

Protocol for Work Package 1: Identifying Existing Systematic Reviews of Crime Reduction

Kate Bowers, Shane D Johnson, Nick Tilley, Lisa Tompson and Jyoti Belur

UCL Department of Security and Crime Science

Introduction

This research will contribute to the work of the What Works Centre for Crime Reduction, hosted by the UK College of Policing. The aim of this particular review is to identify existing systematic reviews within the crime reduction area. Subsequent research will involve coding the identified reviews along a number of dimensions, to include their approach and methodological adequacy. There will also be an emphasis on understanding not simply *what works*, but *how it works*. This protocol does not detail how the latter will be accomplished but how the reviews will be identified, along with the scope of the review. This protocol and the activities undertaken under Work Package 1 (WP1) are one element of four work packages (WP1, WP3, WP4, WP5) that are devoted to answering the general research question:

What can systematic review evidence tell us about the effectiveness, cost-effectiveness and conditions for optimal implementation of interventions aimed at preventing and reducing crime? How can we best communicate this evidence to crime prevention practitioners?

Methods

A. Criteria for inclusion and exclusion of studies in review

To be included in the list of reviews the following conditions will need to be satisfied:

1. Reviews included will be those for which crime reduction or prevention was a measured outcome. This would exclude those reviews that do not explicitly measure such outcomes. As a result, omitted studies would include those that measure intermediate outcomes that might subsequently lead to crime reduction, but for which no data were collected to estimate their crime reduction/prevention impacts. Examples of studies thereby omitted would include reviews relating to truancy that do not measure the intervention(s)' impact upon levels of crime or delinquency. Studies of bicycle theft that measure changes in cyclists locking practices would similarly be excluded from such searches, as would studies dealing with 'risk factors', but not the expected impact on levels of criminality consequent on their reduction. Further excluded reviews where none of the listed outcomes are crime/delinquency would be any that focused exclusively on whether an offender rehabilitation scheme led to higher levels of employment or that related exclusively to

attempts to increase satisfaction with or confidence in the police. Finally, reviews that related only to fear of crime would be excluded¹;

An important reason for restricting reviews in this way is that it is appropriate to have a common thread through the evidence that we review, and we believe that undertaking the review with a wider remit would make the scope of the exercise unviable. Note however that the search terms given below leave scope to identify reviews where the discussion of the outcomes is qualitative or narrative. Whilst these will not satisfy a 'measured outcome' criterion they will be flagged as supporting material to add context to the evidence review.

2. The article or report is a systematic review (regardless of method) or a meta-analysis of an intervention or suite of interventions. As mentioned above, the review must consider effectiveness in terms of reduction of crime; it does not necessarily need to consider cost-effectiveness as well. In order to satisfy this criterion, the review needs to either

- Summarise results from at least two separate studies **and**;
- Have an explicit methods section explaining how the review was conducted, including the search terms employed
or;
- As a rule, primary studies that report the findings of a single evaluation will not be included. However, in some circumstances large scale, multi-site evaluations with strong research designs will also be included. This will occur when there the intervention clearly focuses on reducing crime but there is no systematic review evidence on general effectiveness or the multi-site evaluation provides additional evidence of use to the crime prevention process;

Note that in a similar way to the first criterion, the search strategy will be flexible enough to enable us to flag up reviews which contain relevant information but do not meet the criterion requirements. So, for example, 'empty' reviews with less than two studies should be identified through the search but will not be used in the summary of evidence (other than to flag up that there is a lack of evidence). The large scale multi-site evaluations might be used in situations where experts are aware that such research has been done but no systematic review exists. We are aware that these will not be always identifiable from the search terms detailed below. Such evaluations are most likely to be flagged at the stage where we send the list to leading policing scholars and those who have published or are otherwise knowledgeable in the various fields.

3. In cases where the findings of the review are reported in two or more different publications (e.g. in a government report and in a journal article), only the manuscript with the most detailed information will be included in later quantitative summaries. If there are multiple reviews of the same intervention (e.g. CCTV reviews) and later ones are merely

¹ These exclusions do not mean that these other outcomes are not of interest to this review process. We will consider these as secondary outcomes, where a crime reduction primary outcome has been considered.

updates of an original review, the most recent will be used in the evidence summary. Other reviews can be used for further context background information;

4. The systematic review could have been conducted at any point in time (i.e. there is no time frame for inclusion). Note however, that any large scale primary studies included will be restricted to the last 20 years (1993-2013);

5. The review could have been conducted anywhere in the world (i.e. there will be no geographic limitations for inclusion);

6. The review is written in English. This is for two reasons. First, the political context of English common law tradition nations (in particular the UK, North America and Australasia) are generally the most similar and therefore generalisation is more appropriate across this subset. Second, the cost of searching and translating reviews in an exercise of this scale would be prohibitive given the likely number of relevant returns. To ensure that key references in other languages are identified (they will not be coded), however, we will supplement the review by contacting experts and agencies from countries where English is not the first language, and;

7. Published and unpublished reviews will be included, as well as systematic reviews that have nil returns (no studies meeting the criteria). Our resulting resources will include a list of Cochrane and Campbell systematic *review protocols* for which a completed review is yet to be produced. Whilst this won't go directly into the final evidence summary, this will be useful in alerting practitioners to other reviews that are in progress and for informing the new reviews that are to be conducted as part of the 'what works' programme of research (WP2).

Intervention Type

As stated above, the review must draw together evidence on the effectiveness of crime reduction efforts. To ensure a 'catch-all' approach, we will not specify the particular types of intervention as part of our inclusion criteria. Such classification is, however, central to the process of synthesising and organising the evidence. The original proposal for funding referred to the following, indicative and illustrative set of overlapping categories:

- Developmental and social prevention;
- Correctional interventions (including incapacitation and rehabilitation);
- Drug treatment interventions;
- Policing and partnership;
- Sentencing and deterrence (including restorative justice);
- Community interventions;
- Situational prevention and crime prevention through environmental design; and,
- Publicity

We will classify each review under the following general headings: response modality (the broad category of interventions covered by the review, e.g. situational crime prevention, enforcement, social/community crime prevention, developmental crime prevention)), targeted population/s (what is the focus - victims, offenders, places, communities etc),

intended and unintended outcomes (e.g. burglary reduction, recidivism reduction, decrease in drug related crime), implementer (e.g. police, community corrections etc). Coding on such dimensions should prove particularly useful in enabling flexible searching for practitioners. As part of work packages 3 and 4 we hope to refine this, in particular to cover preventive mechanisms identified (how an intervention works e.g. deterrence, incapacitation, risk, reward, effort etc). We anticipate that the intervention classifications will be a central feature of the research process and we will ensure that we consult with consortium members and other experts in our development of these.

B. Search strategy for identification of relevant studies

The retrieval of relevant reviews will include various search strategies, as follows:

1. A keyword search of electronic abstract databases (see lists of keywords and databases below).
2. A review of known lists and collections of systematic reviews on crime prevention (e.g. the Campbell collaboration, a forthcoming book edited by Weisburd and Farrington, and COPS office problem-solving guides)
3. A review of research reports of professional research and policing organizations (see list below). This step will involve close liaison with the College of Policing, who will search the National Police Library to help identify relevant research. This could be particularly useful in accessing unpublished police research.
4. A hand search of the most relevant journals not electronically accessible via UCL.

The list will be sent to an information specialist at Rutgers University, who has experience in identifying research from the grey literature on crime prevention, who will subsequently search for unpublished material. We perceive a comprehensive search of the grey literature as important to this evidence review as numerous research findings may come from a practice setting.

All the works identified through these means will be reviewed in relation to the inclusion criteria described earlier. Once a shortlist of works meeting these criteria has been created, this will be sent to leading policing scholars and those who have published or are otherwise knowledgeable in the various fields. The scholars contacted will include those authoring key works in the shortlist or colleagues from countries where English is not the first language. We do not expect that this will lead to the identification of a large number of new reviews, but we see it as an integral step in the process as it is hoped that they will be able to highlight any works (particularly those that they have authored) that may have been missed. Moreover, it increases the transparency of the exercise.

The full text of the works shortlisted will be obtained from either:

1. Electronic copies at University College London (UCL; as well as other electronic works accessible through other universities as part of a consortium, e.g. University of London Senate House Library).
2. Electronic copies of reviews available from the internet
3. Paper copies at UCL (as well as other electronic works accessible through other universities as part of a consortium, e.g. M25 consortium).
4. Electronic/paper copies requested through UCL's Inter Library Loan (ILL) system, which sources most materials from the British Library.
5. Electronic copies at the Gottfredson Library at the Rutgers University School of Criminal Justice
6. Electronic/paper copies requested from the authors themselves.
7. The College of Policing library

Should any of the full text versions of the works collated not contain all of the information required to determine their eligibility for inclusion according to our coding strategy (described below), where practicable authors will be contacted directly in an attempt to retrieve this information.

Data base searches

The following databases will be searched for relevant studies. These have been chosen to provide a wide range of coverage across the social sciences (defined broadly). The inclusion of large-scale multi-disciplinary databases (numbers 10 and 13) ensures that the public health and physical sciences are also searched for relevant studies that span multiple disciplines or that fall outside of what are traditionally considered the social sciences.

1. ASSIA (Applied Social Sciences Index and Abstracts)
2. Criminal Justice Abstracts
3. Criminal Justice Periodicals
4. ERIC (Education Resources Information Center)
5. IBSS (International Bibliography of Social Sciences)
6. NCJRS (National Criminal Justice Reference Service)
7. Proquest theses and dissertations
8. PsycINFO
9. PsycEXTRA
10. SCOPUS
11. Social Policy and Practice
12. Sociological Abstracts
13. Web of Science
14. CINCH

Hand Searches

We will search the publications of the following groups:

1. Center for Problem-Oriented Policing (Tilley Award and Goldstein Award winners)
2. Institute for Law and Justice
4. Vera Institute for Justice (policing publications)
5. Rand Corporation (public safety publications)

6. Police Foundation (US)
7. Police Executive Research Forum (PERF)
8. The Campbell Collaboration reviews and protocols (C2)
9. Urban Institute
10. European Crime Prevention Network
11. Swedish National Council for Crime Prevention

Publications from national policing agencies will be searched and the agencies contacted if necessary. These will be:

1. Home Office (United Kingdom)
2. Australian Institute of Criminology
3. Swedish Police Service
4. Norwegian Ministry of Justice
5. Canadian Police College
6. Finnish Police (Poliisi)
7. Danish National Police (Politiet)
8. The Netherlands Police (Politie)
9. New Zealand Police
10. National Institute of Justice

A hand search will potentially be conducted of the following journal:

- Journal of Criminal Law and Criminology

This is the journal for which UCL staff do not have electronic access via a searchable database. The College of Policing (CoP) have hard copy access to this Journal. The CoP also have electronic access to two other journals that are unavailable to UCL staff:

- Police Practice and Research: An International Journal
- Policing: a Journal of Policy and Practice

Please see Appendix A for the means of access to be used for other key journals in the field.

Backward searches

Backward searches will be conducted by searching the bibliographies of all published reviews identified.

Key website searches

We will also search key websites to look for relevant reviews. Some examples of these include:

- Office of Juvenile Justice Prevention and Delinquency (OJJPD) <http://www.ojjdp.gov/>
- Substance abuse and mental health services administration (SAMSA) <http://www.samhsa.gov/>

- National registry of evidence based programs and practices
<http://www.nrepp.samhsa.gov/Index.aspx>
- National Institute of Corrections Evidence-Based Practices for Community Corrections <http://nicic.gov/library/>

We understand that the search strategy is both broad and ambitious. It has been set up like this in order to cast the net as wide as possible in the pursuit of relevant evidence. For all elements of the search strategy we will document (where appropriate) source, initial hits, number of duplications, number meeting criteria, number not meeting criteria (by reason).

C. Search Terms

Searches of electronic databases will use the following Boolean search terms:

Crime Types/ Crime Measurement

The primary filter for searching will be designed to target reviews that discuss a crime reduction outcome. This means that the reviews identified will ultimately consider whether certain interventions are estimated to have had an impact on a measure of crime or delinquency. The search terms for such measures will be:

abduct* OR aggressi* OR (anti*social NEAR/2 behavio*) OR arrest* OR arson* OR assault* OR blackmail OR "bodily harm" OR burglar* OR "calls for service" OR convict* OR counterfeit* OR crim* OR delinquen* OR ((dr*nk OR dangerous) NEAR/2 driv*) OR DUI OR explosi* OR firearm OR fraud OR homicide OR incarcerat* OR incest OR infanticide OR kidnapping OR (knife NEAR/2 crim*) OR (law NEAR/2 breaking) OR manslaughter OR (money NEAR/2 laundering) OR murder OR offen* OR prostitute* OR "public disorder" OR rape OR recidivis* OR reconvict* OR re-offen* OR reoffen* OR riot* OR robber* OR shoot* OR shoplift* OR terrori* OR theft* OR unlawful OR vandalism OR violen* OR weapon OR wounding OR (drug NEAR/2 misuse) OR (drug NEAR/2 abuse) OR (drug NEAR/2 market) OR (drug NEAR/2 deal*) OR (drug NEAR/2 traffick*) OR (drug NEAR/2 supply) OR (drug NEAR/2 possess*

The listed offences have been identified as being key search terms from the following sources:

<http://www.justice.gov.uk/downloads/legal-aid/eligibility/list-of-criminal-offences.pdf>

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/116226/understanding-crime-statistics.pdf

Sensitivity analysis was performed on all of the search terms (including those that follow), and those returning a large number of irrelevant hits were refined. This involved using proximity operators to associate two words within a defined distance (e.g. review W/5 evidence- meaning the word 'review' within 5 words of the word 'evidence'). Wildcard operators were employed to denote variations of terms (e.g. ((dr*nk OR dangerous) NEAR/2 driv*)).

Outcome Action

The search cluster above defines the measure of interest. The next cluster of terms refers to what is expected to happen to these measures as a result of some treatment or intervention. These terms are:

(prevent* OR deterr* OR reduc* OR control* OR increas* OR impact OR diver* OR (cost NEAR/1 effective*) OR (cost NEAR/1 benefit) OR displace* OR (diffus* NEAR/2 benefit))

Note that at the coding stage, other outcomes may be recorded (such as increase in satisfaction, reduction in school truancy, improvement in mental health or family functioning). However, the study will not be included unless crime reduction is included as an outcome.

Study type

The papers identified need to be systematic reviews, and so we will filter out papers referring to primary evaluations, for example. These search terms are typical when searching for systematic reviews and have been informed by the standard published filters (including <https://sites.google.com/a/york.ac.uk/issg-search-filters-resource/>). Specific publication search terms (with case sensitive variations where necessary) referring to study types will include:

(meta*analy* OR (review W/5 evidence) OR (review W/5 literature) OR (review W/5 evaluation) OR (systematic* PRE/2 review) OR "comprehensive bibliography" OR "Integrat* Review" OR "comprehensive Review" OR (quantitative W/2 review) OR (qualitative W/2 review) OR (thematic W/2 analy*) OR meta*narrative OR (data W/2 extract*) OR (data W/2 integrat*) OR (narrative W/2 review) OR (realist W/2 review) OR (campbell W/3 review) OR (cochrane W/3 review)

Interventions

As discussed, we propose not to include search terms for specific interventions, but will subsequently code the studies to classify them according to type/s of intervention considered.

Combining Search Filters

The content and methods components identified above will be combined using the following general process. Controlled vocabulary refers to index terms used by some of the databases, the natural language search terms are combined with these (using the Boolean OR operator) to produce a sensitive search. The three components of the research question (crime outcome, outcome action, and method) are combined using the Boolean AND operator to perform the final search. The general process is presented below. This search syntax will be adapted for the different databases according to available functionality and index terms.

1. Controlled vocabulary for crime terms
2. Natural language for crime terms (title, abstract, keywords)
3. #1 OR #2
4. Controlled vocabulary for outcome action terms
5. Natural language for outcome action terms (title, abstract, keywords)
6. #4 OR #5
7. Controlled vocabulary for method terms
8. Natural language for method terms (title, abstract, keywords)
9. #7 OR #8
10. #3 AND #6 AND #9

D. Coding

At this point, ***only primary coding*** will be undertaken. An initial sift will be completed by inspecting the study titles and accompanying abstracts to remove those articles and reports that do not meet the inclusion criteria (making a note of attrition levels). This will be completed in a conservative manner so that potentially eligible studies are not excluded at this stage. In fact, the screening criteria will be applied in the order listed below so that all potential studies identified receive at least preliminary coding. Consequently, even those studies that are not selected for further coding will be included in the database produced. Separate databases for those meeting and not meeting the explicit criteria will be created. Coding will therefore cover:

- ***Type/s of Intervention- defined using the dimensions outlined above- i.e.***
 - ***Response modality***
 - ***Targeted population***
 - ***Intended/ Unintended outcomes***
 - ***Implementer***
- ***Type of crime (e.g. crime/ delinquency type/s examined)***
- ***Type of measure discussed (recorded crime, calls to the police, arrest data)***
- ***Sample size (number of studies considered in review)***
- ***Methods section (including search strategy) present?***
- ***Type of review (Narrative, Meta-analysis, Mixed-Method, Realist)***
- ***Database searched***
- ***Systematic Search Researcher and date of search***
- ***Inclusion criteria met Y/N***
- Whether quantitative evidence is present (perhaps classifying e.g. 'effect size')
- Does the review contain any information on costs, cost effectiveness, cost benefit analysis
- Whether qualitative information is included
- Whether there is an explicit inclusion criteria
- Date/Year of publication
- Country/ies of origin (i.e. author/s affiliation/s)

- Geographical coverage (e.g. does the review cover international evidence?)
- Period covered (e.g. the interval of time covered?)
- Protocol Y/N

Those highlighted in bold above are the essential coding categories. The other codes will be populated as fully as possible from an initial scan of the particular review. Coding will be undertaken using EPPI Reviewer 4 software. This will allow the team to manage coding tasks, assess inter-rater reliability, and share the results (within the consortium and externally). Work package 1 will deliver a list of studies against the essential criteria and where possible the other initial criteria, and will involve acquiring the relevant studies meeting the criteria and storing them in a single library database.

A separate database will also enable access to a list and available codes for those that are initially coded but do not meet the inclusion criteria. These omitted studies can therefore be searched for relevant supporting information, detailing for example context and mechanism at a later time.

Detailed coding, classification, appraisal of the evidence and synthesis and presentation of the findings will be undertaken in work packages 3 and 4.

Appendix 1: Key journals and accessing plans

Journal	Where indexed
Crime and Delinquency	IBSS: International Bibliography of the Social Sciences Scopus Social Sciences Citation Index (Web of Science)
Crime Prevention and Community Safety	SCOPUS
Criminology	IBSS: International Bibliography of the Social Sciences (ProQuest) Social Sciences Citation Index (Thomson Reuters)
Criminology & Public Policy	SCOPUS (Elsevier) Social Sciences Citation Index (Thomson Reuters) Web of Science (Thomson Reuters)
Journal of Criminal Justice	Scopus
Journal of Criminal Law and Criminology	<i>Accessible to the College of Policing (hard copy)</i>
Journal of Experimental Criminology	SCOPUS Google Scholar
Journal of Quantitative Criminology	Social Science Citation Index SCOPUS Google Scholar JSTOR
Journal of Research in Crime and Delinquency	IBSS: International Bibliography of the Social Sciences Scopus Social Sciences Citation Index (Web of Science)
Justice Quarterly	Social Sciences Citation Index SCOPUS
Police Practice and Research: An International Journal	<i>Accessible to the College of Policing (electronic access)</i>
Police Quarterly	Social Sciences Citation Index (Web of Science)
Policing and Society: An International Journal of Research and Policy	International Bibliography of the Social Sciences; Social Science Citation Index.
Policing: a Journal of Policy and Practice	<i>Accessible to the College of Policing (electronic access)</i>
Policing: an International Journal of Police Strategies and Management	Scopus
Security Journal	Social Science Citation Index
The ANNALS of the American Academy of Political and Social Science	IBSS: International Bibliography of the Social Sciences Scopus Social Sciences Citation Index (Web of Science)
The Asian Journal of Criminology	SCOPUS Google Scholar
The Australian and New Zealand Journal of Criminology	International Bibliography of the Social Sciences Scopus
The British Journal of Criminology	IBSS Scopus Social Sciences Citation Index®
The Canadian Journal of Criminology	Google Scholar Project MUSE Social Sciences Citation Index Swetswise Online Content
The Howard Journal of Criminal Justice	IBSS: International Bibliography of the Social Sciences SCOPUS (Elsevier)