# 'Policing Schools' Strategies: A Review of the Evaluation Evidence

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**Background:** Schools experience a wide range of crime and disorder, victimizing students and staff, and undermining attempts to create a safe and orderly environment for student learning. Police have long established programs with schools, but there has been no systematic review of evaluations of these programs, outside of police-led prevention classroom curriculum programs such as D.A.R.E.

**Purpose:** This paper documents a systematic search to identify experimental and quasi-experimental evaluations that assess the effectiveness of non-educational policing strategies and programs in schools.

**Setting:** Included studies took place in or around K-12 schools in the United States, Canada, and the United Kingdom.

**Intervention:** Studies were included if they reported on a specific school-based strategy that heavily involved police and did not exclusively involve the police *teaching* a curriculum or program such as Drug Abuse Resistance Education (D.A.R.E.).

**Research Design:** Systematic review of experimental or quasi-experimental evaluations.

**Data Collection and Analysis:** Only those impact studies that used experimental or quasi-experimental design, had at least one outcome measure of school crime or disorder, and were available through December 2009 were eligible. Electronic searches and other methods were used to identify published and unpublished evaluation reports.

**Findings:** The searches identified a total of eleven quasi-experimental studies. Ten of the eleven studies would likely have received a "3" on the Maryland Scientific Methods Rating Scale, a common approach to classifying studies on the basis of internal validity. If evidence rating criteria from the U.S. Department of Education's What Works Clearinghouse (WWC) were applied, only one study would likely receive a grade of "Level 2" evidence (acceptable with reservations) and the other ten studies would likely not meet WWC evidence screening criteria.

***Keywords:*** *systematic review; police and schools; crime prevention*

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Although students are safer at school than non-school places, a considerable amount of crime and disorder takes place in the school setting. According to the U.S. Departments of Education and Justice, approximately 86 percent of public schools reported at least one violent crime, theft, or other crime during academic school year 2005-2006 (Dinkes, et al., 2009). Moreover, over half of administrators surveyed in the 2007-2008 School Survey on Crime and Safety reported at least one student threat to physically attack another person, with or without a weapon (Neiman & DeVoe, 2009). Moreover, in 2007, eight percent of students in high school reported "being threatened or injured with a weapon" during the previous 12 months (Dinkes, et al., 2009). An analysis by the Federal Bureau of Investigation found that the majority of offenders arrested at school were charged with simple assault (Noonan & Vavra, 2007).

The problem of school violence, crime and disorder is not just an American issue. Estimates from other countries of school-related crime is more difficult to obtain, but the European Observatory on School Violence has been collating data from nations such as the U.K., Germany, France, and Spain (Debarbieux, 2003). Early estimates from the Observatory's work, for example, included nearly six percent of U.K. teachers claiming they had been threatened or attacked at school, 20% of Spanish students self-reporting vandalism, weapon carrying to schools across Germany ranging from 15-46%, and over one-quarter of French students being involved in a physical assault (Debarbieux, 2003).

These international estimates dovetail with the World Health Organization's (WHO) report that identified violence as the world's priority public health issue (Krug, et al. 2002). The WHO report brought focus on youth violence, and more specifically, on school violence, by such organizations as the United Nations Economic, Social and Cultural Organization (UNESCO, 2007) and the Organization for the Economic Cooperation in Development (OECD, 2003). The European Observatory's offspring, the International Observatory on Violence in the School Environment, was inspired in part by growing interest in this issue around the globe.

Given the crime and disorder at schools in the U.S. and in other nations, it is not a surprise that police would devote resources toward partnering with educators to develop strategies to combat it. School-based interventions by police departments have a long history (e.g., Shaw, 2004). From early "special truant units" or a "police-school liaison officer" to improve student attitudes toward police (e.g., Brown & Yates, 1980), police departments have recognized the importance of developing strategies in collaboration with the schools to combat crime and disorder and have implemented a variety of strategies accordingly (e.g., Shaw, 2004; Raymond, 2010). In contrast to the current climate, in the 1960s, some programs were initiated with some resistance from educators and others who did not want the police involved in their schools and viewed them suspiciously.[1]

In the United States, police presence on school grounds increased dramatically following several high-profile shootings

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[1] This sentiment still exists. In a study of knowledge utilization in the D.A.R.E. program, investigators report that in one district, the negative research on D.A.R.E. was used by one school board member to get D.A.R.E. removed from the schools. The school board member did not want police in school settings (Weiss, et al. 2005)

(e.g., Brown, 2006). American educators are also now more open to police intervention given the detrimental effect that gangs, drugs, bullying, the presence of weapons, and other crime and disorder problems can have on school culture and student learning (e.g., Cook et al., 2009). In addition, laws mandating additional penalties for weapons possession or drug sales around schools have prioritized police patrol activities around educational buildings. Increased police presence and intervention at schools has also been reported in the United Kingdom, Portugal, and other European nations (Smith, 2003). Schools are also targets for police intervention because most delinquent youths or children at risk for getting into trouble with the law attend school, particularly during their developmental years (Gottfredson, 1997). In the United States, federal funding streams for programs like School Resource Officers (administered by its Office of Community-Oriented Policing Services) and Safe Schools/Healthy Students (which requires schools and law enforcement to be among the partners of large collaborations to address violence) further promote police presence and programs in the schools. A recent report by the Justice Policy Institute (2011), however, argues that the presence of police on school grounds has led to increased scrutiny and increases in referrals to the justice system, especially for minor offenses like disorderly conduct.

Shaw's (2004) international review of police-school strategies categorized such strategies into three groups: (1) school-based police officer programs; (2) police as 'teachers' (curriculum approaches); and (3) comprehensive or broad-based liaison programs in which police and other social service agencies are involved with the schools. She reported that non-curricular

policing programs have been implemented in a wide range of countries, including the U.S., U.K., Canada, Germany, Denmark, Australia, the Netherlands, Belgium, Estonia, Poland, and South Africa, at least through 2003.

To our knowledge, there has not been a systematic review of the evaluative evidence specific to the "policing schools" area. The exception is Drug Abuse Resistance Education (D.A.R.E.), a police-led school-based drug prevention curriculum, which is already the subject of two meta-analyses (e.g., Ennett, et al., 1994; West & O'Neal, 2004).[2] Shaw (2004) did report, however, the only comprehensive review to our knowledge of police-school practices around the world, as part of a larger effort on school safety. She did not conduct a systematic review of evidence from evaluations, but a comprehensive synthesis describing documented approaches used around the globe. She (Shaw, 2004) concluded her synthesis with a future research agenda that includes a more comprehensive, comparative review of police-school interventions and the systematic collection and documentation of good practice models and tools. This review of the evaluation evidence builds upon Shaw's (2004) work and recommendations to document the amount and nature of the evaluation evidence on "policing schools."

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[2] This scoping study does not include eligible evaluations of programs in which police teach a structured curriculum or provide an educational program. This includes programs such as D.A.R.E. and Gang Resistance Education and Awareness Training (G.R.E.A.T.), a program inspired by D.A.R.E. that address prevention of gang involvement by youths.

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## Objectives

For this project, we searched for experimental and quasi-experimental evaluative studies that tested the impact of a non-educational policing strategy in the schools on crime or disorder.

## Method

### Criteria for Inclusion and Exclusion of Studies in the Review

For this project, we included those studies that have the following characteristics:

(1) The document reports on a specific school-based, non-education strategy with strong police involvement. Evaluations of police-led curriculum or education programs were not included. The strategy must have specifically targeted schools; projects that included schools in a wider community or neighborhood intervention were not eligible.

Police must either have led or have been an active collaborator in the strategy. Broader programs that involved multiple agencies with minimal police involvement (e.g., police just attended a meeting of concerned agencies about a school problem) were not included. There were a few evaluations of programs that included the police along with many other components. In such studies, one cannot isolate the effects of the police action. The search also did not include studies of the impact of academy or educational training on police performance.

(2) The policing program took place in or directly around a primary or secondary school (Kindergarten to 12th grade in U.S. school systems). In our protocol, we outlined our plan to include studies of policing programs implemented in preschool or higher education settings.

Our searches for evaluative studies included such studies; however we decided to focus on primary/secondary school settings in this report. First, we did not find any evaluations at the preschool level. Second, although there were a few evaluations of interventions at the higher education level, they largely targeted underage drinking and/or driving. Third, the implications of policing college/university settings are different than for policing primary/secondary schools. This is because most colleges and universities, at least in the United States, have their own police force; this is usually not true of K-12 settings, who are patrolled by the local municipal police.[3] Fourth, students at the higher education level are adults and the campus setting involves a less controlled environment than typical K-12 settings. References to excluded studies are available from the authors.

(3) The document contained the results of an impact or outcome evaluation. In short, the document must report on the effects of the intervention on at least one outcome of interest (described below). Descriptions of programs, advocacy or "wisdom" pieces, process and implementation studies, and basic research pieces were not included.

(4) The evaluation either included a distinct randomized control or quasi-experimental comparison group, or employed a time-series analysis (if only a single group was studied). There are many types of quasi-experiments (e.g., see Shadish et al., 2002), but our focus was on those quasi-experiments that either included a comparison group or, if studying a single group, a more sophisticated time series analysis. Simple

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[3] One exception we found was in Texas, where school districts can have their own police.

pre-post designs (comparing a before and after period), which are quite common in policing studies, were not included because of their susceptibility to internal validity threats (e.g., Reichardt & Mark, 2004). We also did not include studies that compared results for a school to all statewide or city schools (e.g., McElvain & Kposowa, 2006). We also did not include studies that examined principal survey data and reported on correlations or regressions of police presence or absence with principal perceptions of their own school's crime. It is not possible in such cross-sectional studies to determine if the order, that is, whether the police presence came before or after the noted "increase in crime."

(5) The evaluation must have included at least one outcome measure that reflects crime or disorder. These could have included data such as official police reports, arrests, calls for service, school disciplinary records, self-reported student behavior, truancy, bullying, or staff perceptions of school safety.

(6) The study report was available through December 2009, without regard to document type (published or unpublished), nation of study origin, or language. We searched for studies published or available up to and including December 2009, without regard for the start date of publication. We also targeted unpublished (grey literature) and published studies, and also attempted to find English and non-English studies without regard to the nation in which the study was conducted.

(7) The study could include samples of students, teachers/staff, individual schools, or school districts as the unit of analysis. Given that our desire was to construct as broad a search as possible to identify evaluative studies, we imposed no exclusion or inclusion criteria on the basis of the type of sample in the study. Programs may have targeted schools, districts, students or professional staff and samples may have been comprised of individuals or larger aggregate units.

## Search Strategy for Identification of Relevant Studies

We relied on six major strategies to identify eligible evaluations published up to December 2009. These were:

(1) Electronic searches of bibliographic databases. Researchers used available online resources and databases at the University of Pennsylvania and Bridgewater State College, as well as two Massachusetts public library systems (the Boston Public Library and the Chelmsford Public Library). Over fifty different databases were searched (see Appendix A).

(2) Checking the bibliographies in prior systematic and narrative reviews. Besides the aforementioned Shaw (2004) review, there were a number of systematic and narrative reviews of related topics that we checked, e.g., reviews of research on the effects of strategies to reduce school violence (e.g., Mytton et al., 2006; Derzon & Wilson, 1999). We identified those reviews from our own collection or via larger collections (e.g., Campbell and Cochrane Libraries and U.K. Centre on Reviews and Dissemination's Database of Reviews of Effectiveness), retrieved those documents, and inspected the citations captured by each of these reviews.

(3) Google searches of the Internet. Many institutions are putting their evaluation reports on the World Wide Web, and we crafted Google searches to uncover these. We limited ourselves to checking the first yield of 500 records, ordered by relevance.

(4) Citation chasing. The reference section of every retrieved evaluation report was also checked to determine whether any possible eligible evaluations were listed. As noted in the eligibility criteria, we were not exclusively seeking English language reports. There were also a number of practice guides and general articles on policing and schools (e.g., Patterson, 2007) that reference evaluative studies, and any relevant citations from these papers were also checked.

(5) Contacting the "informal college" of researchers on this topic. There are networks of researchers conducting research in policing, crime prevention, or school violence who may have been aware of eligible studies. We contacted 25 leading researchers by email to query them about studies they know of that may be relevant to our project. We included a number of colleagues from other nations for help in identifying non-English studies. Those who responded are thanked in the acknowledgements.

### Keyword Strategies for Bibliographic Databases

The databases listed in Appendix A were somewhat idiosyncratic. Our approach was to conduct pilot searches of terms, working iteratively until the yield of citations and abstracts remaining were as relevant to the topic as possible. In other words, we maximized sensitivity (getting as many citations and abstracts as possible) and specificity (making sure that as many as possible are relevant to the project).

Our planned search strategy combined three types of keywords. The first set of keywords (and their derivatives) targeted outcome studies: e.g., "random," "experiment," "control," "evaluate,"

"trial," "impact," "effect," and "outcome." A second set of keywords focused the search on schools and education institutions: e.g., "student," "school," "district," "classroom," "academy," "college," "campus," "teacher," "principal," "faculty," "bully," "truancy," and "superintendent." The third set of keywords focused the search on policing, including keywords such as "police," "patrol," "sheriff," "constable," "enforcement," "officer," and "security." When the database did not permit extensive lists of keywords to be combined, simpler searches involving words such as "police" and "schools" were used.

The specific searches used in each database are available from the authors.

### Retrieving and final Screening of Studies

Search methods resulted in a large number of citations and abstracts. Many of these were easily excluded as not being relevant to the proposed review. In some cases, however, they identified potentially eligible studies. The full text documents of those potentially eligible studies were retrieved and screened by the co-authors. Thanks to full-text electronic journal access, the number of unpublished reports now made available at websites on the World Wide Web, Bridgewater State College's Interlibrary Loan Department, and the good will of authors, we were able to retrieve nearly all full-text reports we initially sought for further screening.

## Results

We located eleven quasi-experimental studies meeting the eligibility criteria. However, none of these studies used a

randomized experimental design, and only one provided evidence that they controlled for pre-existing differences between groups using some type of statistical matching procedure (Bowles et al., 2005). Another study, using statistical procedures, "controlled" for differences on the percentage of economically disadvantaged students between schools that had resource officers versus those that did not (Theriot, 2009). Thus, nine of the eleven studies would be called non-equivalent comparison group designs. Although they are often referred to as the "workhorse design" because of how often they are used in social science settings to evaluate interventions (Cook & Shadish, 2009), they are particularly prone to selection bias, or the possibility that the groups differ along dimensions that could explain any observed result (Shadish, et al., 2002).

Because policing schools interventions are of interest to criminal justice and education researchers, policy makers and practitioners, how the designs are "rated" by each field's prominent standards for evidence can be illustrative. In criminal justice, one of the most popular evidence rating schemes is referred to as the Maryland Scale of Scientific Methods (Sherman, et al., 1997). The Maryland Scale is essentially a scale that provides points depending on how well the design used in the evaluation controlled possible confounding reasons for an observed result besides the intervention, a notion often referred to as internal validity. Thus, the Maryland Scale ranks evaluations from 1-5, with "5" given to well-designed and implemented randomized field experiments. Using the Maryland Scale, nine of the evaluations identified here would likely receive a "3" and two evaluations could receive a "4."

In education, the most prominent standard for evidence, at least in the U.S., is the U.S. Department of Education's What Works Clearinghouse (WWC). The WWC uses a number of criteria to assign evaluations to two levels: Level 1 studies are considered acceptable because they either well-designed and implemented randomized experiments or regression discontinuity designs; and Level 2 studies are considered evidence accepted with reservations (or are downgraded Level 1 studies), because they rely on well matched or equated quasi-experiments (U.S. Department of Education, 2008). All other studies would be classified as "not meeting evidence standards" and is not included in WWC reviews. The WWC would rate the nine non-equivalent comparison group evaluations as "not meeting evidence standards;" only two studies would be eligible to be rated as Level Two evidence, although it is still not clear that they would meet all of the WWC's extensive methodological evidence screens (U.S. Department of Education, 2008).

The studies included in this review draw from over four decades of police-school programs, yet most are strikingly similar in design. Contrast that with evaluations of the D.A.R.E. program, which include a number of randomized schools experiments (see West and O'Neal, 2004), and also was the subject of one of the most impressive experimental studies in educational history in which over 80 *school districts* were randomized to receive a new version of D.A.R.E. or business as usual (Sloboda, et al., 2009).

The studies were conducted in three nations: eight in the U.S., two in the U.K. and one in Canada. They were conducted between 1968 and 2009. Five of the studies evaluate School Resource Officer (SRO) programs (called Community

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Liaison Officer in the one Canadian study). Three studies examine the effects of more intensive policing in the schools, including the two U.K. studies and one New York City project. Two studies assess the impact of specific problem solving strategies used by the police in the schools to tackle a specific problem. Finally, one study examines the impact of provide a "Safe Corridor" for children to travel back and forth to school. We provide a brisk description of these eleven studies, in chronological order, below.

## 1968: School Resource Officer (SRO) Program, Tucson, Arizona (Miller, 1968)

From 1967-1968, the study was carried out in conjunction with the Tucson Police Department to evaluate the effectiveness of the SRO program. The program was used to develop student understanding of the law enforcement role, develop a positive rapport between students and officers, and to reduce the overall juvenile delinquency rates and crimes around the school. The study compared three groups: students with two or more years of exposure to the SRO program, students with six months to two years of exposure, and students with no exposure to the SRO program. The study's objective was to determine if the SRO program reduced crime rates and promoted a more positive perception of law enforcement in the two exposure groups compared to the non-exposure group.

The quasi-experimental was a non-equivalent comparison group design, and evaluated each group using police and school records, and a survey conducted with 1500 middle school-aged students. The results of the evaluation show no significant differences between the

exposure (treatment) groups and the non-exposure (comparison) group whether examining attitudes towards police or delinquency. The evidence does suggest the exposure groups gained a better overall understanding of the role of law enforcement than the comparison group.

## 1979: School Resource Officer (SRO) Program in Hillsborough County, Florida (Templeman, 1979)

The study was carried during 1978-1979 in conjunction with the Hillsborough County Criminal Justice Planning Unit to evaluate the effectiveness of the SRO program for schools. The program's main objectives included officers developing a rapport with students and reducing delinquency rates. The study drew data from schools that had implemented the SRO program (treatment group) and schools that had not implemented the SRO program (comparison group).

The quasi-experiment utilized a non-equivalent comparison group design to evaluate preliminary attitudes towards police and overall juvenile delinquency rates. The results of the study suggest that the exposure (treatment) group had an overall more positive perception of law enforcement than the comparison group, and that students in treatment schools gained a better understanding of the police and developed a rapport with SRO officers. The study, however, does not indicate that the SRO program had a positive impact on delinquency rates.

## 1996: Safe Travel to and From School in Northern Philadelphia, Pennsylvania (Stokes, et al., 1996)

During a six-week period in the spring of 1995, a pilot study was conducted to test a

problem-oriented policing approach for students' traveling to and from school. The study, based in Northern Philadelphia, had a primary objective to determine the impact that targeted patrolling has on the victimization of students (and fear of and reaction to victimization) during the morning and afternoon travel periods. A Geographic Information System (GIS) was used to identify a corridor that had both a concentrated student population and a crime problem.

The quasi-experimental method employed a non-equivalent experimental comparison group design with pretest and posttest measures. The treatment school (utilizing Safe Corridor) and three comparison schools were all drawn from two adjacent districts in Northern Philadelphia. The students were first surveyed at baseline on several victimization factors. The second survey followed a six-month implementation of project Safe Corridor, comparing the results to the baseline measures. The results indicated that Safe Corridor did not have a statistically significant effect on any measure of student safety. Although the program changed student behavior (with more students walking home and participating in after-school activities), there was a slight increase in victimization at the treatment school.

## 2002: Redlands, California police-school partnership to problem-solve gang disputes (Katz, et al., 2002)

Redlands Police received a grant from the U.S. Office of Community-Oriented Policing Services (COPS) during 2000-2002 to implement a problem-solving strategy to address one particular crime problem in one high school.[4] A partnership between the Redlands police and school district led to identifying and responding to a dispute between Mexican-American and Mexican-native gang members, which was affecting students' fear levels. To address the dispute and fear levels, police established a mentorship program in which officers were paired with gang members. Police also instituted a parent training class to equip parents with tactics to help their at-risk youth, and a cultural awareness class to address the ethnic/racial conflict that was perceived to be at the heart of the gang dispute. Because the curricula were part of an overall problem-solving strategy that police developed at the school to address the gang issue, we included this study in our review.

The evaluation included a wide range of data collection that was used to examine pre-post changes at the targeted high school. However, for the quasi-experimental comparison, a non-equivalent comparison group design was used, with the other high school in Redlands not receiving the particular problem solving strategy selected as the comparison school. The quasi-experimental crime or school disorder outcomes included 9th and 11th grade student responses to a survey instrument administered before and after the intervention (that included items on fear, fighting, etc.) and official school records on suspensions and expulsions. A large number of outcomes were reported, and results were mixed, with some in favor of the targeted school and some in favor of the comparison school. Note that the gang

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[4] The grant provided funding to address a problem that the schools and police identified, and the assumption was that a period of planning and data analysis would precede the identification of the problem to be targeted.

dispute problem was not implicitly examined in the comparison school, but pre-post data in the targeted school indicated that the problem largely dissipated before the intervention was implemented.

## 2003: Spartanburg, South Carolina police-school partnership to problem solve student disputes (Maguire, et al., 2003)

During 2000-2002, the Spartanburg, South Carolina Police used a grant from the COPS office to evaluate a problem solving strategy. Like the Redlands, California Police Department in the preceding study (Katz, et al., 2002), Spartanburg used the SARA model (Scanning, Analysis, Response and Assessment) to identify the problem of student disputes in George Washington Junior High School. Police, working with school personnel, implemented several strategies at the junior high school to respond to student conflict, including several that focused on students that were serving in-school suspensions.

The evaluation used a non-equivalent comparison group design, comparing outcomes for disciplinary infractions, suspensions, expulsions and dispute data at George Washington to another junior high school located in Spartanburg. Although some outcomes are positive in direction, authors are cautious to attribute such changes to the intervention because other interventions at the treatment school—such as the implementation of a School Resource Officer program—had also begun during the study time frame.

## 2004: Pilot Evaluation of U.K. Safer School Partnerships (Bhabra, et al., 2004)

In October 2002, a pilot evaluation of the Safer School Partnerships (SSP) was carried out. SSP involved placing a variety of police operations in a hundred school systems across the U.K. The goal of the pilot study was to reduce problem behaviors in the school and improve school systems. The evaluation involved eleven SSP schools (four that were fully funded) and two comparison schools selected from among high-crime areas. The evaluation used a non-equivalent comparison group design with pre- and post-test measures to compare a variety of behavioral outcomes (i.e. safety, happiness, bullying, and substance abuse), along with measures for attitudes and expectations of police and SSP. SSP school official perceptions were largely positive, including decreases in bullying and substance abuse. However, when examining the quasi-experimental data, the results indicate that there were no substantial differences in the majority of behavioral measures (including bullying and substance abuse) between the SSP schools and the comparison schools. Attitudes towards police were not statistically different for students within the SSP schools compared to those from comparison schools, although the data suggest SSP students were more respectful of police after the implementation of the program. Overall the pilot study showed no changes over the six-month evaluation period. The authors noted that program implementation problems compromised their ability to conduct a more rigorous evaluation.

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## 2005: U.K. National Evaluation of the Safer Schools Partnerships (Bowles, et al., 2005)

In 2004, an extensive follow-up evaluation was conducted of the SSP program. As mentioned in the preceding study (Bhabra, et al., 2004), the basic theme of SSP is to build a close relationship between police and schools to address crime and disorder and improve systems. The program takes a variety of forms, from low-impact policing, to an intensive multi-unit approach within a cluster of schools. The specific objectives of SSPs are to reduce victimization, create "whole school" approaches for developing positive social behaviors, target and assist at risk students, promote full-time education for all students, and create a safer school environment. The study involved fifteen schools utilizing a SSP intervention program and fifteen comparison schools, matched on truancy rates and exam scores. The quasi-experiment involved a matched comparison group design, with pre- and post-test data for the majority of behavioral and school-oriented measures. The outcomes included several factors related to youth offending (e.g., bullying, vandalizing, substance abuse) and educational issues (e.g., absence rates, truancy, exclusion rates, exam scores). Although it appears that there is no significant and positive impact of the SSP on offending measures, the study did report that absence (truancy) rates dropped significantly in all 15 SSP schools, relative to the comparison schools.

## 2006: Cape Breton, Canada Regional Police Service's Community Liaison Officer Program (McKay, et al., 2006)

In 1997, the Cape Breton Community Liaison Officer Program (CLOP) established a formal partnership between the Cape Breton Regional Police and the Cape Breton Victoria Regional School Board. The program involved utilizing an in-school officer to act as a proactive positive role model for students, promote school safety, initiate school partnerships with community-based programs, and provide conflict resolution to develop positive social behaviors. In 2006, five schools were identified in the region as participating in the CLOP; the evaluation included two CLOP schools and two comparison schools with no program implementation. CLOs did not report receiving any specialized training, although the study suggests that officers are very well prepared for the position. CLOs had a variety of responsibilities that required officers to act out both authoritative and informal functions. Officers were responsible for presentations on a variety of student relevant issues (i.e. bullying, drugs). CLOs also participated in extracurricular activities with students and networked with administration, counselors, and other school staff. Officers were additionally required to provide traditional police support within the school grounds.

The quasi-experimental comparison, a non-equivalent comparison group design, included qualitative interviews with CLOs and principals, a school-safety survey with measures drawn from several well-established databases, and finally a student focus group comprised of nine

open-ended questions. Perceived outcomes from police, school administration, teachers, and students are mainly positive and most strongly believe in the potential of the program. The survey data indicated that the presence of a CLO did not seem to impact student safety or promote positive social behaviors.

## 2007: New York City Police Impact Schools Initiative (Brady, et al., 2007)

In 2004, the New York City Police in partnership with the Mayor's Office and the New York City Public Schools initiated the Impact Schools program. This program involved using data to identify the city's most dangerous schools. In 2004, twelve schools (ten high schools and two middle schools) were identified; by the end of 2004, 17 schools were targeted for the Initiative. At Impact Schools, police presence was increased (doubled at minimum). In addition, police engaged in aggressive enforcement of lower level student crime and disorder, rigorously enforcing the New York City Public Schools Discipline Code, in an attempt to correct the early conditions that lead to school disorder. Safety intervention teams were formed to visit each school to assess safety issues and to monitor principals on how they responded to serious student incidents. Five "student suspension centers" were opened to deal with troubled students, and increased coordination with courts and probation officers also took place.

The evaluation was a non-equivalent comparison group design. Although the investigators attempted to find ten comparison schools that were similar to the treatment schools, this proved elusive

as the Impact Schools dealt with a larger percentage of at-risk students. Comparisons were also made to all non-Impact schools in the city. Outcomes included suspensions, major crimes, attendance, and police noncriminal activities. Because the emphasis of the initiative was to crack down on even minor student infractions, it may have been no surprise that police noncriminal activity and suspensions increased at the targeted schools. Slight decreases in major crime were indicated at both targeted and comparison schools.

## 2008: North Carolina School Resource Officer (SRO) Program (Barnes, 2008)

This study analyzed statewide data from 1995-2000 to test the impact of SROs in North Carolina public schools. The SRO Program is designed to develop a positive relationship between the police and students, with the main objective to reduce crime in and around the school. The study involved an assessment of data drawn from five consecutive academic years.

The quasi-experimental method, a non-equivalent experimental comparison group design, utilized a pre- and post-test to assess schools that implemented the SRO Program (treatment) versus schools without the SRO Program (comparisons). The outcomes for the study are categorized as participants' perceptions of the program (i.e. school administration, SROs, students), and the impact a SRO's placement has on the level of crime in school. The results suggest that the placement of an SRO has little or no significant impact on the levels of crime and negative behavior in school. The author suggests possible explanations for

the outcome. For one, officers are often pulled out of school assignment for various tasks, not allowing the development of police-student bonds.

## 2009: Southeastern U.S. School Resource Officer Program study (Theriot, 2009)

This study was not designed to evaluate the crime control effect of School Resource Officers, but to determine if their presence led to more arrests, in what Theriot (2009) refers to as the "criminalization of student behavior" (p. 280). In the study, the investigator analyzed arrest data from 28 schools in a single, large, urban, Southeastern U.S. district. Thirteen schools had a school resource officer for at least three years, and 15 schools did not. The schools differed however, on the basis of social demographic statistics, including race (the treatment schools averaged 34% ethnic minority and the comparison schools averaged 11% ethnic minority). Concurrently, there was a sizable difference between the schools in the average number of students considered to be economically disadvantaged (60% for treatment schools, 30% for comparison schools).

Theriot (2009) examines arrest data for 2003-2006 for the 28 schools. He reports that the mean arrest rate per 100 students across the 13 treatment schools is 12; comparison schools averaged four arrests during this time period. When broken down by certain types of arrests, rates are similar for most offenses except disorderly conduct arrests. Treatment schools averaged 9 arrests per 100 students for disorderly conduct compared to two arrests for schools without resource officers. When economic disadvantage is entered into a statistical analysis to "predict" arrests, there is no "statistically significant" difference between treatment and comparison schools on arrests, except those for disorderly conduct offenses. This study could be considered as a statistically controlled comparison group design.

## Discussion

Our searches turned up a large number of practice guides, wisdom pieces and "how to" manuals in the area of policing schools. The amount of experimental and quasi-experimental evidence, at the current time, pales in comparison to the production of "guides" and "manuals" for police and schools. This does not mean the advice provided in such guides or manuals is not to be followed, as it is based on years of accumulated practitioner wisdom, but that the evidence base in terms of evaluation studies is still premature to make definitive conclusions about whether policing schools has an impact on crime and disorder in the schools. We located only eleven studies that could meet most research definitions of a "quasi-experiment" and many of these would not have been rated as rigorous designs by evidence rating systems commonly used in justice (The Maryland Scale of Scientific Methods) or education (the WWC).

The most common design for evaluating policing schools strategies—which were not included in the review—are referred to as a "pre-post" or "before and after" studies. In many of these pre-post studies, very large and dramatic decreases in school crime or student misbehavior are noted. However, such designs are particularly prone to a number of rival explanations for such observed decreases. With little exception,

the eleven quasi-experiments reported here could not match those same crime reduction claims made in reports using pre-post data with no comparisons. In addition, only one study (Theriot, 2009) examined the possible negative consequence of having more police in schools, and examining whether there is an increase in police using arrest for minor student misbehavior.

We recommend that randomized experiments be implemented to study the impact of police programs on the schools. If the police strategy is targeting the whole school, then the random assignment of schools to treatment schools that receive the intervention and control schools that do not is optimal. Such experiments can be conducted most easily in cases in which large municipal police departments implement strategies and programs in the schools. For example, the Boston Police Department serves a municipality that has 135 public pre-Kindergarten to high school facilities. A randomized trial could be constructed in which a small set of schools (e.g., 20) receives a police intervention and another subset does not (e.g., 20). Gargani and Cook (2005) have also outlined some promising scenarios in which the number of schools to be randomized can be lower if a pretest with a high correlation with the posttest can be used as a covariate in the design, but thus far, such pretest-posttest correlates have been elusive with crime outcomes..

Although randomized schools designs are becoming more frequent in the U.S. with funding and encouragement of the U.S. Department of Education's Institute of Education Sciences, there is still resistance by some educators to withhold potentially positive treatment from a number of schools that need assistance. Another powerful design that could be considered is the regression-discontinuity design (RDD). In RDD studies, police and educators could be convened to create a score of "dangerousness" for schools in a particular district (e.g., Petrosino, 2011). Only those schools scoring above a certain threshold would receive the police strategy, those below the score would not. No exceptions are allowed. Because the procedure for assigning schools to treatment and control is completely known (it is solely based on the score), evaluators can use this information to understand the impact of the intervention. A particularly powerful component of the design is that evaluators can determine if there is any change in performance in schools that scored just below the cut-off (and are in the comparison group) and schools that scored just above the cut-off (and are in the treatment group) to see if there is any impact of the program. Any "discontinuity" or difference between schools just above a cut-off score versus just below it would be very persuasive, since one would expect that schools receiving a score of 59 are very similar to those receiving a 61 (if the cut-off is 60). More details on the RDD are provided by Henry (2009), Shadish, et al. (2002), and Minor, et al. (1990).

When random assignment or RDD studies are not possible to implement, another approach to quasi-experimental research is to use statistical procedures to equate a set of comparison schools. For example, by using pretest scores as a matching covariate, the similarity of schools can be better established (Gargani & Cook, 2005). One strategy that has been used more extensively in social science research is the use of propensity scores to equate groups such as schools. In short, statistical analyses are performed to determine what factors "predict" a school receiving treatment (such as a police program). These factors are used to

compute a score that indicates a school's likelihood or propensity to be in the treatment. The evaluators are then able to use the propensity score to match cases, i.e., making sure that comparison schools are selected that have similar propensity scores as the treatment schools.

All of the earlier design suggestions assume instances in which the police strategy is being implemented in a number of schools. But for smaller municipalities, or instances in which the intervention is only being implemented in one school, other methods can be designed that would increase the precision of the study. For example, Bloom (2003) shows how even annually collected data can be used in a "short interrupted time series" design to assess the introduction of an intervention in even one treatment school. Such a study could be further strengthened with the introduction of a comparison school. Such a design can be taxing in that it requires a set of data that can be tabulated for a long period before the intervention and for a long period afterwards. However, data like school discipline actions are one type of administrative records that are often used in studies. Although the short interrupted time series design is not ideal, it would seem to be more persuasive than the simple "before and after" (pre-post designs) studies that dominate the literature on police-schools programs.

Despite the paucity of experiments and well-matched quasi-experiments in this area, there have been many studies. As mentioned, many of these would be considered pre-post or "before after" analyses. There are also a number of studies that examine correlations between particular aspects of school safety, including police presence, and increases or decreases in school crime. There have also been some qualitative studies that have investigated the role of the police in the schools. One question is whether these studies should have a "voice" or add something to our knowledge of policing schools. Although the internal validity issues in the pre-post and correlation studies are compelling, perhaps there are other ways these studies can be mined for important insights into police interventions in the schools. Such a review could proceed in narrative rather than quantitative fashion, with the focus not on "what works" but on "what lessons can be learned."

Systematic reviews were developed and retained their focus on experimental and quasi-experimental research studies, with some exceptions. One possible strategy has been proposed by researchers in the U.K., in a process they have titled "systematic mapping," in which they rigorously identify all research and use it to map what is known about a particular topic (e.g., Bates & Coren, 2006). Such a mapping procedure not only systematically gathers and examines the evidence for the effect of an intervention, but all research that addresses a topic such as policing schools. This too might serve as a fruitful endeavor, although it might be challenging in a broadly defined area.

The results of this review should service as an incentive by researchers and funders to collaborate on a larger scale rigorous evaluation of a policing schools program. It is only through the accumulation of rigorous evaluations that we can generate more stable knowledge about the crime prevention effects of these interventions.

## Acknowledgments

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# Appendix A:
# Results of Searches of Bibliographic Databases/Search Engines

| Database/Search Engine | Number of Citations Retrieved | Number of "Hits" |
|---|:---:|:---:|
| Academic Search Premiere | 654 | 6 |
| The Alcohol and Alcohol Problems Science Database (ETOH) | 32 | 1 |
| American Periodical Series Online | 20 | 0 |
| Bibliography of Nordic Criminology/Criminal Justice in Denmark | 208 | 1 |
| British Public Library Integrated Catalog | 270 | 13 |
| Canadian Evaluation Society Grey Literature | 55 | 0 |
| California Peace Officers Standards and Training Law Enforcement Archives | 296 | 12 |
| Chalk's E-Library | 799 | 0 |
| CHICANO DATABASE | 36 | 0 |
| Claseperiodica Abstracts (Caribbean and Latin America) | 46 | 0 |
| Cochrane Library: Cochrane Central Controlled Trial Register | 46 | 5 |
| Cochrane Library: Cochrane Health Technology Assessment Database | 5 | 0 |
| Cochrane Library: National Health Service Economic Evaluations | 47 | 0 |
| Conference Papers Index | 188 | 2 |
| Criminal Justice Abstracts | 1601 | 52 |
| Database of African theses and Dissertations | 143 | 0 |
| Database of Research in International Education | 18 | 0 |
| EBSCO Master File | 303 | 1 |
| EBSCO Mega-file | 1381 | 1 |
| EBSCO Military and Government Collection | 104 | 0 |
| EBSCO SOCINDEX | 212 | 2 |
| Econlit | 292 | 0 |
| ECONPAPERS | 479 | 0 |
| Education Administration Abstracts | 424 | 2 |
| Education Resources Information Center (ERIC) | 1183 | 95 |
| Education Full-Text | 540 | 17 |
| Education Retro Index | 22 | 7 |

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| Database/Search Engine | Number of Citations Retrieved | Number of "Hits" |
|---|---|---|
| Educators Reference Complete InfoTrac | 240 | 0 |
| Expanded Academic ASAP Plus | 442 | 9 |
| Family and Society Studies Abstracts | 377 | 3 |
| First Search OCLC | 706 | 15 |
| General OneFile Infotrac | 619 | 7 |
| Google | 1395 | 23 |
| Google Scholar | 500 (searched first 500 only) | 11 |
| Homeland Security Digital Library | 97 | 0 |
| Index to Current Urban Documents | 35 | 1 |
| Index to Foreign Legal Periodicals | 18 | 1 |
| International Bibliography of the Social Sciences | 195 | 1 |
| ISI Web of Knowledge/Social Science Citation Index | 503 | 3 |
| JRSA ISAR | 914 | 6 |
| JSTOR | 533 | 0 |
| Medline | 632 | 7 |
| National Bureau of Economic Research Working Papers | 200 | 0 |
| NCJRS | 1510 | 50 |
| Ovid Full-Text Journals and Ovid Books | 322 | 2 |
| Policy Archive | 29 | 0 |
| Policy File | 753 | 1 |
| ProQuest Dissertations | 935 | 19 |
| Psychology and Behavioral Sciences Collection | 106 | 0 |
| Psychological Abstracts (PsycInfo) | 838 | 2 |
| Public Affairs Information Service (PAIS) | 2 | 0 |
| Public Affairs Information Service (PAIS) International | 74 | 4 |
| Race Relations Abstracts | 111 | 0 |
| Sage Criminology Full-Text | 244 | 3 |
| Selected Periodicals Index Online | 91 | 13 |
| Social Service Abstracts | 170 | 15 |
| Social Work Abstracts | 37 | 0 |
| Sociological Abstracts (Sociofile) | 551 | 10 |
| SSRN Electronic Library | 837 | 1 |
| Theses Canada | 1119 | 3 |

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| Database/Search Engine | Number of Citations Retrieved | Number of "Hits" |
| --- | --- | --- |
| UK and Ireland Dissertations and Theses | 94 | 1 |
| Urban Studies Abstracts | 82 | 1 |
| World Bank Documents | 470 | 0 |
| Worldwide Political Abstracts | 94 | 4 |