. Ph.D. dissertation, Iowa State University, United States – Iowa. p. 25. Retrieved April 11, 2008, from ProQuest Digital Dissertations database.
- McKinney, J. R. (2004). *Study of High Schools with Student Drug-Testing Programs*. Indiana University/Indianapolis School of Law. Muncie, IN.

- McKinney, J. R. (2003). *The Effectiveness of Random Drug Testing Programs: A Statewide Follow-up Study*. Indiana University/Indianapolis School of Law. Muncie, IN.
- Meier, E. (2002). Supreme Court rules on student drug testing. *NASN School Nurse*, 17, 14.
- Moore, L., Roberts, C. and Tudor-Smith, C. (2001). School smoking policies and smoking prevalence among adolescents: multilevel analysis of cross-sectional data from Wales. *Tobacco Control*, 10, 117–123.
- Moustakas, C.E. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.
- Mulcahey, C. P. (1998). *Are school-based service programs reaching the target: Student, parent and teacher attitudes and perceptions?* Ed.D. dissertation, University of South Carolina, United States -- South Carolina. Retrieved February 28, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 9918960).
- Mulvaney, K. (2006, November 17). Grant awarded to attack teen drug and alcohol abuse. *The Providence Journal*, p. D-1. Retrieved April 19, 2008, from Business Dateline database. (Document ID: 1176753421).
- National Institute on Drug Abuse (2007, June). *NIDA Info Facts, Marijuana*. US Department of Health and Human Services. (Table 2) Retrieved September 14, 2007 and April 13, 2008 from <http://www.drugabuse.gov>

National Institute on Drug Abuse (2008). Bosworth, K., & Cueto, S. (1994). Drug abuse prevention curricula in public and private schools in Indiana. *Journal of Drug*

*Education*, 24 (1), 21-31. Retrieved NIDA webpage January 30, 2008.

<http://www.drugabuse.gov/about/organization/dspr/hsr/dapre/HansenBarriers.html>

National Institute on Drug Abuse (2008); Hawkins, J. D., Lishner, D. M., & Catalano, R. F. (2003). Childhood predictors and the prevention of adolescent substance abuse. In C.L. Jones & R.J. Battjes (Eds.), *Etiology of drug abuse: Implications for prevention*. NIDA Research Monograph No. 56. Rockville, MD: National Institute on Drug Abuse. Retrieved February 11, 2008

<http://www.drugabuse.gov/about/organization/dspr/hsr/dapre/HansenBarriers.html>

Neuman, L. W. (2003). *Social research methods: Qualitative and quantitative approaches*. (5th ed). Allyn and Bacon.

Office of National Drug Control Policy (2006). *Strategies for success: New pathways to drug abuse prevention*. ONDCP

Office of National Drug Control Policy (2007). *Teens and prescription drugs: An analysis of recent trends on the emerging drug threat*. ONDCP

Office of National Drug Control Policy (2008). Student drug-testing institute. Student drug-testing bibliography. February 2008, p. 54.

(3-23-09) <http://sdti.ed.gov/documents%5CSDTI%20Bibliography%20by%20To...>

- Ogborne, A. C. (2010) *Theories for addiction and implications for counseling*. P. 9  
Retrieved from website January 20, 2010  
[http://www.camh.net/Publications/Resources\\_for\\_Professionals/Alcohol\\_and\\_Drug\\_Problems/ADP\\_Chapter\\_one.pdf](http://www.camh.net/Publications/Resources_for_Professionals/Alcohol_and_Drug_Problems/ADP_Chapter_one.pdf)
- Ormrod, J. E. (1999). *Human learning* (3rd ed.). Upper Saddle River, NJ: Prentice-Hall
- Oswell, M. L. (2005). *A phenomenological inquiry: Managers' perceptions on African-American male's capacity to lead*. D.M. University of Phoenix.
- Paik, Leslie (2006). Organizational interpretations of drug test. *Law & Society Review*, 40 (4), 931-962.
- Patrick, D.L., Bush, J.W., Chen, M.M. (1973). Toward an operational definition of health. *Journal of Health and Social Behavior*, 14, 6-23.
- Penlington, C., Kington, A., Day, C. (2008). Leadership in improving schools: a qualitative perspective. *School Leadership & Management*, 28 (1), 65-82.
- Perhats, Oh, Levy, Flay, and McFall (1996). Identify administrator role differences as gatekeeper perceptions of school-based drug and sexuality education programs: A cross-sectional survey. *Health Education Research*, 11 (1), 11-27. Retrieved NIDA webpage January 31, 2008 [http:// www.drugabuse.gov/about/organization/despr/hsr/da-pre/ HansenBarriers.html](http://www.drugabuse.gov/about/organization/despr/hsr/da-pre/HansenBarriers.html).
- Picciano, A. G. (2004). *Educational research primer*. New York: Continuum.

- Pugh, A. (2004, October). Nature vs. nurture revisited: toward a truly integrative psychiatry. *Cross Currents*, 8(1), 4-5. Retrieved June 29, 2008, from ProQuest Central database. (Document ID: 731713901).
- Regents of the University of Michigan*. (2007). *Monitoring the Future: A continuing study of American youth*. Retrieved from <http://www.monitoringthefuture.org>.
- Ringwalt, C., Vincus, A.A., Ennett, S.T., Hanley, S., Bowling, J.M., Yacoubian, G.S. Jr., & Rohrbach, L.A. (2009). Responses to Positive Results From Suspicionless Random Drug Tests in US Public School Districts. *Journal of School Health*, 79(4), 177-183.
- Ringwalt C., Ennett S., Vincus A., Rohrbach L., Simons-Rudolph A. (2004). Who's calling the shots? Decision-makers and the adoption of effective school-based substance use prevention curricula. *Journal of Drug Education*, 34(1), 19-31.
- Rodgers, C. (2005). *The moderating effects of school and family bonding on the effectiveness of the Life Skills Training program*. Ph.D. dissertation, St. John's University, United States -- New York. Retrieved April 12, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 3235776).
- Roehlkepartain, E. (2008). Parenting with a purpose: A positive approach for raising confident, caring, youth. Minneapolis: retrieved from *Search Institute*.
- (2001). An asset approach to positive community change. Minneapolis: *Search Institute*.
- Rosenbaum, M. (2005). Sex, drugs, doctrine; The Bush administration just says no to effective drug- and sex-education programs. *Memphis Flyer*, p. 20. Retrieved

- April 19, 2008, from Alt-Press Watch (APW) database. (Document ID: 846144031).
- Rosenbaum, P. D., & Hanson, S. G. (1998) Assessing the effects of school based drug education: A six year multilevel analysis of Project D.A.R.E. *Journal of Research in Crime and Delinquency* , 35(4), 381–412.
- Ross, J. G., Einhaus, K. E., Hohenemser, L. K., Greene, B. Z., Kann, L. and Gold, R. S. (1995). School health policies prohibiting tobacco use, alcohol and other drug use, and violence. *Journal of School Health*, 65, 333–338.
- Salazar, E., & Seifert, K. (2008). Experts available to discuss child abuse, awareness. (4 April). *Business Wire*, 1. Retrieved April 19, 2008, from Business Dateline database. (Document ID: 1015824091).
- Solomon, L. K. (2007). Synagogues in South Florida are building a network for recovery: Teams will address drugs, alcoholism. *Knight Ridder Tribune Business News*, 1. Retrieved June 29, 2008, from ProQuest Central database. (Document ID: 1273981751).
- Staff, A.M. (2003). Steep rise in abuse of legal drugs. *Christian Science Monitor* (Boston, MA) October 1, 2003, Wednesday SECTION: USA; Pg. 01
- Swisher, J. D., Smith, E. A., Vicary, J., Bechtel, L., Hopkins, A. (2004). A Cost-effectiveness comparison of two approaches to life skills training. *Journal of Alcohol and Drug Education*, 48(1), 71-87. Retrieved April 19, 2008, from ProQuest Psychology Journals database.
- Trachtenberg, Stephen J. (2007). Lessons from the Top. *Chronicle of Higher Education*, 54 (10) B5.



- Tracy, W. J., & Acker, C. J. (2004). *Altering American consciousness: The history of alcohol and drug use in the United States 1800-2000*. Amherst, MA :University of the Massachusetts Press .
- Trochim, W. (2004). *The research methods knowledge base*. (1st Ed.). OH: Atomic Dog Publishing. Urinalysis Report (2003) Retrieved Yahoo July 14, 2007 [www.hawaii.edu/hivandaids/RI\\_DOC\\_Urinalysis\\_Report,\\_2003.pdf](http://www.hawaii.edu/hivandaids/RI_DOC_Urinalysis_Report,_2003.pdf) - 322k
- U.S. Department of Education (1986). *What works: Schools without drugs*. Washington, DC: Author. ERIC Document Reproduction Service No. ED 270715.
- U.S. Department of Education (1992). *What works. Schools without drugs*. Washington, DC.
- U.S. Department of Education (1990). *Growing Up Drug Free: A Parent's Guide to Prevention*.
- U.S. Department of Health and Human Services (2004) Substance Abuse and Mental Health Services Administration, Office of Applied Studies <http://www.oas.samhsa.gov/nhsda/2k3nsduh/2k3Results.htm>
- Elmqvist, D.L. (2004). School-based alcohol and other drug prevention programs: Guidelines for the special educator. *Intervention in School and Clinic*, 27, 10-19. (2002). *Development and evaluation of a substance use prevention parent involvement program for parents of students with mild disabilities*. Unpublished doctoral dissertation, Utah State University, Department of Special Education.

- Vandell, Deborah (2005). After-school child care programs. *The Future of Children*, 9, 64-78.
- Van Kaam, A. L. (1984). *Existential foundations of psychology*. Lanham, MD: University Press of America.
- Wakefield, et al., M. A., Chaloupka, F. J., Kaufman, N. J., Orleans, C. T., Barker, D. C. and Ruel, E. E. (2000). Effect of restrictions on smoking at home, at school, and in public places on teenage smoking: cross sectional study. *British Medical Journal*, 321, 333–337.
- Wallace, T. (1975). *Perceived administrative decision-making authority of the K-12 Pennsylvania curriculum generalist*. Ed.D. dissertation, Lehigh University, United States -- Pennsylvania. Retrieved January 21, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 7605102). pp 17-54.
- White, William (1998). *Slaying the dragon: The history of addiction treatment and recovery in America*. Chestnut Health Systems Publication.
- Wilson, G.T. (1988). Alcohol use and abuse: A social learning analysis. In C.D. Chaudron & D.A. Wilkinson (Eds.), *Theories on alcoholism*. Toronto: Addiction Research Foundation. (P.11)
- [http://www.camh.net/Publications/Resources\\_for\\_Professionals/Alcohol\\_and\\_Drug\\_Problems/ADP\\_Chapter\\_one.pdf](http://www.camh.net/Publications/Resources_for_Professionals/Alcohol_and_Drug_Problems/ADP_Chapter_one.pdf)
- Wysong, E., Aniskiewicz, R., & Wright, D. (1994). Truth and *DARE*: Tracking drug education to graduation and as symbolic politics. *Social Problems*, 41(3), 448–472.

- Yamaguchi, R., Johnston, L., and O'Malley, P. (2003). Relationship between student illicit drug use and school drug-testing policies. *Journal of School Health* 73, 159-164.
- Yaremko, R.M., Harari, H., Harrison, R.C., & Lynn, E. (1986). *Handbook of Research and Quantitative Methods in Psychology*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Ziesemer, C. (1984). Student and staff perceptions of truancy and court referrals. *Social Work in Education*, 6, 167-178.

## APPENDIX A: SURVEY INSTRUMENT

Place an “X” on the appropriate line which best describes your answer.

**Question 1:** Which drug prevention education program is currently being implemented in your school?

Drug Abuse Resistance Education (*DARE*)

Substance Abuse for Educators (*SAFE*)

**Question 2:** What is your present position in the education field?

Principal

Assistant Principal

**Question 3:** How many years have you served as a building-level administrator?

0-3

4-7

8-10

11-15

16-20

20+

Indicate the degree to which you feel about each question. Place an “X” in the appropriate box which best describes your perception. *\*The term “drug education program” will describe the program you identified in Question One as being implemented in your building.*

CATEGORY	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
I am knowledgeable about substance abuse education, intervention and prevention programs.					
Our current drug education program has been effective in terms of reducing substance abuse among school children.					
Our current drug education should be replaced by another program.					
As a school administrator, I would support the use of random drug testing for all students at my school.					
Random drug testing would be an illegal attempt to invade students’ privacy.					
Random drug testing would not be possible because it would make parents angry.					
Random drug testing would be unfeasible because of the limits/unreliability of drug testing technology.					
CATEGORY	Strongly	Agree	No	Disagree	Strongly

	Agree		Opinion		Disagree
Random drug testing would not be reasonable because we have no resources to help students who test positive.					
Random drug testing would not be practical because we already have too many responsibilities.					
Random drug testing would not be feasible because none of these programs work anyway.					
Random drug testing is the responsibility of the parents.					
The Sheriff's Department would support random drug testing in my school.					
Parent organizations would support random drug testing in my school.					
School Board members would support random drug testing in my school.					
The Teachers' Union would support random drug testing in my school.					
The <i>DARE</i> and <i>SAFE</i> staff would support random drug testing in my school.					
The district Superintendent has the most influence on whether or not to introduce random drug testing in my school.					
As the school administrator, I have the most influence on whether or not to introduce random drug testing in my school.					
Parents have the most influence on whether or not to introduce random drug testing in my school.					
<b>Other:</b> Please feel free to give any comments regarding <i>DARE</i> , <i>SAFE</i> , or random drug testing.					

## APPENDIX B: INFORMED CONSENT FORM

Please carefully read this form and then sign it to certify your informed consent in this research project entitled “Addiction of Educational Perceptions: A Study of How Educational Leaders in Orange County, California, Perceive Drug Testing as a Viable Option in School Drug Policy.”

Your participation in this study is voluntary and will require no more than 10 minutes of your time to complete the enclosed survey. ***If your school site does not utilize the Drug Abuse Resistance Education program (DARE) or Substance Abuse for Educators program (SAFE), you may discard this packet.*** Otherwise, please know that you are free to withdraw from this survey at any point during the process. The results of the research study may be published but your name will not be used and your results will be maintained in confidence.

In this research, there are no foreseeable risks to the participants. And although there may be no direct benefit to you, the possible benefit of your participation is to identify programs having a positive effect on school children. As a member of the educational community, I value your insight and appreciate your support and cooperation in this study. By voluntarily completing the enclosed survey, it will be assumed that you have given your consent to participate in this research.

Upon completion of the survey, please return the attached Informed Consent form and the survey in separate enclosed pre-addressed, stamped envelopes. No name or return address is needed as this is another step to ensure complete confidentiality and anonymity. *The survey should be completed and returned within one week of receipt*

By signing this form I acknowledge that I understand the nature of the study, the potential risks to me as a participant, and the means by which my identity will be kept confidential. My signature on this form also indicates that I am 18 years or older and that I give my permission to voluntarily serve as a participant in the study described above.

\_\_\_\_\_/\_\_\_\_\_  
Signature/Date

## APPENDIX C: INTRODUCTORY CONSENT COVER LETTER

Dear School Administrator,

I am a doctoral student at the University of Phoenix working on my dissertation. I am conducting a research study entitled *Addiction of Educational Perceptions: A Study of How Educational Leaders in Orange County, California, Perceive Drug Testing as a Viable Option in School Drug Policy*. The purpose of the research study is to investigate the perceptions of Orange County, California, public school administrators as to the effectiveness of the *DARE* and *SAFE* programs. The research study is to examine the possible barriers public school administrators foresee in the implementation of random drug testing in schools.

Your participation in this study is voluntary and will require no more than 10 minutes of your time to complete the enclosed survey. ***If your school site does not utilize the Drug Abuse Resistance Education program (DARE) or Substance Abuse for Educators program (SAFE), you may discard this packet.*** Otherwise, please know that you are free to withdraw from this survey at any point during the process. The results of the research study may be published but your name will not be used and your results will be maintained in confidence.

As a member of the educational community, I value your insight and appreciate your support and cooperation in this study.

Upon completion of the survey, please return the attached Informed Consent form and the survey in separate enclosed pre-addressed, stamped envelopes. No name or return address is needed as this is another step to ensure complete confidentiality and anonymity. *The survey should be completed and returned within one week of receipt.*

Sincerely,

Mr. Richard K. Maguire