

PREVENCIÓN DEL DELITO

The importance of an evidence-based approach in the current Spanish policy for crime prevention

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This introductory paper has two objectives. On the one hand, to present the guidelines of the evidence-based perspective on crime prevention as an alternative to the usual criminal policy, which often disregards conclusions based on scientific evidence. On the other hand, to discuss the contemporary situation in Spain regarding crime prevention and particularly the role psychology develops in terms of the utility/effectiveness dichotomy. The evidence-based perspective on crime prevention is guided by the main criteria of collecting the best scientific evidence in relation to 'what works best' in the different areas of crime prevention. In that purpose systematic reviews and meta-analyses are strongly recommended. The Campbell Collaboration in Crime and Justice is a scientific endeavour oriented to prepare rigorous and systematic reviews of high-quality evidence about 'what works'. Regarding crime prevention in Spain it is argued that psychology and other disciplines must make society and its rulers see that intervention based on evidence-based policy is essential for crime prevention.

La importancia de la perspectiva basada en la evidencia en la política criminal española para la prevención del delito. Este artículo introductorio tiene dos objetivos principales. En primer lugar presenta las directrices de la perspectiva basada en la evidencia acerca de la prevención del crimen como una alternativa a una política criminal que no toma en consideración los hallazgos de la comunidad científica. En segundo lugar revisa la situación actual en España respecto a la prevención del delito, a partir de la dicotomía utilidad/efectividad. La perspectiva basada en la evidencia tiene como criterio fundamental recoger la mejor evidencia científica disponible con relación a aquello que ha probado ser más efectivo en la prevención de la delincuencia, y para ello recomienda el uso de revisiones sistemáticas y de la técnica del meta-análisis. La *Colaboración Campbell en Crimen y Justicia* es una empresa científica que impulsa esa labor. Finalmente, con respecto a la prevención del delito en España se discute la necesidad de apoyar iniciativas basadas en esta perspectiva de la evidencia.

What works to reduce crime? How should offenders be dealt with so that they do not offend? What methods of preventing crime are most cost-effective? These are all questions to which citizens as well as policy makers and researchers deserve good answers. All such persons should have ready access to the most rigorous and up-to-date evidence on the effects of interventions designed to reduce crime and offending. The best evidence on 'what works' should be quickly accessible to those who need it through the use of electronic publishing, the Internet and the

World Wide Web, as well as traditional publishing methods (Farrington and Petrosino, 2001). Unfortunately the crime prevention policy followed by the government of a country can be quite different from results supported by the scientific evidence.

This introductory paper to the *first section* in Psicothema on *evidence-based crime prevention* shows the guidelines of this perspective, along with a discussion of the contemporary penal and criminal policy in Spain which, as in other countries, often disregards conclusions based on scientific evidence.

The evidence-based approach on crime prevention

Reducing potential biases that may lead to a wrong result and, therefore, a bad policy decision is an important concern for evaluators in fields such as criminal justice, social work or education. This concern with bias is a primary issue in the current

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evaluation approach known as 'evidence-based policy'. On the one hand, many advocates of this policy advocate randomized experiments when possible to evaluate the impact of interventions, because of their potential to produce unbiased results when comparing an experimental (treated) group with a control (non-treated) group. On the other hand, evidence-based evaluators also strongly recommend the use of systematic reviews and meta-analysis to minimize the bias that may distort findings in a synthesis of separate but similar studies.

Systematic Reviews

The systematic review is the most rigorous method for assessing the effectiveness of criminological interventions. A systematic review, according to Johnson, Li, Larson and McCullough (2000, 35), «essentially takes an epidemiological look at the methodology and results sections of a specific population of studies to reach a research-based consensus on a given study topic». It uses rigorous methods for locating, appraising and synthesizing evidence from prior evaluation studies, and it is reported with the same level of detail that characterizes high quality reports of original research. The key features of the systematic review include the following: (1) there are explicit objectives; (2) there are explicit eligibility criteria for the chosen studies; (3) the search for studies is designed to reduce potential bias (e.g. including studies outside scientific journals or studies written in languages different to English); (4) each study is screened according to eligibility criteria, with exclusions justified; (5) assembly of the most complete data possible; (6) quantitative techniques are used, when appropriate and possible, in analysing results (in particular meta-analysis, see below); and (7) a structured and detailed report is provided, so that the reader can understand each phase of the research, the decisions that were made, and the conclusions that were reached (Welsh and Farrington, 2006).

A competently executed systematic review «provide the most reliable and comprehensive statement about what works» (Petrosino, Boruch, Soydan, Duggan and Sánchez-Meca (2001, 20). The main challenges of this methodology seem to be the transparency of the process (for example, the reasons behind the decision to exclude some studies) and the need to reconcile differences in the coding of study characteristics and outcomes by multiple researchers (inter-rater reliability).

Systematic reviews that include meta-analysis, because of the high quality of the research evidence provided, have received increased attention in recent years, in the social sciences in general and in criminology and criminal justice in particular. This is part of a broader interest in evidence-based policy and practice in the public service (Davies, Nutley and Smith, 2000), and in crime prevention (Sherman, Farrington, Welsh and Mackenzie, 2002). In that new policy, systematic reviews are to be maintained and updated in light of new studies, well founded criticisms or new developments in research, theory and methodology.

Meta-analysis

The US Bureau of Justice Assistance (2005) defines meta-analysis as «the systematic analysis of a set of existing evaluations of similar programs in order to draw general conclusions, develop support for hypotheses, and/or produce an estimate of overall program effects». Meta-analyses, usually performed to study the

outcome of intervention programs, start from a basically descriptive position: to determine the mean effect of a program and the possible influence of certain moderator variables on the results of such program. But meta-analyses can provide more than a merely descriptive approach, proposing explanatory models of why a program is effective and under what conditions it works better, and also estimating the possible influence of methodological factors in the results of the primary studies (Sánchez-Meca, 1997).

In meta-analyses each individual study is treated as a single case in the evaluation proposed. For each study, a common metric («effect size») is created to express the observed impact of the program on the outcome measure of interest, when compared to a control group. Because a common metric based on the difference between experimental and control groups is created, studies with different measures (e.g., new arrest and conviction data; self-report criminality and number of offences reported by the police) can be combined and compared (Petrosino and Soydan, 2005).

The Campbell Collaboration in Crime and Justice

The success of the Cochrane Collaboration in reviewing health care interventions stimulated international interest in establishing a similar infrastructure for conducting systematic reviews of research on the effects of social and educational interventions. Following several exploratory meetings in London and elsewhere, the Campbell Collaboration (named after the psychologist Donald Campbell) was officially founded at a meeting of over 80 persons from 12 countries in Philadelphia in February 2000. Professor Robert Boruch of the University of Pennsylvania was appointed Chair of the Campbell Collaboration's Steering Group. More information on the Steering Group, as well as on the background and progress of the Campbell Collaboration, can be found at <http://www.campbell.gse.upenn.edu>.

Following the example of the Cochrane Collaboration, the Campbell Collaboration will prepare rigorous and systematic reviews of high-quality evidence about "what works." Recognizing that evidence is changing all the time, these reviews will be updated on a periodic basis, taking account of new studies, cogent criticisms, and methodological advances. The Campbell Collaboration will go beyond traditional dissemination in scientific journals and will use a variety of methods including the World Wide Web, to promote rapid access to evidence of all interested persons — and not just the research community.

Through international networking, the Campbell Collaboration will ensure that relevant evaluation studies conducted around the world will be taken into account in its systematic reviews, and that evidence from such reviews will be made accessible globally through language translation and worldwide dissemination. Consumers of Campbell Collaboration products should include the general public, practitioners, funding organizations, professional associations, policy makers, and teachers and their students. The reviews will be non-partisan and objective, using methods that are defensible and explicit, and designed to minimize bias.

The Campbell Crime and Justice Steering Committee

At that February 2000 meeting, the Campbell Collaboration appointed a Crime and Justice Steering Committee (CJSC) to coordinate the work of the Crime and Justice Group. The broad mission of the CJSC is to oversee the preparation, maintenance

and accessibility of systematic reviews of research on the effects of criminological and criminal justice interventions. The main emphasis is on reviews of interventions designed to prevent or reduce crime or delinquency. Broadly, the CJSC is carrying out systematic reviews of research on the effects of interventions delivered by the courts, police, probation or parole agencies, prisons, and community groups; other topics include closed-circuit television, improving street lighting, hot spots policing, restorative justice and the prevention of terrorism. The book published by Welsh and Farrington (2006) contains a showcase of reviews.

Persons who contribute systematic reviews to the Campbell Collaboration must agree to the following requirements (Farrington and Petrosino, 2001):

- (1) A commitment to conduct updates of the systematic review to incorporate new evidence, respond to criticisms, or use more advanced methods, on a regular basis (e.g. every two years)
- (2) A commitment to undergo a rigorous editorial review process not only from researchers but also policy makers, practitioners and citizens to ensure that the review meets high scientific standards and is also written to be understandable to non-academic audiences
- (3) A commitment to maintain transparent and open review processes so that users can comment and criticise each stage of the review, from its proposal through to its completion
- (4) A commitment to use the most rigorous search methods available to ensure that all relevant studies are considered for inclusion or exclusion and not just those reported in easily accessible journals and books
- (5) A commitment to cover literature from around the world and not just the English-speaking world
- (6) A commitment to code and computerize key features of each evaluation study reviewed (so that anyone accessing the review can organize the studies according to such features as sample size, design, and effect size)
- (7) A commitment to explicitly report the final review so that readers can understand decisions made at each stage, justifications for those decisions, and how conclusions were reached
- (8) A commitment to make the review available to broader audiences than readerships of peer-reviewed academic journals through electronic publication and dissemination into policy, practice and media outlets.

The present criminal prevention policy in Spain

As Welsh and Farrington point out (2006, 1): «Crime prevention should be rational and should be based on the best possible evidence. One would expect that decision makers would weigh heavily any available evidence on what works. How can a program that has produced no discernible evidence of effectiveness, as shown through numerous evaluations be considered for implementation? Unfortunately, this happens all the time (...). Regrettably, it seems that evidence of what works best is rarely a factor in implementing new crime prevention programs. Political and policy considerations seemingly dominate».

Spain is no different regarding this general conclusion, and any psychologist or criminologist seeing the present reality of the Spanish penal and political approach can declare that this tendency is magnified in this country. Several factors have contributed to

create this situation: the very fast raising number of prisoners in the last five years; the immigration laws that have opened the Spanish frontiers to many workers coming from Africa, South America and East European countries, which have caused the alarm among citizens regarding increased petty and street offences, as well as non-traditional crimes in Spain as violent burglaries and hold-ups, and gun homicides related to drug traffic and control of the drug market; or the rapid expansion of the juvenile gangs which import a fight culture inside very structured rules (e.g. 'Lating Kings, The 'Ñetas'). Other broad cultural factors cannot be forgotten, such as the decreasing number of police officers that happened from the mid nineties (which is rapidly being rectified in the two last years), and the deficiencies shown by the socialization process of the family and the school, unanimously considered as very permissive (something supported by the increasing number of broken homes and households with only the mother to raise the children), of which clear outcomes would be a high rate of school failure and the increasing participation of 'middle class' youths in juvenile offending and violent acts at home and school (Garrido, 2005a; 2005b).

However, there is also an argument related to the development of psychology and other disciplines applied to the law in modern Spain (Garrido, 1997). Due to the fact that these practical disciplines had to penetrate in the management of offenders, education and social services in a short period of time (i.e., from the seventies, with the arrival of democracy), the main efforts of these disciplines were to show that they had much to say about many of the law-related areas: the diagnostic of criminal and young offenders, assistance to rape victims, etc. Unfortunately, emphasis was not placed on evaluation of the programs, and there has been a lack of rigorous national studies to influence the political crime prevention discussion.

And it is obvious that psychologists in any country simply cannot be satisfied with pursuing the priority of showing their utility. We must climb onto the next and important rung: *that of proving that crime prevention programs can be effective*. So, we must make society and its rulers see that intervention based on evidence-based policy is essential for the solving of important social problems. This general claim cannot be overstated although, evidently, crime prevention does not depend exclusively on psychologists and other social science designers for their solution (Gilligan, 2002).

As a rule of thumb, criminal policy in Spain seems to follow an increasing punishment tendency as the main approach to combating crime, without doubt inspired by a public disconcerted and angry by the visibility of more violent crime than has been traditional in the culture of this country. While the increase in crime has not been a huge one, the spreading of the more publicized (street and residential) offences has put a lot of pressure on the politicians' shoulders. As a consequence, there is a continuous succession of new laws or modification of previous ones, which are not grounded in a rational argument based in science. In fact, the global policy seems to be as simple as this: 'something has to be done', and thus usually a new penal law occupies the focus of the general discussion.

The promise of the evidence-based approach

In the recent past, behavioural scientists have been quite pessimistic about the possible contribution of behavioural

interventions in crime reduction. In the area of offender treatment the seminal article by Martinson (1974) was quite influential in this regard. Based on a review of the extant literature, he concluded that «nothing works» in reducing criminal recidivism. It was not until the late 1980s that this trend was countered by a number of meta-analyses that appeared in the literature. These meta-analyses demonstrated that there were in fact treatment methods that were effective in reducing recidivism (e.g. Lipsey, 1992). This conclusion was reached also in studies carried out in Europe (e.g. Redondo, Sanchez-Meca and Garrido, 1999, 2002; Lösel and Kofler, 1989).

Redondo et al. (1999) in Spain identified 32 European studies between 1980 and 1991 that tested the effects of some treatment on subsequent criminal offending. They reported an average 12% reduction in recidivism when compared to a quasi-experimental comparison group or the pretest period. Interestingly, no randomized experiments were included in their sample of 32 studies. Nonetheless, their overall results are typical of most of the meta-analyses reported to date in showing that correctional intervention is generally effective in reducing reoffending. Further, they and most other reviewers (e.g. Lipsey and Wilson, 1998) concluded that the most effective types of correctional treatment were cognitive-behavioral strategies.

We have today important information regarding ‘what works’ in other areas of crime prevention as well, including at-risk children (family and school settings), victims and high-crime places (Sherman et al., 2002; Welsh and Farrington, 2006). However, as has been discussed, it is a well-known fact that having convincing research evidence and having it influence policy and practice are two very different matters. How to overcome some of the political barriers in order to achieve implementation of more of what works in preventing crime, should be a priority for the researchers interested in promoting effective, evidence-based strategies. That is even more urgent in the current social and cultural climate that dominates the crime prevention policy in Spain.

The papers of this special section of Psicothema

We start this first Psicothema special section about evidence-based crime prevention with the Welsh and Farrington paper *Effectiveness of Family-Based Programs to Prevent Delinquency and Later offending*. The authors have dealt previously with this topic in several papers which presented narrative and meta-analytic reviews on the effectiveness of family-based interventions to prevent childhood antisocial behavior and delinquency. Analyzing studies with high methodological quality (a randomized experiment or an experiment with a matched control group), the authors now focus on the outcome measure of delinquency or later criminal offending, and find that experimental groups did better than control groups in 19 out of 22 evaluations, with a median decrease in reoffending of 35 per cent. Because Welsh and Farrington only found 11 studies that were large-scale randomized experiments, they stress the importance of having more studies with that methodological quality, as well as «programs focusing more clearly and more narrowly on family risk factors (...) rather than multi-modal programs, so that it is easier to evaluate the active ingredients of family-based components».

Another traditional avenue of crime prevention is the focus of the Beelman and Lösel paper: *Child social skills training in*

developmental crime prevention: Effects on antisocial behavior and social competence. The authors start their review making clear that although the effectiveness of social skills training has been the topic of several reviews and meta-analyses, suggesting that social skills training is an effective form of intervention for preventing behavioral problems in childhood and adolescence, «nonetheless, our own earlier analysis showed that whereas effects are medium to large in proximal criteria, they rarely generalize to broader constructs and everyday behavior (...) Other frequent problems are small sample sizes, weak designs, and a lack of long-term follow-up periods». All this —explain Beelman and Lösel— raises doubts about whether social skills training for young people is already a proven measure in preventing antisocial development and later offending. In order to answer this important question, the paper proposes high quality criteria for study selection: among others, the selected study had to contain an evaluation addressing *only* a social skills training program (as opposed to a component of a multimodal program), and to compare a treatment and a control group in a randomized experimental design; and the outcome evaluated was antisocial (e.g., aggression, delinquency) as well social competence behavior. The results of the analysis again prove the usefulness of an evidence-based approach. The authors found a substantial number of randomized studies (127 treatment-control contrasts with a total of over 16,500 youngsters), which yield a correlation of $r = .19$. and thus a small effect size according to the terminology of Cohen. However, «there are several reasons why small effects should not be underestimated in practice. First, assuming that 50% of the control group would develop at least some temporary behavior problems, an effect size of $r = .19$ means that the treatment conditions show a reduction of 19 percentage points or 38% of these cases. Second, because many child social skills programs are relatively short and delivered in group settings, small to medium effects may well pay off in terms of cost effectiveness».

The third paper (Garrido, Morales and Sánchez-Meca) is another example of an evidence-based research, but now in the final stage of the juvenile justice system (*What works for serious juvenile offenders?*). This systematic review discusses the effectiveness of programs implemented in secure corrections and designed to decrease recidivism in the experimental (treated) groups. The question examined in the review is: Are correctional treatments effective in reducing recidivism among institutionalized serious (violent and chronic) juvenile offenders? The authors analyze 30 experimental and quasi-experimental studies, which altogether include 2831 juveniles in the treatment groups and 3002 youths in the control groups. Their research confirms the results found previously in other evaluations carried out with juvenile offenders, and shows that, in general, the treated juveniles offended a 7 per cent less than the non-treated youth, and that cognitive-behavioral treatments are the most effective intervention methods. Taking into account the fact that the persons evaluated are the most recidivist and/or violent youth, as well as the fact that the setting of the intervention (institutional) is less amenable to effective interventions, the outcome achieved can be very important in terms of keeping the promise of a realistic and better outcome for that kind of offenders.

The fourth paper deals with a new difficult group of offenders: people who commit crimes *and* are drug abusers (Holloway, Bennett and Farrington: *The effectiveness of drug treatment programs in reducing criminal behavior: a meta-analysis*). There

have been many reviews of the literature on the effectiveness of drug treatment programs, but most of these investigated the effects of programs on drug misuse. As the title indicates, the focus here is on addressing the potential of drug treatment programs in reducing criminal behavior, which is why the authors excluded the studies that evaluated the effect of an intervention on drug use alone. Another point worth mentioning is that this review «adds to the works of previous meta-analyses by including drug treatment implemented in the UK and Europe, as well as the US, programs initiated by the criminal justice system as well as through conventional routes, and more recent research covering modern types of drug treatment». And again the evidence-based approach clearly repays the effort invested: «The results of a meta-analysis of 28 studies showed that the mean odds of offending following treatment for all studies combined were between 1.41 and 1.56 times greater for the comparison groups than the treatment groups. This means that the odds of offending for the treatment group were between 29 per cent and 36 per cent lower following treatment. Hence, the analysis suggests that drug treatment is effective in reducing offending». And as a clear example of the implications that this evidence-based evaluation hopes to translate to society and governments, the authors point out that «the current review suggests that some programs work better than others. In particular, there is evidence that therapeutic communities, post-release supervision, and maintenance prescribing reduce criminal behavior. Hence, there might be something to be gained from prioritizing certain kinds of interventions over others».

In the last years the individual, offender-based programs for crime prevention have lost part of their prominence in favour of situational crime prevention, which addresses the problem of decreasing crime by hardening the target or increasing the

probabilities of offenders being caught by the police. In other words, the emphasis is on the situation, looking for changes in one or more of the elements that coincide in causing a crime: the offender, the target or victim and the opportunity. The paper of Anthony Braga, called *The Crime Prevention Value of Hot Spots Policing*, which closes this first special section of *Psicothema*, is a fine example of a systematic review that analyzes the available research evidence on the effectiveness of 'hot spots policing' programs in reducing 'crime and disorder'. In the author's words, «the hot spots perspective suggests that police can reduce crime by focusing their limited resources on the small number of places that generate a majority of crime problems». The question addressed by Braga's review (can the way the police do their job make a difference in crime prevention?) has, by now, a positive answer. Seven of the nine selected evaluations reported noteworthy reductions in crime and disorder. Meta-analyses of the randomized experiments revealed statistically significant mean effect sizes favoring hot spots policing interventions in reducing citizen calls for service in treatment places relative to control places. Another important finding is that «spatial displacement appears to be a much less serious threat to the gains of hot spots policing than had been originally thought, and indeed the evidence suggests that diffusion of crime control benefits to areas nearby targeted places is more common». This is good news for situational crime prevention.

In this time of pessimism and uncertainty about how to proceed in crime prevention—something very much stressed in Spain—we hope that the reader will find these papers useful and challenging. Useful because they show clear guidelines for policy makers to follow. Challenging because they prove to practitioners that every effort based on good practice counts in the daunting but necessary task of preventing crime and delinquency.

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