D.A.R.E. and Scientific Evidence: 
A 20 Year History 

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Abstract

This paper presents a brisk history of the Drug Abuse Resistance Education (D.A.R.E.) program, America's most popular school-based drug prevention strategy. After a brief description of the program, the paper outlines the history of D.A.R.E. from its beginnings in 1983 to the 21st Century, with particular attention paid to research evidence relevant to D.A.R.E. The paper highlights the mid- to late-1990s, a period that saw D.A.R.E. remain resilient and even expand in light of negative research findings. Drawing on results from a study of D.A.R.E. and the uses of evaluation findings, the author offers five common themes to explain this irony. By the late 1990s, however, D.A.R.E. was seemingly in decline. Research - particularly in the form of large government reviews and best practice lists - played an influential role, and ultimately led to a meeting between D.A.R.E. leadership and evaluators to ascertain how the program could be improved. A new D.A.R.E. curriculum targeting a more age-appropriate group of students was introduced and is now being evaluated in a randomized experiment in the U.S. that includes over 100 schools.

Key words: school-based drug prevention, research utilization, evidence-based policy

Introduction

Drug use by underage youth is not only an illegal act itself, but it is also a risk factor for many other problems (e.g., Gottfredson, 1997). For example, research has indicated that adolescents who use drugs are more likely to commit delinquent acts, to offend as adults, to perform poorly in school, to be truant or drop out, and to experience physical and mental health problems (e.g., Gottfredson, 1997). Reducing illegal misuse of drugs by young people is a goal of most nations.

Treating drug misuse and addiction by adolescents, after the problem has manifested itself, is necessary but an insufficient response. Drug-involved individuals, whether at the juvenile or adult level, often experience high rates of failure. Even the most passionate supporters of treatment for drug-involved individuals would agree that intervening after kids have begun using drugs is not an efficient or effective way of dealing with the problem. In addition, waiting until the problem has manifested itself is costly, in terms of the tolls on individuals involved in drugs
(and their families), and the actual dollars spent by governments on the problem.

It is no surprise, therefore, that prevention programs would become a focus of scientists and government officials for the better part of the last three decades in the U.S. Is there anything that can be done that would make it less likely that kids would use drugs in the first place? Or, to borrow from the medical field, is there a program introduced early in life that could inoculate youths from drug involvement?

Not surprisingly, schools have become one of the major domains for introducing special programs designed to prevent drug abuse (e.g., Gottfredson, 1997). Given that schools provide thousands of hours of compulsory education during childhood, and that most children in the U.S. are educated in public school systems for 13 years (from kindergarten through the 12th grade), they are an ideal place for introducing broad prevention programs (e.g., Gottfredson, 1997). American schools now have prevention programs targeting obesity, bias or hate crime, dating violence, sexual abuse, and criminal gang involvement. Of all such school-based strategies, the most commonly implemented program in the schools is focused on drug prevention.

The most popular drug prevention program in the schools, at least in the U.S., is Drug Abuse Resistance Education (D.A.R.E.). The story of D.A.R.E. and the research evidence - in the form of evaluations and reviews of evaluative studies - is a complex one, now encompassing more than 20 years. In this paper, I present a brisk overview of D.A.R.E.’s history with special attention to this scientific evidence.

**What is D.A.R.E.?**

D.A.R.E. is a structured curriculum taught by uniformed police officers. There are actually a wide variety of D.A.R.E. programs, targeting different groups, including those for younger children (kindergarten through 3rd grade), middle school students (roughly 7th-8th grade), high school students (roughly 9th-12th grade), parents, and students with disabilities and other special education needs. D.A.R.E. also has summer camp and after-school programs.

The core curriculum is the most frequently implemented D.A.R.E. strategy and has also been subjected to considerable evaluation. The core program is delivered to 5th and 6th grade students (ages 10-12) over a 16-17 week period, approximately 45-60 minutes per week. Each week covers a lesson in the curriculum. For example, Lesson Five is about “learning ways of saying no,” followed by Lesson Six on “building self-esteem.” Officers receive about 90 hours of training to teach the program.

D.A.R.E. is run by the non-profit umbrella organization, D.A.R.E. America. This organization sets policy that is followed by state and local D.A.R.E. program participants. It also reviews and approves changes in the curriculum. D.A.R.E. America periodically convenes a Scientific Advisory Board comprised of several academic and policy leaders in the drug prevention field. The Scientific Advisory Board is designed to continuously review D.A.R.E. and to make recommendations based on empirical research that will improve the program.
Though the numbers on prevalent D.A.R.E. are elusive, some have put the program in an extraordinary 80% or more of U.S. school districts (Petrosino et al., in preparation). D.A.R.E. America indicates that the program is being utilized in over 50 other nations (www.dare.com).

How D.A.R.E. Began

Darryl Gates was Chief of the Los Angeles Police Department during the 1980s. Drugs affected his life in two ways. As a police chief, he saw that his officers were overly occupied with drug-involved offenders. Despite the staggering number of arrests, the drug problem in Los Angeles was growing and overwhelming his department. On a personal level, Gates' teenage son became involved in drugs and was arrested on several occasions (Gates, 1992). Rogers (1993) also writes that the Los Angeles police were under great criticism for their use of aggressive tactics to combat drugs, particularly in minority communities. In a few well-publicized incidents, police broke down doors or destroyed homes of innocent persons that were mistakenly identified as drug dealing locations.

Whether he needed to do something to improve police-community relations or because he believed that enforcement and punishment was ineffective, Gates asked his department to work with the Los Angeles public school system to develop a prevention curriculum for elementary school children (Gates, 1992). Gates believed that police have great role authority and credibility with children and would be more effective teaching them about the dangers of drug use than teachers or health personnel. Ruth Rich, a researcher employed by the Los Angeles Public Schools, was charged with the task to learn from the existing curricula and develop a new program for police to teach. The end result of this collaborative process was the creation of the D.A.R.E. curriculum. The program was then implemented in several Los Angeles school districts in the early 1980s (Gates, 1992).

The Program's Rapid Expansion and Evaluative Studies

The early evaluation studies of D.A.R.E., as expected for a new program, were few in number. But those that were conducted by the Los Angeles Police Department Training Division were very positive about D.A.R.E. These studies were not circulated nationally, but nothing in them would dissuade the Los Angeles Police Department from further expanding D.A.R.E. within their city. In addition, the program began receiving good media publicity, and businesses such as Coca-Cola donated money to support D.A.R.E.

Evaluation did appear to play a role in the expansion of D.A.R.E. to police departments beyond Los Angeles (Rogers, 1993). In the mid-1980s, the National Institute of Justice (NIJ) hired a consultant to conduct an evaluation of the D.A.R.E. program. One reason for this study was that the federal government was anxious to disseminate D.A.R.E. as a model program, as there was great pressure to do something - anything - about the perceived drug crisis in the U.S.
during the 1980s. The pressure on the federal government to take action was also likely influenced by its own proclamation of a “war on drugs” during the 1980s by both the Reagan and the earlier Bush Presidencies.

The U.S. Bureau of Justice Assistance (BJA) provides monies to local and state justice agencies to implement crime and drug prevention programs. In the 1980s, BJA would foster broader implementation of a particular program by issuing a request-for-proposals. Agencies that applied for funding would agree to pilot the particular intervention, considered a “model” or “exemplary” program, within their jurisdiction. In order for a program to be considered a “model” one by BJA, there had to be scientific evidence that it was effective. NIJ sought an independent evaluation of D.A.R.E. to determine its effectiveness before BJA issued its request-for-proposal and subsequently funded further program implementation.

In 1987, DeJong published results of a quasi-experimental evaluation indicating that kids receiving D.A.R.E. did better than the kids who did not get the program on measures of knowledge, attitudes, and self-reported drug use. The effects were positive enough to convince NIJ and BJA that the request-for-proposals to pilot D.A.R.E. in other sites nationally should proceed. It was not the DeJong (1987) evaluation, however, that brought D.A.R.E. to the attention of the law enforcement community. Instead, DeJong (1986) was asked to write a short report on the program, to be published in the NIJ Research in Brief series (known colloquially as a “RIB”). A copy of each “RIB” is circulated to all justice agencies in the U.S., including police departments. D.A.R.E. was already spreading by word-of-mouth across law enforcement agencies - and the DeJong (1986) “RIB” generated more demand for the program (Rogers, 1993).

Not only was the early evaluation evidence on D.A.R.E. positive (even if most of the studies were uncontrolled), but studies of existing drug education indicated that current practice was ineffective, and even harmful, to adolescents. Before D.A.R.E., the most common drug education program was the simple provision of information to schoolchildren about the effects and dangers of drugs. But the provision of information alone, according to studies in the 1970s and early 1980s, indicated that students exposed to the drug information courses experimented and used drugs more than kids who did not. Rather than cause kids to reconsider their decision to use drugs, providing them information seemed to increase their curiosity about illicit drugs. Thus, police chiefs, education officials, and others were left with few reasonable alternatives in responding to the perceived drug crisis. The demand for D.A.R.E. by the latter part of the 1980s was rapidly increasing.

Meeting the Demand: Providing Training and Funds

Two mechanisms were developed at the federal and state levels of government to help meet this growing demand for D.A.R.E. at the local level. First, the federal government provided money to D.A.R.E. America to start and maintain Regional Training Centers. The rationale behind these training centers is that they would train large numbers of police officers in the D.A.R.E. curricu-
lum who were needed immediately to teach in the schools. As local police officials were trained in D.A.R.E. and became experienced in teaching the program, they were eventually used in training officers in their home states, further expanding capacity in the state for the program. Eventually, most states developed their own specialized D.A.R.E. training units within their state police academies. And as more officers were trained, more classrooms and schools were able to adopt D.A.R.E.

Second, the federal government provided funding to states via the Drug-Free School program (later named “Safe and Drug Free Schools”, now titled the “Safe and Drug Free Schools and Communities”). The Drug Free Schools program provided large block grants to each state education agency (i.e. State Department or Board of Education) who in turn would administer those funds to local school districts (with the amount usually based on student population) to use for drug prevention. These monies were soon used by local school districts to support the adoption of D.A.R.E. In time, D.A.R.E. was specifically mentioned as an appropriate target for funding when the Drug-Free Schools Act was reauthorized in legislation, the only program specifically named.

The Bureau of Justice Assistance annually administers large grants to each state for crime and drug prevention programs [these grants are now known as Byrne Program funds in honor of a police officer in New York murdered by a drug dealer]. Although not specifically named, the first of the listed Byrne funding priorities was “drug demand resistance education taught by a uniformed police officer...,” language that certainly prioritized support of D.A.R.E.

The Science Questions the Program’s Impact

Although the early evaluation evidence on D.A.R.E. was interpreted quite positively, there were few studies and most were not considered very rigorous by researchers. None used random assignment in an experimental design, and most only surveyed children immediately after the program. The amount and quality of the scientific evidence on D.A.R.E. certainly changed beginning in the early 1990s, as a number of randomized and quasi-experimental evaluations of D.A.R.E. were launched and reported. In some cases, the outcomes at immediate post-test were mixed, with some positive findings for D.A.R.E. on attitudes toward drugs and toward the police. But as the studies extended beyond the immediate post-program impact and surveyed kids for months and even years after they attended D.A.R.E., and compared them with children who did not have the program, they began reporting disappointing results. It was a meta-analysis of D.A.R.E. outcome evaluations, however, that generated the most controversy for the program.

A meta-analysis of D.A.R.E. outcome studies

Given the federal investment in D.A.R.E., either directly to support the Regional Training Centers or indirectly as used by local school districts and police departments (with Drug Free Schools or Byrne funding), it was sensible that decision-makers would want to know whether D.A.R.E. positively impacted kids. After a peer review process, NIJ selected the non-profit firm,
Research Triangle Institute (RTI) in North Carolina to conduct the study (Ennett, et al., 1994). RTI did a study of D.A.R.E.’s process and implementation by surveying the nation’s schools. They reported that D.A.R.E. achieved a high degree of fidelity (i.e. D.A.R.E. was generally implemented as planned by D.A.R.E. America), provided intensive training to officers in the curriculum (up to 90 hours in the early 1990s), and was unsurpassed in terms of popularity among school and police personnel, parents, and students.

If these were the only results reported, the opinion of D.A.R.E. may have been very positive except for the academicians aware of the earlier evaluations. But RTI also conducted a systematic review and meta-analysis of the experimental and quasi-experimental evidence reported on D.A.R.E. up through 1992. Although there were many studies on D.A.R.E., most of these included no control or comparison groups. Their extensive searches turned up only eight evaluations that used either a randomized field trial or strong quasi-experimental procedures. They examined the following outcomes: self-reported drug use, attitudes toward police, attitudes toward drugs, and knowledge about drugs. For each of these measures, they created a standardized effect size by dividing the mean difference between experimental and control groups by the pooled standard deviation. By doing this, RTI was able to create a dependent variable (effect size) to represent the magnitude of impact for D.A.R.E. in each of the eight studies.

These results indicated that D.A.R.E. had positive impacts on knowledge, but much smaller effects on attitudes or self-reported drug use. The RTI researchers noted that it was difficult to understand how D.A.R.E. was doing without a basis for comparison. Working with prevention expert Nancy Tobler, RTI compared the effect sizes for the eight D.A.R.E. evaluations with those obtained by Tobler in her earlier comprehensive meta-analysis of all drug prevention programs. Tobler had identified a group of 5th and 6th grade programs (that targeted similar age groups as D.A.R.E.) and classified them as ‘interactive’ (involving role playing and discussion) and ‘non-interactive’ (i.e. lecture and information only programs). RTI had reported minimal effects for D.A.R.E. in preventing subsequent use of drugs by adolescents, but these effects appeared even more dismal when compared to programs described by Tobler as ‘interactive’ (Ennett, et al. 1994). The effect size for D.A.R.E. on drug use was about 1/3 of that for interactive programs. Interactive programs performed slightly better on knowledge (.53 to .42), much better on attitudes (.33 to .11), and were far more successful teaching kids social skills than D.A.R.E. (.76 to .19). The authors concluded that, “D.A.R.E.’s limited influence on adolescent drug use behavior contrasts with the program's popularity and prevalence” (Ennett, et al., 1994).

Though not without criticism (e.g., Gorman, 1994), the review was remarkable for the media attention it received and controversy it generated. It was controversial because it provided evidence that there may be more effective alternatives to D.A.R.E. for the population that the core curriculum targeted (10-12 year olds). In 1995, the NIJ Research in Brief series did publish a summary of the RTI research, noting that D.A.R.E. was to become more interactive.

Experimental studies

Three large-scale investigations of D.A.R.E. (in Illinois, Colorado and Kentucky) became espe-
cially well-cited studies and, following the RTI meta-analysis, also questioned the sustained effect of D.A.R.E. on preventing adolescent drug use (e.g., Rosenbaum, et al., 1995; Clayton et al., 1996; Dukes et al., 1996). It is not difficult to understand why the studies resonated within the academic community. Each of the evaluations was a randomized experiment that included a large sample of students. Increasing the rigor of the study is that each of the evaluations reported long-term follow-ups (ten years in one instance now) and minimized the problem of sample attrition (i.e., the loss of original study participants). In each case, well-respected investigators with considerable experience conducting crime or drug prevention studies led the evaluations.

The Continued Growth and Entrenchment of D.A.R.E.

Despite the RTI meta-analysis and several high-quality evaluation studies questioning D.A.R.E.’s effectiveness in preventing adolescent drug use, the program continued to grow during the mid- to late-1990s. This is understandable given the large delivery system that had been built to support D.A.R.E.; it would be hard to dismantle the grants, training, and police academies in rapid fashion on the basis of academic findings. Nonetheless, data provided by D.A.R.E. America shows the program increasing from 50% in 1994 when the RTI meta-analysis was published and after the first evaluation studies to question D.A.R.E. appeared to 80% by 1999 (Figure 1). These data are supported by other statistics. For example, in one state, the agency that administers federal and state money for justice programs kept good records on the number of towns that received funding for D.A.R.E. In 1994, 200 towns received grants for D.A.R.E. This increased 50% to 300 towns by 1999 (also Figure 1).

Not only had D.A.R.E. remained resilient and grown in light of the skeptical research findings, but it had also become part of the American mainstream and culture. By the late 1990s, there were billboards, bumper stickers, special automobiles, baseball caps, and other paraphernalia featuring the D.A.R.E. logo and usually including a key phrase such as “keeping kids off drugs.” Children who completed the curriculum participated in graduation ceremonies and received fancy certificates, and local newspapers sometimes provided coverage. Beginning in 1990 and continuing through 2005, every sitting U.S. President issued an annual Presidential Proclamation setting aside a “National Day of D.A.R.E.” to celebrate the program. The D.A.R.E. logo could be seen in popular movies and television shows. It would be difficult to find another social program that has been able to accomplish this.

The Robert Wood Johnson Foundation Study and the Uses of Evaluation Research

This entrenchment and growth of D.A.R.E. in light of research findings became the focus of our research study, funded by the Robert Wood Johnson Foundation, a philanthropic organization focused on supporting programs and research in areas relevant to public health such as sub-
Figure 1. Data on prevalence of D.A.R.E. During the 1990s

Percentage of U.S. School Districts With D.A.R.E.
(D.A.R.E. America Estimates from their website)

Number of Towns in State Receiving Funding for D.A.R.E.
(data form unnamed Executive Office of Public Safety)

*Note that 1994 is when the RTI meta-analysis was published (Ennett, et al. 1994).

stance abuse. Our research team, led by Harvard Professor Carol Hirschon Weiss, wanted to know why D.A.R.E. was able to remain so popular despite these apparently negative research findings. What were the major influences on decision-makers at the local, state and federal government level, and what role did evaluation research play? For our project, we conducted scores of interviews with key actors in government, as well as researchers and leaders of the D.A.R.E. America organization. We developed, from these interviews, case studies of what went on in the D.A.R.E. program at the federal level, in government agencies within four different states, and within 16 school districts (eight that had D.A.R.E. at the time of our study, and eight that did not). Several papers from our project have already focused on findings from the interviews at the local and state level (e.g., Weiss, et al 2005; Petrosino, et al, in preparation). Why D.A.R.E. has remained resilient is a complicated story, but five major themes emerged during the course of our research.

* Common Sense Expectations*

Most of our interview participants did not believe it was likely that a program delivered to 5th or 6th grade students for one hour per week, over 16-17 weeks, could impact subsequent drug
use. The longer the follow-up period, the more irrelevant our participants found the research. The 'algebra argument' was frequently offered by D.A.R.E. supporters: "would you expect someone to do well on an algebra test in high school if they studied it one hour a week for one semester?" Some of our participants did not believe it likely that such a program like D.A.R.E. could prevent the use of drugs by youth in their teen or young adult years, so evaluations that questioned the program's effectiveness were not troubling to them. It was, in short, common sense.

Local Experience

For some of our interview participants, local experience outweighed the findings from the more prominent national studies. "D.A.R.E. works for us" was a familiar retort, and participants sometimes told us that they "knew the program was working" locally in their town and schools. Sometimes participants recounted powerful anecdotes or stories of how D.A.R.E. helped a child. In one state, a young girl was able to escape a serial killer by using self-defense strategies she had learned in her D.A.R.E. class. This story received widespread media attention across the state and reinforced positive beliefs among parents, cops and school officials about the merits of D.A.R.E. A few towns or states conducted less rigorous research on D.A.R.E. and reported positive results. These local data were far more persuasive to some than the more skeptical findings from rigorous evaluations reported in other jurisdictions.

Shifting Priorities

Although D.A.R.E. was ultimately designed to prevent drugs, local jurisdictions like the program because it meets other goals. In short, towns and schools want D.A.R.E. because it accomplishes other things, and whether it prevents drug use or not is now a secondary concern. For example, many local agencies desired D.A.R.E. because it puts the officer in the school and fosters a better relationship between police and school officials. This fit in well with the "community policing" and "problem-oriented policing" models that swept law agencies in the United States beginning in the late 1970s. More important to local agencies is how D.A.R.E. fostered more positive relationships between police and juveniles, particularly in minority communities. The anecdotal literature on D.A.R.E. includes many stories of how kids confided in their D.A.R.E. officer to reveal personal problems, child abuse, and drug problems. D.A.R.E. assisted in promoting these positive relationships, and was reason enough according to some decision-makers, for keeping the program around.

Powerful Advocacy Base

D.A.R.E. is a program that enjoyed, by the late 1990s, a wide level of support from nearly every constituency except academic researchers. The majority of parents, teachers, children, principals, police officers, and citizens across jurisdictions loved the program, providing a strong advocacy base. The popularity of D.A.R.E. was not lost on town politicians, educational officials, or police chiefs. Even if they were aware of the negative research, they would have been hard pressed to adopt a different program given D.A.R.E.'s immense popularity.

Questioning the Science

One of the difficulties for policy and practice decision-makers is to make sense of the diverse
number of findings for D.A.R.E. - not only across studies - but also within the same study. Academic researchers, by and large, concluded from their careful reading of the studies that D.A.R.E. did not work. But even as a study questioned the program's sustained impact on adolescent drug use, it generally included a mix of positive findings, maybe just enough to confirm the program's worth to advocates. No greater evidence of how the same study could be interpreted differently was D.A.R.E. America's website that included a section on "research findings." In that section, the very studies interpreted as negative by the academic community were listed as positive evidence for D.A.R.E. This is because even the more skeptical studies will include a wide range of outcomes measured at various time intervals, and at least a few of these will report positive impact for D.A.R.E. These positive nuggets were selectively posted by D.A.R.E. America.

D.A.R.E. on the Run

D.A.R.E. was devastated in the late 1990s by two articles written by a prominent writer, Stephen Glass (1997, 1998). In his 1997 article, entitled "Don't you D.A.R.E.,” Glass provided a shocking account of how the D.A.R.E. America leaders used strong-arm tactics to squash skeptical research findings. These included such stories as calling evaluators at night in their homes to threaten them, trying to intimidate editors of journals that planned to publish negative findings, to influencing tenure review boards of the universities where the evaluators (generally academic professors) worked. Most controversial was Glass' account of how a child was cajoled by a D.A.R.E. officer into turning in her parents for using drugs, resulting in the parents receiving a jail term and the child hauled off to foster care. The articles created bad publicity nationally for D.A.R.E. Upon closer investigation, it was determined that Glass made up a large amount of his material. For example, the town in Glass' article where the child supposedly turned in her parents did not have a D.A.R.E. program. Soon, other inconsistencies were found, and D.A.R.E. sued both the author and the magazines for hundreds of millions of dollar in a libel suit. Eventually, the case was settled out of court, and Glass issued a written apology to D.A.R.E. America that was publicized at its website. Nonetheless, the articles caused a great deal of damage to D.A.R.E.

The U.S. Department of Justice and D.A.R.E.

Though the articles by Stephen Glass generated negative publicity for D.A.R.E., more problematic were research initiatives undertaken by the U.S. Department of Justice that questioned D.A.R.E. For example, in 1996, University of Maryland researchers were awarded a grant by the United States Department of Justice (through its National Institute of Justice) to report to the Congress on the state of crime prevention (Sherman, et al., 1997). In the Maryland Report, each review chapter dealt specifically with the evaluation evidence for interventions in a specific domain, such as policing, corrections, and communities. Gottfredson (1997) tackled the chapter on school-based crime prevention, and justifiably includes drug prevention within this ambit. She surveys the evidence on D.A.R.E. and concludes that:
Evaluations show that as it is most commonly implemented, D.A.R.E. does not reduce substance abuse appreciably. But the revised D.A.R.E. curriculum with its follow-up sessions in later grades has not been evaluated...a reasonable course of action would be to conduct a rigorous study to compare the revised D.A.R.E. program including its follow-up sessions with other plausible, long-term drug prevention curricula containing more social competency content (1997:5-16).

A second Department of Justice initiative that questioned D.A.R.E. was published in 1998, by the University of Colorado’s Center for the Study of Violence Prevention (Mihalic, et al., 2001). The Center received funding to identify model or promising programs that reduced violence - or a risk factor for violence such as adolescent drug use. The Center was also funded to provide technical assistance to aid communities in the implementation of these programs - referred to as Blueprints for Violence Prevention. Although several drug prevention programs were listed, D.A.R.E. was not. The media attention and scrutiny that came from this omission led the Center researchers to issue a summary statement about D.A.R.E. and why it was not a Blueprint (Center for Study and Prevention of Violence, 2001).

The U.S. Department of Education List and Other Initiatives

In the late 1990s, the U.S. Department of Education began to look critically at how states were spending their Safe and Drug Free Schools and Communities money. Government reports questioned how those funds were being managed and used. In 1998, the Department issued regulations requiring that all entities receiving funds under the program must follow “Principles of Effectiveness.” One such Principle authorized schools to either spend their money on “research-based” programs or to conduct a study within two years showing how a program that was not considered research-based was working in their community. As Gorman (2002) writes, this is a great incentive to select research-based programs as few school districts have resources to conduct an evaluation.

The requirement to select a research-based program raised another dilemma. School districts did not have guidance on what a research-based program was. To help districts make this choice, the Department convened an expert panel, which issued the List of Exemplary or Promising Drug or Violence Prevention Programs in 2001. It identified nine exemplary and 33 promising programs, and not surprisingly, D.A.R.E. was not on the list. School districts that wanted to use Department of Education funding for D.A.R.E. would now have to document its effectiveness within two years. Despite briefings by the D.A.R.E. America people on how their program met the “Principles of Effectiveness,” the List was influential in persuading some school districts to move away from D.A.R.E. and adopt approved programs. The List also reinforced the growing perception that there were more effective alternatives to D.A.R.E.

Along with the Department of Education’s List, and the previously discussed Department of Justice initiatives, there were a considerable number of research studies, reviews, best practice lists, and other reports that questioned or resoundingly rejected D.A.R.E. by the early 21st Century. For example, in 2001, the U.S. Surgeon General - the chief public health officer in the United
States - convened a special task force on youth violence, with drug prevention clearly within its ambit. In this report, D.A.R.E. was listed by name as a program that "didn't work." About the same time, the U.S. Center for Substance Abuse Prevention created its own National Register of Effective Programs and Practice (NREPP) and designated top ranked strategies as "Model Programs" (Schinke, et al., 2002). Again, the special designation had funding implications as states could receive special incentive grants if they implemented model programs in their jurisdictions. D.A.R.E. was not on the list. In 2003, the U.S. General Accounting Office reviewed the research on D.A.R.E. at the bequest of the United States Congress. After looking at six long-term evaluations of the program, they issued a summary statement that D.A.R.E. had no sustained impact on drug use. As recently as June 2004, the American Journal of Public Health published a new meta-analysis including recent D.A.R.E. outcome studies, and again reported - similar to the RTI researchers - that the program had little or no impact (West and O'Neal, 2004).

The Media's Message: D.A.R.E. Doesn't Work

The national media found the story that "D.A.R.E. doesn't work" a newsworthy one, given the immense popularity of the program. Articles questioning D.A.R.E. were published in well-read dailies such as the New York Times and the Boston Globe, in weekly periodicals such as the U.S. News & World Report and Newsweek, and news segments critical of D.A.R.E. were aired in television shows watched by millions, such as Dateline and 20/20. In our interviews, we generally found that most participants were aware of the negative evaluations and reports about D.A.R.E. not because they had read the studies - but because they had read media articles about the studies.

Decisions made by large U.S. cities to drop D.A.R.E. also became big news. For example, Salt Lake City, Utah and Minneapolis, Minnesota were two major American cities that dropped D.A.R.E., and city officials they cited the evaluation results as one of the main reasons for their decision. These decisions were front-page news in major metropolitan papers across the nation. Some of advocates for D.A.R.E. were upset because decisions to adopt D.A.R.E., made recently by cities such as New York, were not similarly covered. All in all, the negative media coverage on D.A.R.E. changed some perceptions and led many to conclude that the program was a failed strategy.

Although D.A.R.E. was still prevalent in the U.S., its popularity seemed to decline by the end of the 1990s. The data, however, on the number of school districts using D.A.R.E. are not very reliable. From the data we were able to collect from our research states, however, the number of school districts or towns with D.A.R.E. decreased - sometimes substantially so. For example, an official in one state estimated the program was dropped by 25-50% of towns since the late-1990s.

Other Mutually Influential Factors

The evaluation studies of D.A.R.E. seem to have influenced decisions about the program. But research was not the only factor at play. For example, by the late 1990s, many states had adopted new standards for educational achievement of students, and schools were held accountable for
reaching these goals. Some states began to require that students spend more time in the classroom on core academic subjects like mathematics and reading comprehension, and that left less time for outside programs. D.A.R.E., once considered the most convenient of drug prevention programs because police essentially handled the teaching and the administrative details, was no longer a convenience when competing with math and other academic subjects for classroom time.

Another factor was the shift in priorities during the late 1990s away from drug prevention to school safety. Schools had to cope with mass murders in rural or suburban districts in places like Paducah, Kentucky and Jonesboro, Arkansas, as schoolchildren killed their classmates and teachers in large numbers. The violence reached its apex in April 1999 when two teenagers murdered 13 of their fellow classmates and a teacher at Columbine High School in Littleton, Colorado. These tragedies affected D.A.R.E. in a several ways. In order to meet local needs, federal and state educational authorities directed funding toward security devices and other strategies to promote school safety. The Clinton Administration made a special funding stream available for putting police in the schools, the “School Resource Officer Program.” Essentially, jurisdictions could get up to $50,000 to support an officer to work full-time at a school. The role of the School Resource Officer (SRO) was different than the D.A.R.E. officer. The SRO was viewed as a law enforcement officer, not an educator. But with a strong image of children dying in schoolyards, getting armed police into the schools seemed to be a priority over a kinder and gentler officer teaching children about the dangers of drugs. The rather large federal grants for the SRO meant that some police departments found it more attractive to seek funds to support a SRO rather than smaller funds available to support D.A.R.E.

The 2001 terrorist attacks on the U.S. reinforced concerns about school safety and security, as larger districts in particular considered whether they were potential targets. More pertinent, however, is that the terrorist attacks and concurrent economic downturn led to decreases in federal, state and local government budgets. It was going to be difficult, given hard financial times, to support D.A.R.E. or any other prevention program.


In 1999, an unprecedented meeting was convened between D.A.R.E. America and a number of evaluators who had studied the program. D.A.R.E. America, an organization that was often viewed as defensive resistant to research now appeared willing to discuss methods for improving its own program. In short, there was agreement among participants that D.A.R.E. had a wonderful and well-entrenched delivery system that no other prevention program has or could ever achieve. But there was also consensus that the curriculum had to be improved to take into account recent scientific findings in prevention, and that the program needed to be delivered to more age-appropriate targets. The participants agreed that a new D.A.R.E. curriculum should be developed, tested in middle schools with 6th-8th graders (roughly 12-14 year olds), and that a well-
respected drug prevention scientist sought to lead the study. Zili Sloboda, formerly the Chief of the Prevention Branch of the National Institute of Drug Abuse and now a research scientist at the University of Akron, agreed to be the Principal Investigator for a grant proposal to the Robert Wood Johnson Foundation for the redesign of the curriculum and evaluation the “New D.A.R.E.” She was successful in obtaining a grant to establish expert panels to assist in redeveloping the D.A.R.E. curriculum and the evaluation, and to pilot test it in a small sample of middle schools.

After the pilot test concluded successfully, a more substantial proposal was developed by Sloboda and her colleagues to conduct a randomized field trial of over 100 middle or junior high schools. The experimental schools would use the new D.A.R.E. curriculum. The control group would not. Although the experiment is still in progress, the early results are positive (http://www.asapstoday.org/). There is no doubt that if the new D.A.R.E. is effective, it will reenergize the organization and the many officers involved in teaching the curriculum.

Discussion

In this paper, I have reviewed - albeit briskly - the story of D.A.R.E. over the past two decades. For several years, researchers had considered D.A.R.E. to be an example of how evaluation findings failed to influence policy and practice. It seemed that D.A.R.E. had not only survived, but thrived, despite the number of studies that questioned its impact in preventing adolescent drug use. After our own study, however, our research team concluded that the evaluation evidence did have an impact on decisions about D.A.R.E. D.A.R.E., because of the recent decision by the Robert Wood Johnson Foundation to support its redesign and experimental evaluation, is now viewed as a success story for utilization of research. In fact, Henry (2003) listed the D.A.R.E. evaluations as among the most influential conducted during the past ten years. It is difficult to know, however, how soon research findings should be reflected in policy decisions before they are labeled a success. Patience may be required. Mosteller (1981) noted that it took 167 years for the British Navy to institute into policy the findings from experiments showing that citrus juice prevented scurvy.

We should not underestimate the non-research factors that influenced decisions about D.A.R.E. The program was not initiated because of research, and it is difficult, therefore, to imagine that jurisdictions would turn away from D.A.R.E. solely on the basis of research findings. But it is easy to see how negative research findings, coupled with factors such as the new educational standards (meaning D.A.R.E. was no longer convenient) and school shootings (i.e., drug prevention was no longer the priority issue), could influence decision-makers. In addition, the research findings could be used by decision makers in towns coping with budget issues to argue that the program be scrapped and manpower redirected toward necessary police patrol.

Evaluators are wise to understand that a program with strong advocacy will not react to negative findings lightly. It is not surprising that advocates will engage in a number of “evidence
destruction techniques” to negate the findings from evaluative studies. A frequently used retort of the D.A.R.E. studies, often raised by advocates, is that the evaluations were not relevant because the curriculum had been changed periodically over time. Given that the D.A.R.E. curriculum was constantly revised, every evaluation was viewed by such advocates as being irrelevant. This was frustrating to evaluators, who claimed that D.A.R.E. was treating their curriculum like a moving target that could not be studied in a single place and time. Evaluators facing this argument may be buoyed by the latest meta-analysis of D.A.R.E. (West and O’Neal, 2004), that included evaluations testing curriculum in all of its various forms (except the new D.A.R.E.), with results even more disappointing than the earlier study (Ennett et al., 1994). Thus, changes in the curriculum (whether trivial or substantial) did not lead to a positive impact for D.A.R.E.

Acknowledgements

This paper was primarily supported by a grant from the Robert Wood Johnson Foundation to the Harvard Graduate School of Education (Professor Carol Hirschon Weiss, Principal Investigator). The paper, however, is the responsibility of the author and not any funding agency, institution, or other person. A preliminary version of this paper was given at the Societies of Criminology Key Issues Conference in Paris, May 2004.

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D.A.R.E.と科学的なエビデンス  ——20年間の歴史——

アンソニー・ペトロシーノ  リサーチコンサルタント

この論文は、刑事司法及び犯罪学における無作為統制実験の利用について概観したものである。この論文では、実験を用いる理由として、観測された結果に関する因果の説明を排除できることを重視する。司法に関する実験の歴史について説明した後、この手法の限界についての検討を行う。

キーワード：学校における薬物濫用防止、研究の活用、エビデンスに基づく政策

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