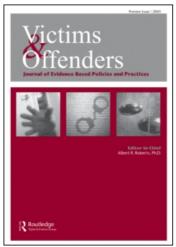
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Separating Science from Nonsense: Evidence-Based Research, Policy, and Practice in Criminal and Juvenile Justice Settings

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Separating Science from Nonsense: Evidence-Based Research, Policy, and Practice in Criminal and Juvenile Justice Settings

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The following special issue of *Victim and Offenders*, "Separating Science from Nonsense: Evidence-Based Research, Policy, and Practice in Criminal and Juvenile Justice Settings" is designed to explore how—and where—evidence-based research can be applied to a wide range of criminal and juvenile justice issues. Contributors to this special issue were asked to consider the available empirical evidence in their specialty area, focusing specifically on the available evidence-based reviews on these topics. The issue contains 17 brief reviews of the latest research evidence covering an expansive set of topics in the criminal justice arena. True to the journal's mission and content, the issue consists of articles that concentrate on both victims and offenders and the interesting dynamic between the two—as well as policies, programs, and practices designed to address the needs and problems of these diverse groups. The reviews are timely and comprehensive and speak to many cutting-edge issues

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that will appeal to scholars, practitioners, and policy makers. In compiling these reviews, our hope was to illustrate how systematic, evidence-based reviews—when properly conducted—can advance thinking and practices in the fields of juvenile and criminal justice.

The contributions included here also underscore another critical point: you cannot develop evidence-based policies and practices without first conducting high quality research on the problem under review. In our rush to embrace the notion that criminal and juvenile justice can and should become more scientific, many researchers appear to use the term "evidence-based" inconsistently and prematurely. When offering "evidence-based" assessments and recommendations to federal, state, and local funding agencies, academic researchers need to distinguish what we know from what we wish we knew; by taking this more research-focused course, we can begin to separate the science from the nonsense in evidence-based reviews of criminal and juvenile justice policies and practices.

WHAT IS AN EVIDENCE-BASED REVIEW?

Much of the recent discussion of "what works" in the fields of criminal and juvenile justice has been oriented to evidence-based reviews of research into particular topics of interest (e.g., hot spots policing, drug courts, mandatory sentencing, prison-based treatment programs, community-based sanctions, etc.). The proliferation of reviews on what works runs the gamut from high quality, well designed, "scientific" reviews to low quality, poorly designed, and very unscientific reviews (otherwise known as nonsense).

In developing this special issue of *Victims and Offenders*, we asked the members of our editorial board to summarize and comment on the policy and practice implications of the evidence in their areas of specialization by drawing on the results of evidence-based research reviews when available. As these articles suggest, our contributors believe that a great deal of work needs to be done before we can offer definitive policy and practice recommendations in most of the topic areas covered in this volume. Further, we must distinguish "science from nonsense" among the current wave of evidence-based reviews because many of them are simply not "evidence-based," at least not in the manner in which we define the term here.

The literature consists of three basic types of evidence-based reviews: the "gold standard," which focuses exclusively on only randomized, controlled experiments; the "bronze standard," which includes a systematic review of both experimental and well-designed quasi-experimental research with comparison groups; and the unscientific (or nonsense) approach, which is characterized by the unsystematic selection of studies—including experiments, quasi-experiments, and nonexperimental research. These unscientific reviews are written typically by advocates of a particular program or strategy. In the

most extreme form, the authors of the review simply allude to an evidence-based or "best practices" review without providing supporting documentation. Unfortunately, many of the reviews in the area of criminal and juvenile justice fall into this final category. Because these unscientific reviews often support strategies favored by policy makers and program developers, they provide an alternate to the common lament of authors of careful, scientific reviews: we don't know what works in a particular area, because the necessary empirical research has not been completed.

Gold vs. Bronze Review Standards in Evidence-Based Reviews

For several reasons, criminal and juvenile justice managers have rarely supported the use of independent, external evaluations of programs or strategies under their control. As a result, only a small number of external, independent evaluations have been conducted. Notably, with very few exceptions, these evaluations are often of such poor quality that they would never be included in the reviews of "evidence-based practice" that legislators and policy makers are using as blueprints for organizational change in a variety of police, court, and corrections systems across the country.

Because of this long-standing resistance to external, independent evaluation, today's criminal and juvenile justice managers are at a distinct disadvantage. They are unable to cite either the gold or bronze standard of "best practices" or evidence-based reviews in order to support their requests for new resources or programs or to bolster their claims for organizational effectiveness and good management. In addition, federal agencies involved in criminal and juvenile justice issues—such as the National Institute of Justice, the National Institute of Corrections, and the Office of Juvenile Justice and Delinquency Prevention—have disseminated a variety of best-practices reviews that fail to meet even the minimum standards for valid evidence-based reviews.

The gold standard for evidence-based research reviews mandates that at least two randomized field experiments be conducted on a particular program or strategy before we can assess what works (see, e.g., the reviews conducted for the Cochrane Collaboration at http://www.campbellcollaboration.org). When applied to institutional corrections, for example, the use of this gold standard results in a simple conclusion: we simply do not know what works (and what does not work) with offenders in correctional settings. Since 1980, only 14 randomized experiments have been conducted in the area of corrections (Farrington & Welsh, 2005), including 7 evaluations of juvenile corrections programs. Of these 14 examinations, 2 are evaluations of scared straight programs for male juveniles, 4 are evaluations of boot camps for male juveniles, 1 is an evaluation of a juvenile treatment facility (Paint Creek), and 7 are evaluations of adult corrections programs (3 evaluations of therapeutic communities for adult drug-involved inmates, and 4 evaluations targeting male prisoners placed in one of the following four treatment programs: reasoning and rehabilitation, social therapy, moral reconation therapy, and cognitive behavior treatment). Obviously, evaluation research that is much more rigorous in nature must be conducted before "evidence-based reviews" can be used to guide correctional practice in either adult or juvenile facilities in the United States. Of course, the need for more high quality research is not simply a corrections problem; it is the same in the areas of policing (see, e.g., the Campbell review of hot spot policing) and the courts (see the Campbell reviews of drug courts and sentencing alternatives).

One solution to the problems associated with applying the gold standard to the current body of corrections research is offered by the Campbell Collaborative: lower your standards for including studies in your evidence-based reviews. By using a bronze standard, members of the Campbell Collaborative have conducted evidence-based reviews of a broad spectrum of criminal justice and juvenile justice interventions. Based on this relaxed standard, both experimental and well-designed, quasi-experimental research studies would be examined (levels 3, 4, and 5 on a quality scale ranging from 1 [low] to 5 [high]). For a specific program or strategy to be deemed effective, at least two level 3 (or higher) studies would be needed along with supporting research from the majority of lower quality evaluations (levels 1 or 2).

Meta-analysis techniques are also used in conjunction with both gold and bronze standard evidence-based reviews in order to allow the assessment of the overall impact (or effect size and direction) associated with a particular program or strategy. When utilized correctly, meta-analysis can serve as the basis for identifying both the best and evidence-based practices. Meta-analysis allows a determination of both the size and direction of effects across studies, and it yields summary statistics that public policy makers can understand easily (e.g., a 10% recidivism reduction effect for all correctional interventions using multisystemic strategies).

Synthesizing the findings from a large number of studies is certainly helpful, but meta-analysis has its drawbacks. As several authors included in this special issue point out (e.g., Austin and Byrne), meta-analysis is often misapplied and misinterpreted as a statistical technique. Specifically, meta-analysis should be used to summarize research findings derived only from methodologically rigorous evaluation designs. In contrast, it should never be applied when only a small number of studies (ten or fewer) are included in a review. Further, meta-analysis is most appropriate for studies that examine the relationship between clearly defined independent and dependent variables (Lipsey & Wilson, 2001; Rossi, Freeman, & Lipsey, 2001).

Throughout the country, legislators and policy makers are incorporating evidence-based research reviews in new legislation and program initiatives for a broad range of criminal justice endeavors in both institutional and community corrections. In several states, legislation has been enacted—or is pending—that

prohibits the development of new initiatives unless they are based on a detailed evidence-based review. Although the standards for establishing such reviews are still being debated (i.e., the gold versus bronze standards), a consensus has emerged on the need for more and better designed evaluations of criminal justice interventions in general and correctional strategies in particular.

SPECIAL ISSUE CONTENT

This special issue of *Victims and Offenders* begins with an article by Austin that scrutinizes the findings and conclusions of systemic reviews of published studies covering a wide range of correctional programs. Austin argues that "treatment effects" can easily be overstated, which leads policy makers—who are untrained in research methodology and statistical analyses—to render erroneous policy and funding decisions. Moreover, the author indicates that an overemphasis on criminal justice programs rather than policies diverts our attention from the pressing need to reduce prison and jail populations.

The next article, by Farrington and Ttofi, focuses on school bullying, which is a public health and social problem that has serious short- and longterm implications for the physical and mental health of children in the United States. The authors note that bullies tend to be aggressive and delinquent, while victims tend to be anxious and depressed. Based on a meta-analytic review of studies of antibullying programs, the authors conclude that such interventions work to reduce the prevalence of bullies and victims. They also suggest that more efforts be made to develop and test theories of bullying and victimization, which can serve as the basis for designing antibullying programs.

Early in his administration, President Obama established the White House Office of Faith-Based and Neighborhood Partnerships, continuing President Bush's support of faith organizations and the services they provide for people in need. In her contribution to the special issue, Lane discusses the definitional and constitutional issues relevant to faith-based programs for offenders under government control. She then summarizes the results, limitations, and policy implications of published studies of such programs. Lane suggests that few studies on faith-based programming have articulated explicitly their specific underlying philosophies or presented scientifically valid evidence to support their claims of success.

In the fourth article in this special issue, Taxman and Ainsworth review the literature on the effectiveness of building a therapeutic alliance between offenders and criminal justice actors (e.g., judges, correctional officers, probation officers, special counselors, etc.) in the context of correctional practice. The authors explain how the rapeutic alliances intersect with the concept of punishment and the roles of correctional staff, as well as models of offender and organizational change.

The link between violent behavior and mental illness has long been a subject of popular dramatization and empirical investigation. Lurigio and Harris examine the relationship between mental illness and violent behavior, and they explore assessment tools that have been employed to predict violent behavior among correctional and psychiatric populations. They conclude with a discussion of the implications of this research for policy and practices regarding mental illness, violence, and risk assessment.

Byrne and Miofsky's contribution to the special issue presents the findings of evidence-based reviews in several areas: prison, probation, intermediate sanctions, and offender reentry. They highlight the limitations and strengths of these reviews as well as the shortcomings of correctional reforms.

Rebovich's article focuses on the perpetration of identity theft by sex offenders, an emerging crime that has recently attracted considerable media attention. The author contends that more research is needed to elucidate the characteristics of the sex offenders who commit this type of crime. Rebovich describes the findings of two major studies that have increased our evidence-based understanding of this crime. He then articulates how offense-offender research can be integrated with victim research to enhance the control of identity theft.

Greenwood and Turner's contribution features the findings of studies that have identified the most effective interventions in reducing delinquency. The authors identify what does and does not work relative to preventing delinquency by examining recent reviews, meta-analyses, certified lists, and cost-benefit analyses. Examples of the effective and promising programs cited in their review include the Nurse Home Visitation Program, the Seattle Social Development Project, Multisystemic Therapy, and Multidimensional Treatment Foster Care. Greenwood and Turner's article concludes with an enumeration of the challenges and obstacles to implementing evidence-based practices.

As Bazemore and Maruna observe in the ninth article of the special issue, the enthusiasm for improving the reentry process for former prisoners fails to match its shaky theoretical and empirical foundations. They contend that restorative justice is an obvious place to start thinking about reentry because of its well-developed theoretical underpinnings in reintegrative shaming and its growing empirical evidence base. Further, they suggest that restorative practices should be employed more often to address serious offenses. Bazemore and Maruna conclude with an illustration of how specific restorative principles can be adapted to facilitate the prisoner reentry process.

Pattavina's paper explores evidence-based research on electronic monitoring. She highlights the knowledge generated by previous reviews of electronic monitoring and how those data can inform the next generation of monitoring

technologies for promoting offender change. She also explicates the challenges and opportunities that stem from the use of evidence-based research reviews as a basis for the application of electronic monitoring as a technological supervisory tool.

Solomon, Solomon, and Heide's contribution to the volume pertains to trauma survivors—including people who have suffered childhood abuse and neglect, as well as victims of other violent crimes, such as sexual assault, robbery, and domestic violence. The authors explain how many of those victims develop symptoms of post-traumatic stress disorder (PTSD). These symptoms can be alleviated with a technique known as Eye Movement Desensitization and Reprocessing (EMDR), which helps survivors reprocess the memories of the traumatic experience that have been stored dysfunctionally. In addition, they discuss the research that supports this evidence-based treatment and conclude with the implications of these studies for policy and practice.

Article twelve, by Daigle, Fisher, and Stewart, sheds light on the problem of rape on college campuses and reviews the results of evaluations of rapereduction programs. As the authors note, a limited number of studies suggest that most rape reduction programs improve students' knowledge and attitudes about rape but fail to produce large, sustainable reductions in victimization. Daigle, Fisher, and Stewart also enumerate the components of rape reduction programs that show the greatest promise for reducing the risk of offending and victimization.

Stalans's paper reviews gender differences in pathways to offending and victimization and how those differences have factored into the creation of gender-sensitive assessments, substance abuse treatments, domestic battery interventions, prison-based therapies, and probation and parole supervision programs. Her paper reviews research on gender differences in needs and risks as well as responsivity to substance abuse, mental health, and criminal justice interventions. Finally, her paper presents directions for future research focused on women offenders.

In the next article, Albanese maintains that policy-relevant research on organized crime has been hampered by several impediments, such as a misplaced emphasis on criminal groups rather than criminal opportunities and a media-driven view of organized crime along with the effects it exerts on American society. He also points to the paucity of systematic research and the absence of prevention-based approaches in the field of organized crime. Albanese recommends that organized crime policies be grounded in research, not ideology.

MacKenzie and Weiss observe that the United States leads the world in incarceration rates, which have been costly and have done little to reduce crime. They review research that demonstrates the effectiveness of community-based correctional options that have worked in other countries to reduce incarceration rates without a corresponding increase in crime rates. The authors call for the abandonment of the "lock 'em up mentality" in favor of a rational evidence-based approach to correctional policies and practices.

In their article, Paparozzi and Schlager note that the notions of "what works" and "broken windows"—two popular approaches to offender recidivism reduction—have significant theoretical relevance and practical value. However, they also contends that they are restricted in their application value because practitioners believe that they are mutually exclusive, and neither one lends enough credence to restorative justice or offender rehabilitation. For both concepts, the authors review their theoretical groundwork, research evidence, and relevance to the field. Paparozzi and Schlager also elucidate how the two concepts can be reconciled, and describe the policy implications that flow from such a reconciliation.

The special issue concludes with the article by Moriarty and Parsons-Pollard, which focuses on several aspects of cyberstalking—such as its definition, prevalence, pernicious effects on victims, and current state laws enacted to combat this relatively new crime. The authors also discuss strategies for increasing our knowledge about cyberstalking to better assist its victims by increasing public awareness and resources.

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