THE FALLACY OF THE IDEOLOGICAL PURSUIT OF ABSTINENCE: THE PITFALLS OF YOUTH DRUG PREVENTION PROGRAMS IN AMERICA

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ABSTRACT

In the belief that education about drugs can change behavior, schools have become an essential component of our nation's war on drugs. The goal of our national policy is to help people maintain total abstinence from drugs; it is not the prevention of drug-related harms. Nonetheless, youth drug use persists at significant levels. While ineffective drug education is one concern, prevention efforts themselves have raised issues for the students they were designed to guide. These issues include not only an increase in drug use, but also the reduction of educator credibility, the disconnection of children in need of help from the school system, and the transmission of the message that the school is not there to help them succeed.

For over a century, drug education has been repeating the same mistakes while expecting a different result. In this thesis, I propose to show that our efforts to protect and improve the health of the next generation of young people will be better served if we move away from trying to prevent a common adolescent developmental or experimental behavior and, instead, focus on young people's innate capacities to thrive. Without condoning drug use, a resilience approach to drug education prioritizes the protective factors that enable young people to have the capacity to make healthier drug-use decisions (even if this does not mean abstinence); to make choices, in general; and to thrive over the course of their lives. If the results from the longitudinal study by Werner and Smith (1982) are any indication, this is an important opportunity to reverse our historic failure and set the foundation for a life-long positive youth development—an approach that helps young people succeed in all of life's challenges.

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This thesis and all my work to come is dedicated to my grandma.

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INTRODUCTION

In the United States, there has been large-scale investments in programs that have focused on a Drug-Free America. These programs focus on identifying at-risk students and indoctrinating them with an exclusively "no use" message—all drugs are equally bad and any use is abuse—contradicting the rich knowledge many students have acquired on their own. Students have been told to “Just Say No” and abstain for life. The rhetoric of choice is always presented to students, but any choice other than abstinence is pathologized or punished. Nevertheless, by the time they graduate high school, roughly 50% of adolescents will have experimented with drugs. In spite of drug programs’ shortcomings, they keep evolving, but teen drug use shows no signs of declining. Given that our directives to abstain have been rejected by most youth, it is important to have a discussion about what is going on in their classrooms.

It can be difficult to understand the reasons why young people experiment with drugs. There could be many reasons for this but, to me, the foremost factors include being young, wanting to experiment, and desiring to imitate adult norms. These adolescents need reliable, valid information but, unfortunately, drug education as constituted under the “War on Drugs” has ensured a biased presentation of current knowledge about drug use. Young people are given no information on how to reduce harm, identify problematic use, or weigh the drug decisions that they will all make at some point. To start with, the legality of the drug does not make it safer, in fact, some of the most dangerous drugs are the legal ones. For the purposes of this paper, I will use the term “substances” and “drugs” appropriately, to encapsulate alcohol, tobacco, cannabis,

and all legal and illegal mind-altering substances. The term youth, children, adolescents, and teenagers are also used interchangeably, to encompass ages 14-19, the time when most experimentation begins. This thesis aims to explore why drug education has been unsuccessful in reducing adolescent substance use. This failure is no new observation, nor is it specific to one program, a comparative analysis by Beck (1998) reveals both the purpose and practice of today's curricula have remained consistent throughout American history. In spite of their shortcomings, abstinence drug education persists, perhaps, simply because it satisfies parents, educators, and political leaders as a visible critique of drugs and a form of outreach to young people. To understand where we are today, I will use a historical perspective to discuss the conceptualization of school-based drug education. This thesis will be organized to demonstrate the fallacies and similarities of both past and present school-based prevention efforts.

In Chapter One, I will discuss how the 19th century temperance crusaders instructed abstinence in public school classrooms with graphic portrayals, propaganda, and misinformation."Scientific" textbooks were designed to preach total abstinence, Use and abuse were considered one and the same (Hunt, 1897), and any information that "[does] not preach total abstinence" was unacceptable (Tyack and James, 1985). Chapter two covers the 1960s-90s, when public concern transformed prevention policies because illicit drug use among white, middle-class youth was increasing. The long-term solution of this period was to raise a generation of young people who would understand and reject drugs. As a result, Nancy Reagan's highly publicized "Just Say No" campaign and Zero Tolerance programs like D.A.R.E. were

founded and quickly implemented, nationwide despite lack of effectiveness. It is now a given that D.A.R.E. not only fails to prevent teenagers from using drugs, but may actually increase such use (Wysong et al. 1994). Chapter three discusses today's anti-drug programs, which claim to have replaced the scare tactics of years past with evidence-based information about drugs and how to make good decisions about using them. Despite the different names and, perhaps, slightly different emphases, Brown (2001) argued that today’s "no use" drug education is similar to, and likely as ineffective as, the historically ineffective "no use" drug education.

My thesis concludes with an intervention that has a fundamentally different orientation than current drug prevention programs. This intervention is based on the work of Joel Brown and his colleagues at the Center for Educational Research and Development in Berkeley, California. Drawing from what we know in Youth Development, Psychology, and Education, Joel Brown and his colleagues have developed a research-based alternative to current drug prevention programs that they call “Resilience Drug Education” (Brown, D'Emidio-Caston, Benard, 2001).They believe that “a focus on resilience builds adults’ credibility and allows youth to positively connect with adults, further supporting their own lifelong development” (Brown et al., 2001). If drug prevention programs move away from trying to prevent a common adolescent behavior and instead, focus on young people’s innate capacities to thrive, we will have cultivated better practices for young to people to become healthy and successful adults.

CHAPTER 1-THE ORIGIN OF SCHOOL-BASED DRUG EDUCATION

In this chapter, I discuss the origins of school-based drug education. Led by the Mary H. Hunt, the Woman's Christian Temperance Union (WCTU) successfully demanded that a mandatory "scientific" instruction be taught to millions of students across the nation. Hunt and her colleagues dictated the content of the instruction and textbooks. Anything that "did not preach total abstinence" was considered unacceptable. However, the required scientific textbooks were full of misinformation and propaganda complete with graphic portrayals of the physical harms and moral mortification of drinking and alcohol abuse, which were portrayed as one and the same (Hunt, 1897). Indeed, the extensive exaggerations, distortions, and gross inaccuracies in textbooks were deliberate and were designed to scare readers into abstinence. While the temperance instruction failed to sustain itself after prohibition was repealed, the messages, practices, and goals of this period established both the purpose and practice of drug education in America. (Zimmerman, 1992)

THE GOOD GIFT OF GOD

Alcohol has been pervasive in American society since the early colonial years. In fact, the European settlers viewed alcohol as the "good gift of God" (The Society, 1908), to be used and enjoyed in moderation by young and old alike.

However, excessive consumption was neither approved nor tolerated; abuse was seen as arising from the Devil (Aaron and Musto, 1981). Following the Revolutionary War, our nation experienced radical social, political, and economic changes that indirectly affected the patterns of liquor consumption. Up until this point, alcohol had been moderately consumed within the family structure but, with urbanization, the social sanctions that had kept drunkenness to a

minimum began to lose their power (Ammerman, Ott, & Tarter, 1992). Concern grew as intoxication became associated with "masculine" behavior and public drunkenness grew to be defined as a social problem.

THE MEANING OF TEMPERANCE

Corresponding to the changing attitudes towards alcohol at this time, a prominent physician, Dr. Benjamin Rush, issued a statement saying that "excessive use of alcohol was injurious to physical and psychological health" (Katcher, Scollins, & Embleton, 1993). In 1784, Rush laid out an elaborate syndrome model of addiction and emphasized the moral and physical decay caused by drinking alcohol (as cited in Katcher et al., 1993). This diseased condition of dependence could be cured, according to Rush, only by total abstinence from hard liquor.

As a result of this analysis, a temperance movement emerged from America's Protestant churches that promoted moderation and encouraged drinkers to help each other to resist temptation. But, with the growing suspicion that alcohol was to blame for increasing unemployment, poverty, and crime, the temperance groups quickly shifted their focus to one of pure abstinence with the belief that no one should be permitted to drink alcohol of any kind. According to Room (1984), these early radicals organized possibly one of the largest mass communication effort about a social issue that this country has ever seen. By 1851, the temperance groups had distributed nearly 5 million anti-liquor propaganda advertisements that promoted abstinence using "scientific" and moral reasoning. Although these publications came in a variety of forms and styles, the information pointed to a single viable option: abstinence.

Woman's Christian Temperance Union

The leading national force in the fight for prohibition was the WCTU. Founded in 1874, the WCTU had more than 45 departments organized for the benefit of a host of causes: free kindergarten, equal pay, and raising the age of sexual consent. But no single program had more impact than the Department of Scientific Instruction. At that time, the prohibition movement was experiencing serious difficulties but Hunt, superintendent of the WCTU educational department, realized that, if prohibitionist messages could "get to the children", they could enforce the sentiment that prohibition was good (Sobsey & Sheehan, 1981). Since “a government of the people cannot compel majorities” (as cited in Zimmerman, 1992), Hunt felt that voters “must first be convinced that alcohol and kindred narcotics are by nature outlaws, before they will outlaw them” (Zimmerman, 1992). Using the concept of “science,” Hunt set out to use the public school system to bring about moral reform.

SCIENTIFIC TEMPERANCE INSTRUCTION

Hunt quickly became one of the most powerful women in the temperance movement, lobbying state legislatures and Congress to require “scientific” temperance instruction in schools and vetoing any textbook of which she did not approve. Without standardized texts, she worried that “teachers would fail to present the appropriate materials” (Hunt, 1897). To prevent this occurrence, temperance instruction required that textbooks "teach that alcohol is a dangerous and seductive poison” (Sinclair, 1962) and that any educational materials that did not preach total abstinence were considered unacceptable (Tyack & James, 1985). Hunt also directed women from WCTU chapters all over the country to pressure local school boards and, by 1901, all 22

million children enrolled in public school in every state were sitting through temperance classes three times a day (Mezvinsky, 1961).

Beginning in kindergarten, children studied texts filled with lurid misinformation calculated to appeal to emotions and fear (Sinclair, 1962). Temperance materials made no distinction between drinking and alcohol abuse, which were portrayed as one and the same. The initiation of use was warned to be the first step on the slippery slope inevitably leading to either prison or death. Just one drink, some books alleged, “could burn away the lining of the throat and stomach, and begin eating at the liver and kidneys” (Sinclair, 1962).

One such textbook asserted that “alcohol caused deafness, dropsy, lunacy, not only in those who swallowed it, but in their children, and their children's children” (Ploetz & Tillinghast, 1915). And, of course, some textbooks warned “there was the fearful possibility that drinking could spark spontaneous combustion, bursting suddenly into fatal blue flame” (Krout, 1925). One can only speculate as to how many children unnecessarily suffered anxiety and emotional trauma as they watched their parents enjoy a glass of an alcoholic beverage with their dinner. The messages of the WCTU demanded abstinence as the only morally and socially acceptable behavior, essentially a blueprint of all the drug education that has come since.

From early on, the extensive exaggerations, distortions, and gross inaccuracies in the approved textbooks were criticized by leading scientists and educators who worried that the perversion of temperance instruction provoked the curiosity and interest of the child. And worse, that the strict adherence to textbook teachings suppressed the learning and development of children (Ferguson, 1895). In addition to psychological concerns, a group of faculty members from Harvard and Clark University found the temperance instruction to be seriously “inappropriate” and “doomed

to backfire" (Billings, 1905). The group concluded that the students would soon find out that the "facts" they were forced to memorize were incorrect (Billings, 1905).

In the most comprehensive attempt to study the alcohol teachings, a private research group, The Committee of Fifty, organized in 1893, suggested that "to observe the distinction between the diametrically opposite conceptions of use and abuse…it should not be taught that the drinking of one or two glasses of beer or wine by a grown-up person is very dangerous, for it is not true" (Billings, Eliot, Fortune, Greene, & Peabody, 1905). They found the "scientific" temperance instruction to be "neither scientific, nor temperate, nor instructive" (Billings et. al, 1905)

Outraged, Hunt (1904) prepared a *Reply* in which she charged the Committee with being prejudiced against abstinence instruction, accused it of grossly misrepresenting facts, and insisted that the WCTU-endorsed textbooks were completely accurate. Both sides debated the latest findings of science to give a good reason for their position on school-based drug education. Sadly, it was clear just how established this total abstinence approach had become in the educational system and the minds of legislators. As a consequence, the Committee (1905) concluded that "the removal of this educational excrescence will be no easy task…a prolonged struggle will be necessary to free our public school system from the incubus which rests upon it".

On December 18, 1917, the United States House of Representatives and Senate approved the eighteenth amendment to the Constitution prohibiting the manufacture, sale, and transportation of alcoholic beverages nationwide. The WCTU was pivotal to passing this law after convincing society that National Prohibition, as a political solution, would bring social reform (Sinclair, 1962). Unfortunately, Prohibition not only failed to bring about social reform

but actually created additional serious and disturbing social problems throughout society. This resulted in an increasing disillusionment with Prohibition by millions of Americans. Journalist, H. L. Mencken, wrote in 1925 that “There is not less drunkenness in the Republic but more. There is not less crime, but more. There is not less insanity, but more. The cost of government is not smaller, but vastly greater. Respect for law has not increased, but diminished” (as cited in Joshi, 2009). Prohibition quickly proved to be a terrible idea based on false premises that left the country far worse off than it was to begin with (Mezvinsky, 1961).

Following the repeal of prohibition in 1933, an increasing social support for alcohol indicated the beginning of the end of compulsory temperance education (Mezvinsky, 1961). During this time, drug education was actually discouraged because of the fear that arousing curiosity would lead to experimentation. But the movement never really died. In a review of historical records, Beck (1998) found that these pivotal early years of the American drug education experience would “set a precedent for much of what we associate with the field of drug education today” (p. 23).

"What America needs now is a drink"

—President Franklin D. Roosevelt at the end of Prohibition (as cited in Ford, 2015)

CHAPTER 2: THE DRUG FREE EXPERIMENT

In this chapter, I will examine how drug education programs based on scare tactics became one aspect of the nation's “War on Drugs”, alongside Nancy Reagan's highly publicized “Just Say No” campaign. In 1986, Congress enacted the Drug-Free Schools and Communities Act (Title IV, Section 4132), which mandated that any material that did not endorse abstinence was to be censored from the drug education curriculum (Beck, 1998). It was during this time that Los Angeles Police Chief Daryl Gates, who made no apologies for claiming that "casual drug users should be taken out and shot" (Domanick, 1995), founded the Drug Abuse Resistance Education (D.A.R.E.) program which was quickly implemented nationwide. D.A.R.E. is not only the largest anti-drug program in America, but it is also the first national program promoting zero tolerance. D.A.R.E. gets censured repeatedly but this is only because it is the most researched drug education program. Other drug education programs often don’t fare much better.

RACIALIZED PUSHERS

After alcohol prohibition was repealed in 1933, Harry J. Anslinger, director of the recently formed Federal Bureau of Narcotics, pushed Congress to ban marijuana, stating that “it was a powerful, addicting substance and a gateway drug to harder narcotics, such as heroin” (Becker, 1963). Anslinger's initial attempt to criminalize marijuana was a struggle due to the general belief that it was harmless in comparison to other substances.

To garner public support, the Federal Bureau of Narcotics produced various forms of propaganda, playing on existing xenophobic attitudes to deliberately frame Mexican immigrants and African American youth as perpetrators of the growing drug problem (Sullivan, 2005). As local media and law enforcement spread sensationalized stories of juvenile gangsters invading

white suburbs to provide marijuana and heroin to teenagers, white middle-class youth were positioned as innocent victims of the racialized pushers and inner city illegal drug markets (Lassiter, 2015).

Racist anxieties justified the over policing and targeting of black and brown urban youth under unjust drug legalisation (Muhammad, 2009). In the article, "Rethinking Urban America through the Lens of the Carceral State," Heather A. Thompson (2010) defines this process as the "criminalization of urban space" in which increasing numbers of urban dwellers, overwhelmingly people of color, "become subject to a growing number of laws that not only regulated bodies and communities in thoroughly new ways, but also subjected violators to unprecedented time behind bars".

Simply put, because the identity of the drug user was constructed as exclusive to minorities, criminals, and inner-city youth, there was little opposition to its rampant criminalization amongst white Americans. With the increase of public support, Congress established the 1951 Boggs Act (United States, 1972) that sentenced first-time drug offenders to harsh, mandatory, minimum terms for incarceration. Setting mandatory terms for incarceration prohibited the Court from making an individualized determination of what sentence was appropriate for a given defendant.

NEW CLASS OF DRUG USERS

The dominant paradigm was challenged in the 1960s when the emerging counter-culture popularized marijuana use on college campuses. Far from the racy parts of town, the fear of white lives ruined by marijuana laws immediately altered public opinions and policymakers revised the penalties for marijuana possession (Lassiter, 2015). Judges were allowed to have discretion to

sentence first time offenders to probation. At this point, there was relatively little education about any drug other than alcohol, and, to a certain extent, tobacco (Tupper, 2008). But as drug use became more commonly recognized among white, middle-class youths, the Narcotic and Drug Abuse Committee recommended that students undergo information-based, fear, arousal drug education programs:

> The teenager should be made conscious of the full range of harmful effects, physical and psychological, that narcotics and dangerous drugs can produce. He should be made aware that, although the use of a drug may be a temporary means of escape from the world about him, in the long run, these drugs will destroy him and all he aspires to. -The President's Advisory Commision on Narcotic and Drug Abuse. (as cited in Brown, 1964)

In other words, children were considered vulnerable to the lies of drug peddlers if they were not given the knowledge and "truth" of how drugs will ruin their health and their future. Through this ubiquitous discourse, President Nixon made sure that all students, from kindergarten through high school would receive drug information (Beck, 1998). Underestimating the complex relationship between humans and their drive to alter their consciousness (Weil, 1972), Nixon assumed that, when provided with the negative physiological, psychological, and legal aspects of drug use, rational youth would decide not to try drugs or would decide to discontinue their use of drugs (Janvier, Guthmann, & Catalano, 1980).

INFORMATION-BASED PROGRAMS

But the vast number of prevention programs were pressured into action by the President's orders, and were uncoordinated and ill-equipped to respond to complexity of youth substance use (United States, 1972). The massive information provision, designed to attract attention and frighten

individuals not to do drugs, backfired by informing an entire generation of young people about the new, myriad of drugs available (Stuart, 1974). For example, lysergic acid diethylamide (LSD), a chemical few people had even heard of before 1962, was suddenly popular among high school students following the highly publicized messages and anti-drug campaigns (Brecher, 1972). While programs initially provided information about the pharmacology and physiological effects, an assessment conducted by Grizzle (1974) noted that "most programs resorted to scare tactics to enforce a norm of abstinence" (as cited in Baumann & Karel, 2013). The context of the time also contributed to the failure of prevention efforts, authority figures preaching unbelievable claims and warnings, while recalcitrant young people simultaneously embraced an anti-authority movement. With concepts like freedom of choice and experimentation, abominations to abstain only made the prohibited behavior more appealing. Not surprisingly, studies revealed modest increases in experimentation following participation in drug education classes (Stuart, 1974). Critics suggested that the majority of drug education programs were purely symbolic in showing the public that "something was being done" (Morgan et al. (1989).

During this time, one of first comprehensive evaluations on abstinence-only drug education was completed. Blum (1969) verified that the use of scare tactics had resulted in "increasing polarity" and distrust between students and educators, particularly among older students who were not saying, "No." As a consequence, "Dishonesty in this area weakens credibility in all areas; hypocrisy generates wide distrust; reliance on external control and authoritative pronouncements weakens the development of internal controls and learning to make informed decisions".

By 1973, the National Commission on Marihuana [sic] and Drug Abuse concluded that "no drug education programs in this country, or elsewhere, has proven sufficiently successful to warrant our

recommending it”. The commission further pronounced that “the avalanche in drug education in recent years has been counterproductive.”

“Just Say No”

By the time President Reagan had taken office, teen drug use had reached historic peaks. According to Monitoring the Future: a continuing study of American youth, sponsored by The National Institute on Drug Abuse at The National Institutes of Health, marijuana use among high school students peaked in 1979. By this time, about 60% of all high school seniors had tried marijuana at least once while 43% had used an illicit drug other than marijuana (Johnston, O’Malley, Miech, Bachman, & Schulenberg, 2016).

As drug use was becoming more persistent and, consequently, perceived as more problematic, Nancy Reagan took the stage with her highly publicized anti-drug crusade. In 1982, the First Lady notoriously uttered “Just Say No” to a schoolgirl who wanted to know what she should say if someone offered her drugs. Suddenly, society’s drug problem was falsely reduced to an inability of the individual to “Just Say No” with no alternatives for keeping teenagers out of drug use over the longer term. Nancy Reagan's “Just Say No” rhetoric was more than silly or ineffectual. Her campaign reinforced misconceptions about drug use that shaped prevention policies for decades to come.

FEDERAL POLICIES

Shortly after Nancy Reagan's “Just Say No” campaign, Congress passed the Drug-Free Schools and Communities Act in 1986, more recently known as the Safe and Drug-Free Schools and Communities Act (U.S. Department of Education, Title IV — 21st Century Schools, 2004, Section 401, Part A, Sections 4001-4003). This Act mandated that schools adopt zero-tolerance drug abuse

prevention programs with some variation of the "no use" message in order to procure federal funding. In addition to teaching young people that “illegal and other drug use” is “wrong” and “harmful” (Section 4132), school districts were expected to provide substance use and abuse prevention services geared towards protecting at risk students (Department of Education, 1992). Based on a general probabilistic model that linked drug use to delinquency, social scientists, Hawkins, Lishner, Jenson, and Catalano (1987) suggested that the likelihood of a person becoming involved in substance use and abuse is predictable from risk factors that are biological, psychological, and socio-cultural. The term *at risk* became a phrase used to identify those who are deemed most likely to develop problems with illicit substances.While correlations may exist, they are not sufficient to link risk factors with future drug use (Brown & Horowitz 1993).

In spite of this, this deficit model has been uncritically applied to our public educational system. In the early 1990s, the California Department of Education designated 36 risk factors associated with youth failure. The risk factors ranged from personal attributes (alienation or rebelliousness) to family situations (inconsistent or severe discipline) to community structures (community disorganization). According to federal guidelines, schools are to determine “which risk factors were most significant” and plan interventions accordingly (Hawkins, Catalano, & Miller, 1992). But the risk factor model has shown no effectiveness in identifying and assisting youth at risk for substance use. In fact, risk factors are so broadly defined that almost any American teenager could be classified as being at-risk. Rather than providing interventions to assist students who may be struggling, some psychologists suggest that predicting who is at risk merely reinforces a misguided assumption about youth by labeling certain students as deficient on

the basis of characteristics over which students have no control (Baldeweg, Richardson, Watkins, Foale, & Gruzelier (1999).

Zero Tolerance

Not only do we have drug education programs in school, but we also have policies related to drug education: They are called zero tolerance policies. Based on an investigation of drug education targeted toward at risk students, Brown and D'Emidio-Caston (1995) found that "those most in need of assistance were of the first removed from the school system". This means certain children are more likely to be impacted by zero tolerance policies, which inherently punish them by taking away their opportunity for education, which is directly related to getting out of the high risk situation. While there is no official definition for the term zero tolerance, it generally means that youth who violate school rules one time are expelled, suspended, or excluded from participation in student government, sports, and other extracurricular activities. This is done without regard to the seriousness of the behavior, mitigating circumstances, or the context of the situation (Skager, 2007). Brown and Caston (1995) believe that, while removing them from the situation may be publicly reassuring and highly symbolic, zero tolerance policies may create, enhance, or accelerate negative mental health outcomes for youth by creating increases in student alienation, anxiety, rejection, and the breaking of healthy adult bonds (Comer & Poussaint, 1992; Reynolds, 2004).

To complicate matters, minority youth are punished at a disproportionate rate despite a lower rate of drug use than that of non-minority students. For example, 7% of American Indian students in kindergarten through 12th grade were suspended in 2004 under zero tolerance policies. This number was higher than White (5%) students who make up the majority of the population.

This rate was lower than the rate for African-American students of whom 15% were suspended (Wallace Goodkind, Wallace, & Bachman, 2008).

But researchers have shown that these punishments are not a deterrent (Hemphill, Plenty, Herrenkohl, Toumbourou, & Catalano, 2014; Way, 2011). The scientific literature has warned that zero tolerance policies "run counter to our best knowledge of child development...and...have created unintended consequences for students, families, and communities" (American Psychological Association, 2008). Moreover, deterrent punishments increase the very problems they were designed to prevent. This is a serious issue as zero tolerance policies have been implemented in 90% of America's schools (Skiba & Knesting, 2001).

Social Influence Programs

One of the largest and most implemented anti-drug programs operating under the "Just Say No" philosophy, as well as one of the first national programs promoting zero tolerance, is the D.A.R.E. program. Founded in 1983 by Los Angeles Police Chief Daryl Gates, D.A.R.E became the leading model for drug education in the United States. Since it was understood, at this point, that increased knowledge about substances did not reduce drug use, D.A.R.E. utilized a social influence strategy, which assumed that young people lacked the skills and motivation they needed to resist peer pressure to use drugs. Adopting this perspective, D.A.R.E sent uniformed police officers into mostly fifth-grade classrooms for one hour a week for seventeen weeks to teach the risks and harmful effects of drug use, peer pressure resistance, and to "Just Say No."

In the study, "Youth, Drugs, and Resilience Education," published in the *Journal of Drug Education*, Joel Brown (2001) found that there was virtually no participation of educators in the development of drug education programs. D.A.R.E used a standardized curriculum developed by

their headquarters with no local review by teachers and administrators (Brown, 2001). Rather than providing students with science-based information, the messages of the D.A.R.E. program have misinformed an entire generation, lumping all drugs together as equally dangerous, all use as abuse, and that experimenting with marijuana would either kill one or cause one to end up on the street. Despite the fact that Kandel and Faust debunked the Gateway Theory in 1975, D.A.R.E continues to teach that marijuana use leads to the use of harder drugs like cocaine and heroin and that is why it is dangerous.

Though the messages delivered by the D.A.R.E. program are generally similar to other school-based drug education curricula, the use of uniformed police officers as instructors is seen as a key element to the program's success. But in some ways, having police officers teaching drug education is like celibate nuns teaching sex education. Their institutional roles undermine their credibility in these areas of teaching.

The D.A.R.E program was initially very well received by parents, politicians, and the public, and, by the late 1990s, the General Accounting Office (GAO) reported that 80% of school districts in the United States were using D.A.R.E. But after the first set of evaluations were completed, the effectiveness of D.A.R.E was questioned. In 1999, a team of researchers at the University of Kentucky found that 10 years after receiving the anti-drug lessons, former D.A.R.E. students were no different from non-D.A.R.E. students in terms of drug use, drug attitudes, or self-esteem. Not surprisingly, every subsequent study on the effectiveness of D.A.R.E. found much the same result. Of particular concern was research by Dr. Dennis Rosenbaum, who found that "there is some evidence of a boomerang effect among suburban kids” (1998). That is, suburban students who were D.A.R.E. graduates scored higher than suburban students in the control group

on all four major drug use measures. In his study, Rosenbaum (1998) concludes that “parents, educators, and police officers have confused program popularity with program effectiveness” (p. 381).

D.A.R.E.’s utter failure and waste of taxpayer dollars drained it of federal funds in 1998. This prompted the Department of Education to establish a new requirement for the “Safe and Drug-Free Schools and Communities” guidelines. From this point on, prevention programs were were required to be evidence-based in order to receive funding (Section 4132). Now, states are required to show that they are selecting and utilizing programs that, at least minimally, demonstrate the promise of success in reducing teen drug use (Office of National Drug Control Policy, 1999, p. 86).

Healthy-Decision Programs

It was during this period that modern social skill programs, such as Life Skills Training (LST), emerged as the leading contender to D.A.R.E (Botvin, Mahalic, & Grotpeter, 1998). Developed by Gilbert Botvin, LST has since attempted to distinguish itself from the flawed D.A.R.E. program by claiming “to educate students not only on the dangers associated with substances, but how to make healthy decisions on their own” (Botvin et al., 1998). LST has since been accepted by the Department of Education as an effective evidence-based curriculum despite an absence of long-term studies. The program has been praised praised for reducing “tobacco, alcohol, and marijuana use by up to 75%; use of multiple drugs by two-thirds; and [for] decreases [in] the use of inhalants, narcotics, and hallucinogens” (Journal of the American Medical Association, 1995). Such remarkable outcomes should be enough to warrant implementing LST in every school in the country, if it weren’t for one thing: These outcomes are probably not accurate. Interestingly,

Gilbert Botvin is also the lead scientist on those evaluations, as well as the one profiting from its success (Botvin, Baker, Dusenbury, Botvin, & Diaz, 1995).

Such conflicts of interest are not proof that the conclusions are flawed. However, Brown and Kreft (1998) examined Botvin's data and methodology and found that, contrary to Botvin's claims of high efficacy, when students received 59%or less of Life Skills Training, their drug use was actually higher than that of students who did not go through LST at all.

In a study about the long-term effectiveness of the LST, Gorman et al. (1996) concluded that social skills programs have little or no impact on participants' alcohol use behavior. These studies have been ignored, which is a persistent theme in the field of prevention. One look at the literature on the vast majority of school-based drug education research that is funded by the U.S. Institute on Drug Abuse, reveals that there is a tendency for authors to submit reviews to be approved, and for editors to publish research that only finds positive effects from an intervention (Kreft, Brown, & Horowitz, 1993).

But more importantly, this is not about LST or D.A.R.E. because, regardless of the particular program, process, or technique employed, Federally developed and supported "no use" curricula have failed. Although the particular substances targeted by such efforts have changed over time, Becks (1998) historical review reveals that the approaches employed to dissuade substance use have remained remarkably the same. In the next chapter, I will explore how, despite repeated offerings, careful scrutiny of the evidence tells us that we have very significant problems that go far beyond drug education.

CHAPTER 3: WHERE WE ARE TODAY

In this chapter I will to discuss today's anti-drug programs. The first thing to cover is instead of incorporating the evidence about drug use into their programs, schools continue to push a message of abstinence without considering, in a holistic way, the challenges and choices facing young people. Additionally, educators continue to rely on scare tactics, misconceptions, and simplistic explanations to convey the mandatory "no use" message. This message has inevitably been rejected by older teens with access to evidence-based information. Finally, it has become unquestionably clear that schools' prevention efforts are ineffective, more recently, students experiences pertaining to these programs have raised serious concerns about the negative impact of "no use" programs and corresponding zero tolerance policies.

Today, the United States continues its vigorous efforts to teach young people how to say no to drugs. Although it seems like, in the last 25 years, there have been some variations in what is being taught, these programs have remained within the relatively narrow range of the "Just Say No" campaign. Researchers have found that, when one looks under the names of the programs and looks at the elements in them, they are remarkably similar, and are bound by one unchanging policy mandate: that is Section 4132 of the Drug-Free Schools and Communities Act that mandates the teaching of "no use" drug education. Simply put, one cannot get funding for a program unless it teaches that all substances are bad, all drugs are harmful, and that preaches a message of "no use". And, if history has not made it clear, a growing body of literature reveals that current programs and their conceptually flawed underpinnings cannot consistently prevent youth from using or abusing substances. (Brown, D'Emidio-Caston, Benard, 2001). The

following goals, methods, and messages have resulted in an ineffectual and biased presentation of current knowledge of drug information in the name of education.

ABSTINENCE

Just about every school drug prevention program in the United States operates on the principle of universal abstinence. Experts agree that this myopic goal is a more significant threat to young peoples' and societies' health and safety, because it leaves young people uninformed about basic drug issues (Brown, D'Emidio-Caston, Benard, 2001). These drug issues are not only about drinking and driving, but they also involve prescription drug use, and a young person evolving into an adult who does not know how to weigh drug information in order to make an informed decision. Most importantly, the insistence on complete abstinence is misguided when considering the strong influence of socialization agents, societal norms, and rites of adolescent passage (Barnes, 1984; Rosenbaum, 1999; Brown, & Kreft, 1998l Skager, 2007). In other words, the educational system has been preaching abstinence even though there is no validity to it.

It is no mystery to see how the use of substances has been normalized in our culture. Americans are bombarded with advertisements to celebrate, to recreate, and medicate with alcohol and pharmaceutical drugs. Popular media promotes substances use as part of the good life with humorous or attractive character. And students who have witnessed the "Ritilazation" of their peers know that ADHD stimulants can help them earn better grades and do better in school. Educational institutions urge young people to be drug-free when, in fact, America is hardly drug-free at all.

The reality is, children are usually confronted with drugs when they enter middle school and by the time they enter high school, a majority of students, including those who choose

abstinence, view the use of alcohol and marijuana as a common social activity (Austin & Skager, 2004). According to the 2015 Monitoring the Future survey (MTF), in the past month 35.3% high school seniors have used alcohol, 23.6% say they have used an illicit drug; with 7.6% reporting they used an illicit drug other than marijuana. One limitation of the MTF survey is that school dropouts have always been excluded but, otherwise, the trends have remained stable since the survey began in 1975. Some psychologists (Newcomb & Bentley, 1998) argue that given the nature of American culture, "teenage experimentation with legal and illegal mind-altering substances should not be considered abnormal or deviant behavior".

Even the government's own GAO believes that "the expectation that teenagers, at a time in their lives when they are most amenable to risk-taking...will accept our abominations, is unrealistic at best" (1993). Warnings to "Just Say No" may only make the disapproved behavior more desirable. Marsha Rosenbaum (1999), author of "Safety First: A Reality-Based Approach to Teens and Drugs," believes that while abstinence from drugs is the ideal choice, our efforts lack risk-reduction education for those who say "yes" or "maybe" or "sometimes." These same individuals are left vulnerable to the trials and errors of their substance use and those of their peers. And that is how problems begin, uninformed experimentation without guidance and boundaries can become very dangerous.

Dr. Andrew Weil (1983), author of the book *From Chocolate to Morphine*, says that whether we like it or not "Drugs are here to stay" (p. 5). With this in mind, experts have suggested that a more appropriate goal for drug education is, perhaps, advising abstinence while addressing safety for those who nevertheless choose to experiment (Skager, 2009; Brown & Horowitz, 1993; Midford, McBride, & Munro, 1998; Poulin & Nicholson, 2005).

Consider our approach to the parallel problem of sexual experimentation, that, like drugs, is an unavoidable part of life that parents have to deal with. Sex education in the early 20th century focused on preventing moral impurity, premarital, extramarital, and autoerotic sexual behaviors (Tupper, 2008). Beginning in the 1960s, the sexual revolution in women's rights and gay rights shifted tolerance in the public sphere for behaviors such as homosexuality, masturbation, and pleasure. A vast majority of Americans came to believe young people should be given information about how to protect themselves from unintended pregnancies and sexually transmitted diseases (Sex Education in America, 2004). While still advocating abstinence as the safest choice, sex education has evolved to provide the knowledge necessary for reducing risk—particularly to older student populations who are most in need. Since then, there has been huge success in reducing harm resulting in a tremendous decrease in unwanted pregnancies and sexually transmitted diseases (Stanger-Hall & Hall, 2011).

Tupper (2008) believes that there is an important reason to look at sex and drugs as human behavioral phenomena that have a lot of similarity. He believes that preventing moral impurity is also a subtext within our drug education paradigm, and whether any actual harms come about is beside the point.

SCARE TACTICS

To satisfy the government's expectations, educators continue to deliver federally funded prevention programs that rely on scare tactics as a pedagogical tool to convey their "no use" message. Despite over 60 years of studies that reject this approach, students are continuously exposed to exaggerations and false information that take the place of honest discussions, leaving the reasons why so many people use drugs open to interpretation and exploration (Goodstadt,

1974; Swisher & Hoffman, 1975; Dorn & Thomson, 1976; Schaps, DiBartolo, Moskowitz, Palley, & Churgin, 1981; Beck, 1998; Petrosino, Turpin, & Finckenauer, 2000).

According to Moore and Saunders (1991), "young people dutifully attend these classes and are then re-subjected to a world where drug-taking is the norm rather than the exception". Rosenbaum (1999) cautions that classroom lessons employing an unbalanced, fear-based approach will inevitably contradict the rich knowledge about drugs and drug use young people have, or will soon have. When exaggerated dangers, false information, or biased presentations are delivered, teens tend to disbelieve the message and discredit the messenger (Beck,1998). Without confidence in what we are telling them, young people may ignore the legitimate warnings about more harmful drugs, such as methamphetamine or heroin that were lumped together with marijuana, and place themselves in real danger.

It is not effective simply to scare young people with accounts of the dangers of drugs, and it is not productive to exaggerate those dangers in prevention programs. Young people have a right to evidence-based, reality-based information that can help them prevent drug-related harms throughout their lives. In the following scenario, a young woman describes how drug information tantamount to scare tactics was just as dangerous as the drugs themselves.

> In high school, my classmates and I had been warned that the use of molly (MDMA) once could melt your spine. The presentations were frightening, but at the same time inconsistent with the drug's euphoric effects which were glamorized by popular media and the music industry. The only drug information I received was ill-conceived scare tactic that in no way prepared me for the drugs' effects. I had not known that ecstasy tablets were notoriously impure, so I failed to take advantage of available drug testing kits. I did not expect the loss

> of appetite, so I failed to nourish myself. I neglected to give my body proper rest, because I did not anticipate the over stimulation and post-session fatigue. And of course, I did not know it was extremely dangerous to mix substances because of their synergistic effects. Knowing these side effects would have certainly delayed my use, or at least helped me anticipate what I should've prepare for. (Anonymous, 2016,)

Although this person did not experience the effects suggested by her drug education class, she felt betrayed by the inaccurate information. Like most teenagers, she came to view authority as less credible on drug issues and looked elsewhere for honest drug information (Brown & Caston, 1995).

USE IS ABUSE

Another dangerous misconception pervasive in drug education is the failure to distinguish between drug use and drug abuse. Throughout the school-based drug education literature, there exists an assumption that all drugs are bad and that any use is abuse. While the scientific literature can testify that drugs are "dangerous to different degrees" (Strategy Council on Drug Abuse's *Federal Strategy for Drug Abuse and Traffic Prevention 1977*), Rosenbaum (1999) notes that " hypocritical messages are often dismissed by teens who see that adults routinely make distinctions between use and abuse" (p. 2).

When young young people recognize the difference between prescriptive norms and actual fact, for example when respected elders unproblematically use substances, they come to believe that the strangers delivering drug facts were simply “lying” to them (Brown, D’Emidio-Caston, & Pollard, 1997). Just as the “all drugs are bad” message fails to stand up to personal observations, it

also blurs the distinction between use and abuse that becomes most salient when considering teens are unable to recognize problematic substance use, whether in oneself or others.

For example, while both are illegal and discouraged, there is a difference between a social marijuana cigarette on a Saturday night and “waking and baking” Monday morning before class. Young people need to understand that there is a complex interaction between the drug they are ingesting, their own mind-set, and the setting in which they use substances (Zinberg, 1984). To teach children that any use is abuse does a disservice to them and to us.

DECISION-MAKING

Rodney Skager (2007), an expert on substance abuse programs, blames the failure of federal drug education programs on “erroneous assumptions about youth development” (p. 579). In his article, “Beyond Zero Tolerance,” Skager (2007) argues that the traditional view of adolescence as a biologically distinct stage in development reinforces the assumption that young people are incapable of making choices about issues such as substance use. This has manifested into didactic, top-down, patronizing forms of education that tells young people what they should think and do . Conversely, young people end up not being able to talk openly and honestly. Instead, they end up saying what they think their teachers or parents want to hear rather than what they really believe (Ball & Cohen, 1996)

Contrary to popular belief, human development specialists have found that, when it comes to decision-making, the difference between adolescents and adults is not found in mental capacity, but rather accumulated life experiences (Quadrel, Fischhoff, & Davis,1993). Psychologists suggest that from the age of about 12 or 13, formal reasoning commences, enabling adolescents to think hypothetically and, thus, reason like adults (Inhelder & Piaget, 1958). This is not to say that

adolescents can accurately assess the risks of drug use, but Skager (2007) believes that a shift in development explains why information in earlier prevention years may have been effective in deterring use, but, suddenly, is rejected by mid-teen years. He reminds us that young people do not ask adults for permission to drink or use drugs. “They respond to the norms of their world just as we all do” (Skager, 2005). Given a culture that has normalized substance use, it is important that young people are prepared to relate and reflect critically of the norms of their own social world.

IN THEIR OWN VOICES

Modern programs, such as LST, have since applauded themselves for helping students improve their decision-making skills. The state of the art approach appears to be more complex and comprehensive. Nevertheless, absent the police uniform, these social skills programs are no different from traditional information only programs when it comes to limiting adolescents natural quest for knowledge. Instead of simply telling children that drug use is bad, they emphasize “decision making skills” and how to make “healthy choices.” Instead of “Just Say No,” children hear, “Use your refusal skills.” Since drugs are not healthy, there is still only one correct decision, to “Just Say No” (Brown & Kreft, 1998). As soon as young people feel as though they are being manipulated, they stop listening.

This narrative was observed when, in 1990, a California law called for an overall evaluation of the largest anti-drug program in America, the California Drug, Alcohol, and Tobacco Education Program. The DATE study, conducted from 1991 to 1994, looked at numerous drug education programs, such as D.A.R.E., LST, and Red Ribbon Week. Analyzing data from more than 5,000 students, this was the first study of its kind to depict the voices of youth as important to evaluating drug education. The three-year study, commissioned by the California Department of

Education (CDE), showed that the most advanced drug education programs do not only fail to educate children effectively regarding the drug decisions they are all going to have to make. But, in many cases, these programs cause a series of negative effects. Although the CDE approved the research methods, they declined to publish the findings. The three-year study by Joel Brown is described in the article "In Their Own Voices: Students and Educators Evaluate California School-Based Drug, Alcohol, and Tobacco Education (DATE) Programs."

Initially, the study focused on traditional evaluation research outcomes, i.e., whether a program increased or decreased youthful substance use. The researchers found that, as a rule, federally funded programs ensured an incomplete and biased presentation of current knowledge regarding both legal and illegal drugs. Whether it was D.A.R.E., LST, or another program delivered under DATE, the universal message was that all drugs were bad in any variation. In focus group interviews, students confirmed that many of them had both heard and understood the "no use" message. Nevertheless, they perceived the drug education programs negatively because they did not believe the message or the ways they were delivered. For example, prevention messages claimed that there was no such thing as moderate use, but students (5th grade) in the focus groups apathetically discussed how family members would get drunk and that it was normal behavior at gatherings. Nearly all the students interviewed discussed the substance "use versus abuse" distinction as a reason why drug education was not credible because, outside of school, they would see a variety of people using a variety of substance with different effects. This caused an emotional contradiction, which Aronson (2003) described as the experience one would have if that "person were to hold two cognitions that were psychotically inconsistent, he or she would experience dissonance."

This dissonance was reported in as early as 6th or 7th grade when young people came to believe they were not being told the truth. By 8th or 9th grade, they came to fully reject the message as well as the messenger. And by high school, 90% of students reported feeling "angry apathy" (Brown & D'Emidio-Caston, 1995, p. 33) towards anti-drug programs.

The students also confirmed the counter-influence strategy of educators attempting to influence their decisions by teaching them how to resist others' influences. Programs stressed "decision making skills" but dictated the correct decision and punished those who make any other choice. These strategies transcended the types of programs and did not depend on whether students were at-risk for substance abuse or were thriving in their schools (Brown & D'Emidio-Caston, 1995).

The DATE findings suggest that, as young people interpreted the contradictory messages of programs such as D.A.R.E. and LST, their initial perception that adults in schools were not credible appeared to be amplified in combination with zero tolerance policies. Young people who stay in school watch their friends who they think may have a drug problem, and that in turn results in a circumstance where young people get the message that adults don't care about them. Notably, many students reported that the school's drug policies were tool for "getting rid of the bad kids" than getting rid of the problem (Brown & D'Emidio-Caston, 1995, p. 56).

So there is a significant issue about the combined impact of such programs and corresponding interventions that seem to escalate the initial dissonance towards drug educators onto the school as a whole (Brown & D'Emidio-Caston, 1995). By coming to believe that school personnel are not credible and do not care, students might well wonder if they cannot believe adults about the drug use they can see in the real world, why should they be valid about algebra

and history and all the other subjects. Overall, while drug-prevention education makes up only a tiny part of the total curriculum, its effects play a disproportionately large role in disconnecting young people from their teachers and compromising the school's' ability to educate effectively (Brown & D'Emidio-Caston, 1995).

In conclusion, young people use these programs as tests to discern whether or not adults are credible. Therefore, not only are these programs themselves questionably effective , but they have ramifications that go far beyond what we see in the educational community.

Even the U.S. GAO in 1991, that evaluates how effectively federal money is being spent, reported, "There is no evidence that the 'no use' approach is more successful than alternative approaches, or even successful in its own right". And, if "we don't fund research on promising alternatives" then the search for promising alternative programs will have to begin again. Unfortunately, federal policymakers have chosen to ignore the GAO's recommendation to examine alternative programs and there is very little government support for researchers to do this. So, given that we are never going to have a drug-free America; and, given that changes in consciousness and perception are part of normal development; how do adults establish positive connections with teenagers? The short answer is that adults can bring about positive relationships with adolescents by treating them with respect.

CHAPTER 4: INTERVENTION

In this chapter, I suggest what could be our best case scenario for drug education. After 115 years of "Just Say No" type messages, educational institutions must start by recognizing that some kids will do drugs no matter what they're told. The first thing I will cover is harm reduction, which recognizes that drugs are here to stay and therefore we must learn how to live with them so they cause the least possible harm to users. But while harm reduction is necessary, it is insufficient. My intervention is that we need to move beyond preventing a problem and into a focus on youth development. A resilience approach to drug education moves away from "at risk" labeling and focuses on capacity-building. Given that it is impossible to inoculate children against all of life's challenges, if we give them the ability to "bounce back" when they do encounter adversity, we are arming them in the best way possible.

HARM REDUCTION

Most of our efforts to educate young people about drug use have focused on the "Just Say No" approach. One exception to this approach took place during the 1970s after the first evaluations of abstinence education verified that the use of scare tactics "resulted in growing polarity and distrust between educators and young people" (Blum, 1969). As it was becoming clear that drug use was not going to be eliminated, the U.S. government decided to take a much more comprehensive approach. During this time, the federal government was promoting responsible

drug use education. There were attempts to understand and educate students on the differences between substance use and abuse. Instead of promoting strict abstinence, programs focused on delivering credible information so that students could make responsible, informed choices regarding their drug use. Adolescent substance experimentation, although not promoted, was seen as a dialectic process of growth.

The goal of this new stance—misuse or abuse prevention—was a major paradigm shift in the field of drug education. Swisher (1979) listed some of the key assumptions that were guiding drug education in the latter half of the 1970s:

- A reasonable goal for drug-abuse prevention should be to educate for responsible decision-making regarding the use of all drugs (licit and illicit) for all ages (p. 427).
- Responsible decisions regarding personal use of drugs should result in fewer negative consequences for the individual (p. 427).

In many ways, these efforts reflected what is more recently referred to as *harm reduction* though the concept had not yet been articulated as such. Unfortunately, this progressive approach to youth and substance use was short-lived. By the time the first evaluations came in, Reagan had intensified the “get tough” approach to the “War on Drugs” and anything that did not preach abstinence was censored from the curriculum. However, globally, we are now seeing that the way in which we have decided to fight the War on Drugs, i.e., punitively, has not worked, specifically with teenagers.

Currently, countries like Western Europe and Australia have adopted harm reduction as the guiding principle for education. A harm reduction approach shows tolerance of the fact that people will continue to use drugs no matter what the laws dictate, and raises the question of how they can do so most safely (Mugford, 1991). The goal focuses on trying to prevent the harms associated with drug use rather than on preventing drug use itself (Duncan, Nicholson, Clifford, Hawkins, & Petosa, 1994). In this sense, harm reduction makes the essential distinction between drug use and abuse. Also, it notes that any drug can be abused but recognizes that no drug is inherently addictive. Such a strategy is consistent with our experience with sex education, drunk driving laws, and needle exchanges, which all have had much success in reducing harm.

RISK AND RESILIENCE

While harm reduction guidance is necessary, I believe there is a greater opportunity here than merely providing information to reduce harm. To take it a step further, schools could focus on preventing and reducing harm from drug use by guiding students to be more resilient. Such training has proved to be an effective means of educating, predicting, and promoting positive life outcomes. It is a normative process that attempts to strengthen the existing qualities of individuals, with the aim that this will protect them against the stresses and adverse situations they will all one day encounter. This orientation is described by Masten (2001), "Resilience does not come from rare and special qualities, but from the everyday magic of ordinary, normative

human resources in the minds, brains, and bodies of children, in their families and relationships, and in their communities" (p. 238).

Providing a foundation of resilience training can be integrated into any learning situation and any program that nurtures development. This holistic approach is especially salient in economically disadvantaged schools that do not have the means to provide the needed academic, social, or emotional support that these students' challenges require.

The results from this resilience approach are long-term and predictive. Resilience research suggests that nearly 80% of young people thrive by mid-life when the following three protective factors are present (Anthony & Cohler, 1984; Garmezy, 1991; Hinkle, 1974; Rutter, 1987; Werner, 1986, 1987):

1. Connectedness to a caring adult.
2. Opportunities for participation and contribution.
3. High self-expectations (Bernard, 1987; Garmezy, 1983, 1987, 1991; Resnick et al., 1997; Rutter, 1981, 1985, 1987; Werner, 1986, 1987, 1989, 1990, 1993; Werner et al., 1971; Werner & Smith, 1977, 1982, 1992, 2001).

Research

In one 40 year study, Werner and Smith (as cited in Bernard, 2004) followed the progress of 700 children who possessed up to four high-risk factors to adulthood. Known as the Kauai study,

Werner and Smith found that at-risk children who had the impact of school-level resiliency protective factors overcame the odds and grew up to be assets to society. Their seminal work on risk and resilience concluded that the impact of protective factors on students was much greater than risks.

Critical to a building resilience is the presence of a compassionate adult who conveys understanding, respect, and interest (Benard, 1991). In a study of kindergarten classrooms, Ponitz, Rimm-Kaufman, Grimm, and Curby (2009) discovered the enormous significance of adults as mentors and models, especially for at-risk students. According to Bonnie Benard (1991), caring relationships from adults establish safety and trust with students despite adverse conditions. Most importantly, the basic principle in achieving positive relationships between adults and young people is treating them with respect.

When addressing the positive effect of caring adult relationships, the same strategies and skills that foster resilience also promote learning (Ponitz et al., 2009). Teachers can enhance students' resilience by simply allowing students to ask questions, by encouraging them to contribute relevant personal experiences, and by giving them an active role in setting the agenda. Resilience theory suggests that when an individual has the opportunity to make decisions, to share and be heard, and to participate in their community, learning improves.

High self-expectations increase the probability of children growing up into thriving individuals (Brown, D'Emidio-Caston, Benard, 2001). School personnel are encouraged "to provide classroom activities that stress high academic achievement while also building students' self-esteem and self-confidence (McMillan & Reed, 1994). High-expectation messages communicate not only firm guidance, structure, and challenge but, and most importantly, convey a belief in the youth's innate resilience and point to strengths and assets as opposed to problems and deficits (Benard, 1991).

These are some of the specific components to thriving but, fundamentally, resilient youth are less disturbed by challenges and have a greater ability to bounce back (SDERA, 2001). Even under the worst circumstances such as poverty, physical or verbal abuse and neglect, when youths' attention was drawn to their innate capacities to thrive, this culminated in adults who were highly functional and, even more, were successful (Brown, D'Emidio-Caston, Benard, 2001). Protective factors do not apply only to young people who face adversity; resilience extends across the board.

RESILIENCE DRUG EDUCATION

When Joel Brown (1995) looked across schools and communities, he found that, in otherwise effective schools, the way drug education was presented was a complete break from what we know about effective education. He says that, with D.A.R.E., LST, and other similar programs,

“effective educational practices are sacrificed at the expense of expensive and ineffective scripted curricula”). Moving from the problematic "abstinence" or "no use" approach to one that focuses on youth development, Brown and his team at the Center for Educational Research and Development have applied a resilience framework to drug education. As described in the book, *Resilience Education* (Brown, D'Emidio-Caston, & Benard, 2000), all youth, at-risk and thriving, will one day have to make drug-related decisions and a variety of decisions, in general, and face adversity in one form or another. Rather than starting with the idea that certain characteristics, personal weaknesses, or deficits are predictive of failure, Brown et al. (2001) said that, within a resilience context, teachers can help kids become skilled decision makers rather than merely telling them which decision is right and which is wrong. This process-based service called “Resilience Drug Education” targets three main protective factors: caring adult relationships, student engagement, and high self-expectations. These factors comprise a skill set of resilience. It is believed that when young people develop these skills, the results carry them through into adulthood enabling healthier drug-use decisions (even if this does not mean abstinence), choices in general, and the capacity to thrive over the course of their lives.

<u>Process-Based</u>

To Brown, D'Emidio-Caston, and Benard (2001), the most important aspect of drug education is the education itself, and the most significant opportunity for positive change lies within this

process. Resilience drug education does not highlight drug information. Rather, drug information is supplied only at a time when it is most likely to be accepted. This is often referred to as a "teachable moment." Most programs do not focus attention on process; they emphasize students learning information by rote. And, when they call them Life Skills, they stress that there is only one right decision to make.

Nature of Interaction

As opposed to condoning drug use outright, Resilience Drug Education presents honest, accurate, and comprehensive information delivered, not by a scripted response, but, rather, by embracing the teachable moment. Taking a resilience approach "requires acknowledging and balancing the ongoing tension between short- and long-term goals for learning" (Brown et al., 2001). Through experiential learning, facilitators can engage each person's natural thirst for connection, learning, and development concerning drugs and related issues.

While top-down lecturing and information dispensing have been acceptable in classes such as math and history, Skager (2009) suggests that, when it comes to personal choices, deep learning will not occur unless delivered via interactive learning. An effective approach should be participatory, interactional, and non-didactic. In Resilience Drug Education, information is considered salient if young people can verify it themselves through various credible sources such as the Internet, their peers, or self-exploration. The attention given to honesty gains the trust of

young people and develops authentic relationships. Conducting exercises to help youth build interpersonal skills within this context, educators, counselors, administrators, or social workers implementing the resilience model accomplish significantly more than merely providing redundant drug education for these young individuals.

The Power of Adult Relationships

By emphasizing trust and offering reassurance of a caring, connected, relationship, a learning opportunity emerges that can gain a young person's interest or strength. Resilience Drug Education provides a sense of meaning and belonging to these young people that paves a sturdy path for the information to be delivered in an unhindered setting that encourages a deeper sense of learning. By establishing trust and building emotional ties of connectedness between youth and adults, information can be provided during these teachable moments that is more likely to be accepted by youths and to become deeply rooted. This occurs not because of the credibility or facts of the information, but because of the caring environment in which this information is presented.

CONCLUSION

From the very beginnings of the temperance movement, to the “Just Say No” era, to the place where we are now, there has been a single message and only one type of learning where the program teaches what decision to make, instead of how to make a reasoned decision (Brown,

1995). Evaluations of all kinds have consistently shown that drug education does not prevent young people from using drugs. In this thesis, I have shown that the fallacies are not those of program implementation but rather of program conceptualization and practice. Increasingly, experts are realizing that it is the goal that needs to be changed, not the technique. But, despite a century of failure, the question of whether the abstinence goal is even attainable is completely off the table for policymakers. Additionally, few people have questioned past theories on youth substance use that have emphasized primarily risk factors and that have developed into a generalized youth deficit educational platform. Such programmed applications not only fail but often backfire in terms of their primary educational objectives. In addition, they also carry over into a general lack of school achievement.

The overlying issue that exists today is that today's youth are growing up with massive amounts of contradictory information. Reform efforts must be mindful that young people have learned more than we realize through social influences, the Internet and social media, and music. The flooding of useful and useless information is not only difficult to navigate through, but has also blurred the distinctions between what is true and who is credible. There are social networking platforms like Erowid (a non-profit educational organization that provides information about psychoactive plants and chemicals as well as activities that can produce altered states of consciousness) where people talk about their drug experiences online, both

positive and negative. It should be no surprise that students do not trust drug educators due to the significant differences between school programs and outside sources of information. Because of this conflict of information, young people are rejecting school programs as not being credible sources of information or assistance. The idea of prevention must be present on both sides of the conflict to reduce the repudiation of school drug programs by young people as more non-credible propaganda.

What is unique about this era is that today's youth are growing up in a state of flux between classifying marijuana as a dangerous narcotic where it is still a Schedule I drug, and the end of marijuana prohibition at the state level. By the turn of the century, the cannabis market had taken mainstreet and marijuana had become part of the normal world, akin to alcohol. This reduced the illegal supply on the street level, where drug dealers do not require identification, and opened up doors for the government to regulate, enforce, and tax the illicit market. These policy shifts came with an absence of drug education. The D.A.R.E. program had even dropped marijuana from its curriculum, perhaps, because it could not rely on scare tactics when a growing number of Americans promoted its legalization. Just say nothing is not better than “Just Say No.” Young people need assistance to navigate through a world where drugs are readily available, “scientific” information has all but become a rhetorical tool, and the lines between what is good information and scare tactics have been dangerously blurred. With all of these factors against

youth and their quest for important evidence-based information, the time has brought about a pivotal movement away from traditional views of negative reinforcement and old policies that reinforced contradictory messages, Resilience Drug Education provides a new platform to deal credibly and compassionately with young people to provide them with the knowledge and skills needed to live in a world where drugs are pervasive. This new direction is not only about making the safest educated decisions when it comes to drugs, but to respect young people as the capable and competent individuals that they are. Fundamentally, Resilience Drug Education sends a critical and effective message to young people from the adults they are working with that these adults genuinely care for their well being. In the words of teenage poet Quantum Hall (2000), "it is time somebody told" the students that adults in schools care and will do whatever it takes for students to be successful". It is this caring process that makes Resilience Drug Education so impactive and will provide the necessary foundation for long-term positive youth development.

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