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Scared Straight and Other Juvenile Awareness Programs for Preventing Juvenile Delinquency



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Even though research has indicated that deterrence-based programs such as Scared Straight are not effective, jurisdictions across the country continue to use [them].

Introduction

Introduction

In the 1970s, inmates serving life sentences at a prison in New Jersey started a program known as "Scared Straight" to deter at-risk or delinquent children from a future life of crime. The inmates used aggressive presentations depicting the worst of life in adult prisons, including exaggerated stories of rape and murder, to discourage at-risk juveniles visiting the prison facility from committing future criminal offenses (Finckenauer 1982).

The initial program was also the subject of a television documentary, *Scared Straight*, which claimed that nine of 10 delinquent youth (90 percent) who attended the program and featured in the show did not reoffend. The documentary went on to win an Emmy Award and led to increased popularity for the program (Finckenauer 1982). More than 30 states rapidly implemented the program, resulting in special congressional hearings on the program by the United States House Committee on Education and Labor, Subcommittee on Human Resources (U.S. Congress 1979).

Programs like Scared Straight are rooted in deterrence theory. Even though research has indicated that deterrence-based programs such as Scared Straight are not effective (Sherman et al. 1997; Lipsey 1992), jurisdictions across the country continue to use Scared Straight and related programs (see Finckenauer and Gavin 1999; Blum and Woodlee 2001). Other countries such as Australia (O'Malley et al. 1993), the United Kingdom (Lloyd 1995), Norway (Storvall and Hovland 1998), Germany (Hall 1999), and Canada (O'Malley et al. 1993) have also replicated the program.

In 1999, *Scared Straight: 20 Years Later* aired in the United States, claiming similar results to those reported in the 1979 film (Fries 1999; Muhammed 1999). This newer film reported that of the 12 juveniles attending the program, 10 remained offense-free in the 3-month follow-up (Muhammed 1999). Unfortunately, as in the 1979 television show, no data on control or comparison groups were presented.

In 2000, Petrosino and his colleagues conducted a preliminary systematic review of nine randomized field trials. They found that Scared Straight-type programs generally increased crime between 1 and 28 percent in the treatment group when compared to the no-treatment group. In 2002, Petrosino and colleagues published formal reviews with the Cochrane Collaboration and the Campbell Collaboration (Petrosino, Turpin-Petrosino, and Buehler 2002; 2003). These reviews also reported negative findings for these juvenile awareness programs.

Despite the results of these reviews and other research, Scared Straight and other juvenile awareness programs continue to be promoted as an effective crime prevention strategy. The most recent example is seen in the A&E weekly television series titled *Beyond Scared Straight*, which as of 2011 was the highest rated show in the station's history. Its success has renewed interest in Scared Straight and similar programs as a crime prevention strategy (Dehnart 2011).

At the same time, this show has also spurred criticism that the continuation of such programs ignores the lengthy history of scientific evidence against their success (Robinson and Slowikowski 2011). Although prior research is no guarantee that interventions will (or will not) work in a future setting, continued examination of the evidence will improve the ability of researchers, practitioners, and policy makers to judge the efficacy of these programs.

The authors [of this review] focused their analyses on the most common outcome, which was . . . the percentage of each group that reoffended after the program's completion.

Summary of Systematic Review Methods

Summary of Systematic Review Methods

This review included studies that used only a randomized experimental design, as it is the only design that can control for both known and unknown factors that can influence outcomes (outside the intervention under investigation). All included studies compared the effects of "Scared Straight" or another juvenile awareness program to a control group, and each study provides data on at least one relevant outcome (delinquency). The review included studies published or available through 2012, including studies available in languages other than English.

A variety of search methods (e.g., electronic searches and contacting colleagues) identified relevant studies for inclusion in this review. The searches included both published documents (e.g., journal articles) as well as unpublished documents (e.g., dissertations). The authors of this review then used an instrument to capture information on each study, using these data to summarize the effects of Scared Straight and similar juvenile awareness programs as they compared to the control groups. Due to the paucity of outcome data reported, the authors focused their analyses on the most common outcome, which was prevalence, or the percentage of each group that reoffended after the program's completion.

A total of 946 juveniles participated in the nine studies.

Descriptive Review Findings

Descriptive Review Findings

This review includes a total of nine studies reported in 11 publications and conducted in eight different U.S. states (Michigan was the site for two studies: Yarborough 1979; Michigan DOC 1967). Each set of researchers was responsible for only one study.

The studies span the years from 1967 to 1992, and the first five studies are unpublished (found in government documents or dissertations). The remaining four studies were in academic journal or book publications.

The participants ranged in average age from 15 to 17, and only the New Jersey study included female participants (Finckenauer 1982). A total of 946 juveniles participated in the nine studies. Most of the included studies used delinquent youths who were already in contact with the juvenile justice system.

The follow-up periods varied and included measurements at 3, 6, 9, 12, and 24 months post-intervention. The appendix on page 28 provides further details on the included studies.

The analysis of the data . . . demonstrates that Scared Straight and other similar programs increase the prevalence of crime or delinquency at the first follow-up period.

Meta-Analysis: Main Effects ¹ Fixed effects and random effects models reflect assumptions about how the effect sizes of studies in this review vary. They have implications for weighing studies, and different statistical calculations apply (Borenstein et al. 2010).

Meta-Analysis: Main Effects

The authors of this review conducted a meta-analysis to provide a statistical summary of the results of the nine experiments. First, the authors converted the difference between the two groups in the study to a common metric, termed an effect size (Wilson and Lipsey 2001; Boruch and Petrosino 2004). Unfortunately, two studies (Locke et al. 1986; Cook and Spirrison 1992) did not report enough data to compute an effect size and could not be included in this meta-analysis.

There are many kinds of effect sizes, and this review uses a common one—odds ratios (OR). An odds ratio, in this context, is the odds of a youth in the treatment group committing a new offense compared to the odds of a youth in the control group committing a new offense. An odds ratio of 1.0 means there was no difference in prevalence rates between treatment and control groups. An odds ratio above 1.0 means that the intervention increased crime, and an odds ratio below 1.0 means that the treatment reduced crime. Reported confidence intervals (CIs) provide a measure of the stability of the odds ratio estimate. In addition, this review includes analyses assuming both random and fixed effects models.¹

Figures 1 and 2 provide data from the main meta-analysis, including a forest plot and a visual summary of the effects reported by the seven studies included in the meta-analysis. Given the paucity of follow-up data, this review only reports the crime outcomes for official measures (e.g., arrest) at the first follow-up time interval period reported (e.g., 6 months).

The analysis of the data from the seven studies reporting reoffending rates demonstrates that Scared Straight and other similar programs increase the prevalence of crime or delinquency at the first follow-up period. Assuming either a fixed effect or random effects model does not change their overall negative impact. Under the fixed effect model (Figure 1), the OR is 1.68 (CI 1.20-2.36); using a random effects model (Figure 2), the mean OR is not much different at 1.72 (CI 1.13-2.62). Both are statistically significant, and the intervention increases the odds of offending by between 1.6 and 1.7 to 1.

Figure 1. Effects of Scared Straight and other similar programs: Meta-analysis of first effect crime outcomes (fixed effects analysis)

Study Name	Statistics for each Study				Odds ra	atio and 9	95% CI		
	Odds Ratio	Lower Limit	Upper Limit	Z- Value	p- Value				
Finckenauer 1982	5.454	1.650	18.022	2.781	0.005		-	+	
GERPDC 1979	1.513	0.607	3.772	0.888	0.374		+		
Lewis 1983	2.092	0.860	5.090	1.627	0.104		-	-	
Michigan DOC 1967	3.750	1.110	12.669	2.128	0.033		-	+	
Orchowsky and Taylor 1981	1.087	0.444	2.660	0.183	0.855		+		
Vreeland 1981	1.476	0.569	3.832	0.801	0.423		+		
Yarborough 1979	1.054	0.537	2.070	0.153	0.879		+		
Weighted effects across all studies	1.642	1.162	2.320	2.814	0.005		•		
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Figure 2. Effects of Scared Straight and other similar programs: Meta-analysis of first effect crime outcomes (random effects analysis)

Study Name	Statistics for each Study				Odd	s ratio and	95% CI		
	Odds Ratio	Lower Limit	Upper Limit	Z-Value	p-Value				
Finckenauer 1982	5.454	1.650	18.022	2.781	0.005		-	-	
GERPDC 1979	1.513	0.607	3.772	0.888	0.374		-	-	
Lewis 1983	2.092	0.860	5.090	1.627	0.104		-	_	
Michigan DOC 1967	3.750	1.110	12.669	2.128	0.033		_	-	
Orchowsky and Taylor 1981	1.087	0.444	2.660	0.183	0.855		+		
Vreeland 1981	1.476	0.569	3.832	0.801	0.423		-	-	
Yarborough 1979	1.054	0.537	2.070	0.153	0.879		+		
Weighted effects across all studies	1.724	1.134	2.619	2.550	0.011		•		
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The overall effect of the intervention in the five remaining studies shows that Scared Straight . . . programs have a negative impact on subsequent crime and delinquency.

Meta-Analysis: Sensitivity Analysis

Meta-Analysis: Sensitivity Analysis

Two investigators (Finckenauer 1982; Yarborough 1979) confronted difficult methodological issues in their studies. Finckenauer (1982) reported that participants received a different condition than the one they were randomly assigned to, a violation of the integrity of the design. Yarborough (1979) noted that a large percentage of participants, after they were randomized to different groups, did not show up to participate in the program; thus, Yarborough did not include those participants in the analysis.

To determine the stability of the findings, this review excluded both the Finckenauer and Yarborough studies to see how this affected the overall meta-analysis. As Figure 3 shows, even with both of these studies removed for sensitivity analysis, the overall effect of the intervention in the five remaining studies shows that Scared Straight and other similar programs have a negative impact on subsequent crime and delinquency.

Figure 3. Sensitivity analysis: Removing Finckenauer 1982 and Yarborough 1979 (random effects analysis)

Study Name	Statistics for each Study				Odds ratio and 95% Cl	
Study Name	Odds Ratio	Lower Limit	Upper Limit	Z-Value	p-Value	Odds ratio and 95% Cl
GERPDC 1979	1.513	0.607	3.772	0.888	0.374	+
Lewis 1983	2.092	0.860	5.090	1.627	0.104	 -
DOC 1967	3.750	1.110	12.669	2.128	0.033	
Orchowsky and Taylor 1981	1.087	0.444	2.660	0.183	0.855	_
Vreeland 1981	1.476	0.569	3.832	0.801	0.423	
Weighted effects across all studies	1.682	1.098	2.578	2.388	0.017	•
					0.	01 0.1 1 10 100 Reduces Crime Increases Crime

All analyses showed that involvement in these programs increased measures of crime and delinquency.

Conclusion

Conclusion

This review, which examined the results of nine randomized controlled trials and seven in a meta-analysis, finds no evidence that Scared Straight and other juvenile awareness programs have crime control effects. In fact, all analyses showed that involvement in these programs increased measures of crime and delinquency.

These results are consistent with past findings. For example, Lipsey (1992) examined 11 related programs (he combined Scared Straight and "shock incarceration" programs in his analysis) with an overall effect size of -0.14, meaning that these programs were associated, on average, with a negative impact (roughly about 7 percent increase in failure rates compared to control).

Criminological interventions that cause harm lead to people committing more offenses, thus hurting not only themselves but also other innocent folks in the community. For this reason, it is in the public's interest for policymakers to build a research infrastructure equipped to rigorously evaluate criminological interventions and to identify successful strategies.

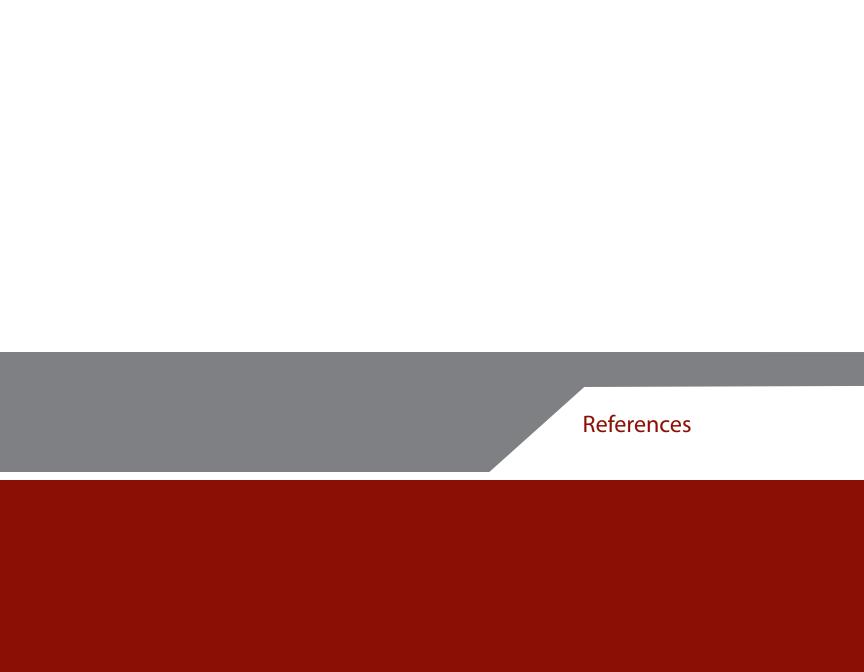
Given the overall negative results for participation in Scared Straight and related juvenile awareness programs across the studies cited in this review, jurisdictions should hesitate to implement these types of programs in the future. Those jurisdictions already using Scared Straight-type programs should reevaluate the approach; otherwise, they are at risk for causing harm to the very citizens they aim to help.

List of Included Studies

List of Included Studies

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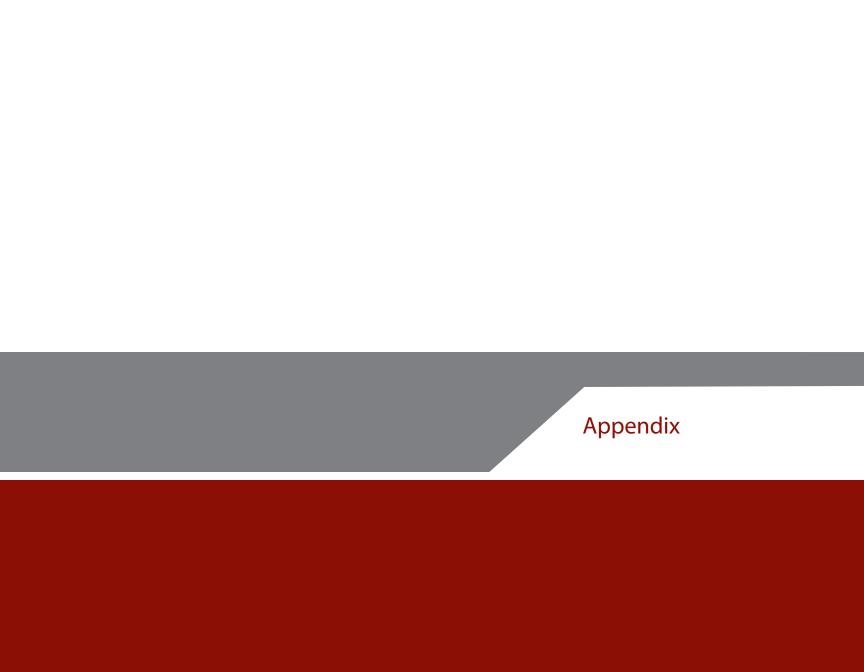


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Appendix: Characteristics of Included Studies

Citation	Methods	Intervention
Cook and Spirrison 1992 (also see Cook 1990)	Quasi-random assignment: researchers numbered court files and assigned all odd numbered ones to intervention group	Educational, prisoner-run 5-hour session, designed to be nonconfrontational
Finckenauer 1982	Random assignment	One visit, a confrontational rap session lasting approximately 3 hours with inmates serving life sentence
GERPDC 1979	Random assignment	Confrontational rap session with inmates
Lewis 1983	Random assignment	Three total visits (one per week) including confrontational rap sessions, guided tours of prison and interaction with prisoners, and review of pictures of prison violence

Outcomes	N	Age Range	% Male	% White	Level of Prior Offending
12- and 24-month follow-ups of official court record data, average offending rates and severity of offense School attendance and school drop-out	176	12–16	100	36	Delinquent
6-month follow-up of official complaints, arrests, or adjudications Severity of offense Attitudes: toward criminals, toward crime, toward law, toward justice, toward police, toward prison, toward punishment, self image	81	11–18	80	40	Delinquent (50 percent) or at risk for delinquency (50 percent)
5–15 months follow-up of contacts with police Psychological instruments administered to the youth: • Piers Harris Children's Self-Concept Scale • Jesness Inventory	161	13–18	100	84	Delinquent or at risk for delinquency
12-month follow-up of percentage arrested, average number of arrests, percentage charged, average number of charges by type of offense, offense severity, time to first arrest Attitudes: toward police, toward school, toward crime, toward prison, toward work camp Psychological instrument administered to	108	14–18	100	<50	Delinquent, most with extensive prior record
Psychological instrument administered to the youth: semantic differential test					

Appendix: Characteristics of Included Studies (cont'd)

Citation	Methods	Intervention
Locke et al. 1986 (also see Locke 1982)	Random assignment	Nonconfrontational, educational interaction, tried to match juvenile with inmate
Michigan DOC 1967	Michigan DOC 1967 Assignment using random numbers table; data collectors were blind to assignment	
Orchowsky and Taylor 1981	Random assignment	Confrontational, inmate-run program, locked in cell, introduction by guard, 2-hour session with inmates
Vreeland 1981	Randomly assigned to four groups	1-day orientation lasting 13 hours, including haircut and physical labor
Yarborough 1979	Researchers randomly assigned participants according to random numbers table	Tour of facility, separated and take to cell for interaction with inmates, confrontational session with inmates, one visit 5-hours long

Outcomes	N	Age Range	% Male	% White	Level of Prior Offending
Minimum 6-month follow-up of self-reported crime, and juvenile court and police records of official offending	53	14–19	100	65	Delinquent, on probation
6-month follow-up of official petition for delinquency or probation violation	60				Delinquent
6-, 9-, and 12-month follow-ups of official measures of offending, including new court intakes, average number of court intakes, and severity of offense	80	13–20	100		Delinquent, minimum of two prior offenses
6-month follow-up of official (using court records) and self-reported data to establish offending Psychological instruments administered to the youth: • Attitude toward law • Friend survey • Deterrence questionnaire • Self-image • Jesness checklist	160	15–17	100	40	Delinquent, on probation, average of two or three prior offenses
3- and 6-month follow-ups of official juve- nile crime as measured by subsequent court petitions, new offenses, average offense rate, weeks to new offense, type of offense charged, average days in detention	227				Delinquent



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