

# **Updating the Crime Reduction Toolkit: A report and manual**

Authors:
Dr Lisa Tompson
UCL Department of Security and Crime Science
35 Tavistock Square,
London,
WC1H 9EZ

T: 020 3108 3216 E: <u>l.tompson@ucl.ac.uk</u>

Dr Karen Schucan-Bird UCL IOE Department of Social Science 18 Woburn Square London WC1H 0NR

T: 020 7612 6465 E: k.bird@ucl.ac.uk

March 2018

# Contents

Introduction	3
Systematic searching	3
Screening	6
Coding and moderating	10
Writing up into narratives	10
Workflow process	10
Conclusion: Tips for successfully implementing the update	12
Appendix A: Search strings	13
Appendix B: Website hand-searching methods	21

#### Introduction

The Crime Reduction Toolkit (CRT) is an online repository of narrative summaries of systematic reviews on crime reduction. This report details the methods used to update the CRT, outlining the systematic process and the numbers of records/items dealt with at each stage. Work package 1 (WP1), of the original research programme that supported the establishment of the 'What Works Centre for Crime Reduction', was a project that systematically assembled the evidence base (defined as evidence syntheses) on crime reduction. Work package 4 (WP4) of this programme then quality assured this evidence, using coding derived from the EMMIE framework (Johnson et al., 2015), and wrote the results up into narratives that were subsequently uploaded to the Crime Reduction toolkit (CRT).

The CRT update was undertaken in two phases, with each phase spanning a different time period:

- 1. Updating with reviews published January 2014 August 2016
- 2. Updating with reviews published September 2016 September 2017

The project was co-managed by Dr Lisa Tompson and Dr Aiden Sidebottom and the research process and team was managed by Dr Karen Schucan-Bird. The research team included between three and four researchers who undertook dedicated tasks within each stage of the update process. Special thanks go to all of the researchers who worked on this project, including: David Colas-Aberg (UCL), David Perez (UCL), Joshua Owen (CoP), Karen Moreton (CoP), Emily Dryer-Beers (CoP), Austra Jenner-Parson (CoP), Robert Braddock (CoP) and Hannah Kennedy (CoP).

This report outlines the methods used to undertake the update of the CRT, structured according to the order of the process.

#### Systematic searching

Each phase of the update began with a systematic search. This involved executing the existing search strategy which covered electronic bibliographic databases, specialist libraries, key journals and websites of relevant organisations (See Bowers et al. 2014<sup>1</sup>). The details of the search techniques for each source are outlined below.

#### Electronic databases

This involved systematically searching from the end of the date of the previous WP1 search (December 2013). For the first phase of the refresh work, the 13 databases were searched using the search syntax developed for the original WP1 work, using date filters in the databases to limit the results to those studies published between January 2014 to August

<sup>&</sup>lt;sup>1</sup> Bowers, K. J., Johnson, S. D., Tilley, N., Tompson, L., & Belur, J. (2014b). Protocol for work package 1: Identifying existing systematic reviews of crime reduction. Available at: http://discovery.ucl.ac.uk/1462098/ Accessed 27 March 2018.

2016. The second phase of the refresh work conducted searches in the same databases from September 2016 to September 2017 (full search syntaxes are available in Appendix A).

In the interests of conserving resources, filter terms for the database PsycINFO were tested for their effectiveness and efficiency in identifying eligible studies from WP1. The results are documented in Tompson (no date). In brief, these tests showed that the application of different index filter terms (grouped by topic and method) produced difference measures of effectiveness (ability to identify the maximum number of relevant records) and efficiency (ability to minimise the number of number of irrelevant records). The empirical results reported in this paper can assist search strategy design and resourcing for future work involving a systematic search using PsycINFO.

### Specialist libraries

In addition the libraries of the Campbell and Cochrane Collaborations were hand-searched since these were potentially rich sources of studies. For the former, all reviews identified under the 'Crime and Justice co-ordinating group' published 2014-2016, were screened on full text. For the latter, a search was run using the crime type keywords used in the search syntax (see Appendix A for methods used).

#### Journals, websites and other sources

Twenty-four websites of police and crime reduction organisations<sup>2</sup> and two pertinent journals: Journal of Experimental Criminology and Crime Science were hand-searched. The reference lists of two compendiums of systematic reviews in crime reduction<sup>3</sup> were also screened for potentially included studies (on title in the first instance).

#### Results of searches

The total number of citation records identified in each database and specialist library (across both phases of the search) are summarised in Table 1. As can be seen here, SCOPUS returned the greatest volume of hits – most likely because of its sheer size and interdisciplinary nature, with the topic specific Criminal Justice Abstracts database producing almost as many hits. A great deal more reviews were found from the Cochrane Collaboration

-

<sup>&</sup>lt;sup>2</sup> Including: Swedish National Council For Crime Prevention; Washington State Institute for Public Policy; Danish National Centre for Social Research; UK Home Office; UK Ministry of Justice; Canadian Government Department of Justice; Australian Institute of Criminology; EPPI Centre; US Dept of Justice; Rand Corporation (public safety publications); US Centre for Disease Control and Prevention; US Government Accountability Office; US National Institute of Justice; Institute for Law and Justice (US); Vera Institute for Justice (US); Police Foundation (UK); Police Executive Research Forum (US); Urban Institute (US); European Crime Prevention Network; Swedish Police; Norwegian Ministry of Justice; Canadian Police College; Finnish Police; Netherlands Police; New Zealand Police.

<sup>&</sup>lt;sup>3</sup> De Waard (2017) "What Works?: A systematic overview of recently published meta evaluations / synthesis studies within the knowledge domains of Situational Crime Prevention, Policing, and Criminal Justice Interventions, 1997 – 2017" (Jaap de Waard, October 2017). And Farringdon, D.P., Gaffney, H., Losel, F., Ttofi, M.M (2017) Systematic reviews of the effectiveness of developmental prevention programs in reducing delinquency, aggression and bullying. Aggression and Violent Behavior 33 (2017), 91-106.

library, compared to the Campbell Collaboration library, due to the ability to search the website with keywords.

Source	Number
ASSIA	405
Criminal Justice Abstracts	3,018
Campbell Collaboration	7
ProQuest Criminal Justice Database	291
Criminal Justice Periodicals	85
Cochrane Collaboration	452
ERIC	59
IBSS	258
NCJRS	65
ProQuest Theses and Dissertations	81
PsycEXTRA	77
PsycINFO	1,582
SCOPUS	3,757
Sociological Abstracts	327
Social Policy and Practice	224
Web of Science	240
Total	10,928

Table 1 – Total citation records identified in the electronic databases and specialist libraries

Thirteen items were found through manual hand-searching. Reports were identified from Washington State Institute for Public Policy (1), Dutch Ministry of Security and Justice (1), European Parliament (2), National Drug Law Enforcement Research Fund (1) Journals (5) and reference checking of compendiums of systematic reviews in crime reduction (3).

#### Information management

The results of each database search were imported into EPPI Reviewer (a comprehensive software tool for systematic reviews, see Thomas et al., 2010)<sup>4</sup>. This web-based research synthesis tool contains functionality that facilitate information management and provide a means of tracking allocated workloads. For example, it assisted this project in automatically identifying many of the duplicate citation records and had the capacity to perform screening

<sup>&</sup>lt;sup>4</sup> Thomas J, Brunton J, Graziosi S (2010) *EPPI-Reviewer 4.0: software for research synthesis*. EPPI-Centre Software. London: Social Science Research Unit, Institute of Education, University of London. See http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=3396 for more information.

and data extraction. Once duplicate records were removed just under 8,700 articles remained.

# **Screening**

Screening is the process of reviewing the references identified by the search strategy, using the inclusion/ exclusion criteria to decide whether the items are relevant to the project. Screening was undertaken in different stages, and tailored to different search sources. The inclusion and exclusion criteria are presented in Table 2.

For bibliographic databases a two-stage screening process was employed, focusing on title and abstract screening first and then full text screening. An initial batch of items were screened by two researchers to test out the inclusion/ exclusion criteria and then subsequent batches were trialled until the researchers had a common understanding of the criteria and its application. Title and abstract screening was then undertaken by one researcher, seeking to be inclusive at this stage (including studies where there was some uncertainty) or seeking input from a colleague. The full text was then retrieved for those items that were included on title and abstract. A further round of screening was undertaken on the full text, again by a single researcher.

Screening of items found in journals followed the same format as that described above for electronic databases. For items found on websites or reference lists, initial screening was performed on titles. Those that were deemed potentially relevant would then be retrieved and screened on full text. This screening was undertaken by a single researcher.

Additional screening checks were undertaken by the team leader on studies included on full text. These checks included: 1) searching the original evidence base identified by WP1 (in EPPI Reviewer) to see if the review/ report had previously been identified (and reasons for inclusion/ exclusion), 2) checking the CRT for the intervention covered by the review, and 3) undertaking further full text screening to check that the intervention and outcomes complied with the inclusion criteria.

Item	Exclusion Criteria	InclusionWhat we're looking for:
Study type	<ul> <li>Exclude any study that is not a systematic review.</li> <li>Exclude studies that don't do all of the following:</li> <li>has at least 2 included studies</li> <li>Has an explicit methods section explaining the processes taken to complete the review. This means that the report should acknowledge the basic stages of the review process, including coding and synthesis stages.</li> <li>States the search sources used, including search terms employed to search electronic databases</li> </ul>	
Intervention	<ul> <li>Exclude studies that do not include an intervention that aims to prevent or reduce crime.</li> <li>Exclude studies that don't include an intervention. For example, studies that report prevalence of crime or views of the criminal justice system or experiences of crime.</li> <li>Exclude studies that are not about crime. There is no involvement by any criminal justice agency. For example, studies that focus on personal consumption of drugs/alcohol without connection to the criminal justice system.</li> <li>Exclude studies that focus on interventions that seek to identify crime but do not aim to reduce or prevent it. For example, screening tools that identify potential victims of</li> </ul>	Studies that include an intervention that aims to reduce or prevent crime.  Crime is defined as any behaviour prosecutable by law.  These interventions could be aimed at offenders, victims, communities, or geographical areas.  These interventions can be delivered in any setting or country.  Single or multiple component interventions are included.  Interventions include laws, programs.

	crime (e.g. domestic violence) or predictor tools for future criminal behaviour (e.g. for young offenders).	
Outcome	Exclude reviews that do not provide an outcome measure of crime reduction or prevention.	Quantitative outcome measure of crime reduction or prevention.
	Exclude reviews that only report, for example, health outcomes (e.g. injury prevention, traffic accidents,), education outcomes (e.g. academic attainment, school attendance), or psychological outcomes (e.g. offender attitudes, victim quality of life).	These outcomes can include data collected at any point of the pathway through the criminal justice pathway:
		Calls for service (response to emergency service calls)
		Recorded Crime (Official police records including local, regional and national data)
		Arrests (Official records)
		Charge/ Release data (Official records)
		Remand/ Bail Records (Official records)
		Conviction (Official records)
		Sentencing (Official records)
		Imprisonment(Official records)
		And/ or general measures of crime reduction/ prevention such as:
		Re-offending/ recidivism (General)
		Anti-social behaviour
		Self-reported offending
		For reviews on domestic violence, victim's reports of domestic violence are considered to be a crime outcome measure so should be INCLUDED.

Review focus	Exclude reviews where the main focus/ aims are not to evaluate a crime reduction/ prevention intervention.	
	This exclusion criterion should be used when the review includes individual studies that evaluate a crime reduction/ prevention intervention and report crime outcomes but the overall focus of the review is not evaluation of an intervention.	

Table 2 – Detailed inclusion/exclusion criteria that were used in the project

# Coding and moderating

Each study included on full text was EMMIE coded independently by two coders, using the bespoke spreadsheet designed in WP1<sup>5</sup>. This spreadsheet has an embedded codebook, accessed via hyperlinks from each of the 103 codes. This codebook has been developed over the five years of the project and is considered comprehensive in guiding coders into making decisions. Some codes collect data, or evidence (EMMIE-E), whereas others judge the quality of the methods and evidence reported by the review authors (EMMIE-Q). Floating labels are used for each code to prompt the coder for information. Logic rules are used to suggest a Quality score for each dimension of EMMIE, based on the answers given to EMMIE-Q codes, but these can be overridden manually by the coders if justification is provided.

Completed coding was then taken to a moderating session where the two coders discussed any discrepancies in the coding, reasons behind this, and agreed on the final EMMIE-Quality scores.

#### Writing up into narratives

The writing up of the agreed coding into narratives is a complicated procedure. For this reason we have produced a narrative guidance document (see Schucan-Bird and Tompson, 2018) that covers most of the common issues and presents the 'house style' agreed with the College of Policing. This also contains decision rules on how to synthesise new evidence into existing narratives.

The editorial process for the narratives is extensive, and involves checks by:

- 1) Both coders
- 2) The team manager
- 3) The project manager
- 4) The College of Policing

At every stage of this process questions could be raised that related to the coding, the write up or the interpretation of the review. Most reviews are complex and convoluted, and therefore the peer review process means that many iterations of the narratives were often required of the authors. On particularly thorny issues debate and resolutions between different strata of the editorial team were required. Once all the issues raised were resolved by the narrative author, the narrative was signed off by the College of Policing and uploaded to the Crime Reduction Toolkit.

#### Workflow process

Figure 1 illustrates the workflow process, summarised across both waves of searching. This shows that the combined searches yielded just under 11,000 citations, of which just over a

<sup>&</sup>lt;sup>5</sup> Imaginatively named: EMMIEcodingtool-Mar2018.xls

fifth were duplicates (and removed). Some 8,000 citation records were screened on title and abstract, with a further 278 screened on the full text. After this round of screening, 127 records were considered eligible, but on closer scrutiny, 88 were excluded at this stage, following the checks undertaken by the team manager (mainly because the interventions were subsequently deemed 'multiple' rather than single interventions, or it transpired that the review had been excluded in the original screening for WP1), leaving 39 to be EMMIE coded.

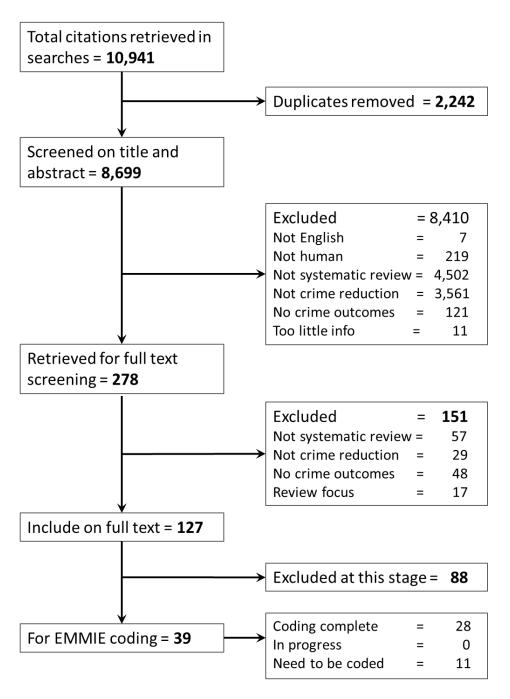


Figure 1 – Workflow process illustrating the search, through to screening phase

# Conclusion: Tips for successfully implementing the update

Updating the CRT draws on systematic methods to replicate the transparent and robust process applied in the original project (WP1). The update ensures the latest evidence base/reviews are present on the toolkit and provides opportunities for staff development and capacity building in a range of research skills.

Going forwards, for successful implementation of the continuation of this work we suggest that a dedicated member of staff takes ownership of the running of the workflow process. This, in our experience, assists in the considerable information management required, the work allocation, the managing of where each included review is in the process and provides oversight of the nature of the topics (e.g. types of intervention and outcomes) on the toolkit. Importantly, a dedicated team manager develops and applies tacit knowledge built up through the process and can use their familiarity of the strengths of the research team to optimise the workflow.

Having experienced researchers who are familiar with systematic reviews, have knowledge of research methods, have critical thinking skills and good writing skills is invaluable. Ideally, they should be involved in the process from screening through to narrative writing for a reasonable time commitment, to capitalise on the steep learning curve involved. This work is highly time consuming and therefore any continuing work needs to be duly resourced. We recommend using EPPI reviewer software (or similar) to manage the whole process. Finally, all guidance documents should be considered living documents, and when new decision rules are created in the light of new challenges and debates, the documentation on the process should be updated accordingly to ensure consistency in production of the searching, screening, coding and narratives.

# Appendix A: Search strings

# **SCOPUS** (searched via Elsevier)

Used original 'Crime type' AND 'research design' search strings. **N=1612**. Searched and imported on 2<sup>nd</sup> Oct 2017. Limits to English language and Published years 2016, 2017. Search string copied into the 'Advanced' tab in order to accommodate the full string.

(TITLE-ABS-KEY ((abduct\* OR aggressi\* OR (anti\*social PRE/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) W/2 driv\*) OR dui OR explosi\* OR firearm OR fraud OR homicide OR incarcerat\* OR incest OR infanticide OR kidnapping OR (knife W/2 crim\*) OR (law W/2 breaking) OR manslaughter OR (money W/2 laundering) OR murder OR offen\* OR prostitute\* OR (public PRE/0 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 adj2 misuse) OR (drug adj2 abuse) OR (drug adj2 market) OR (drug adj2 deal\*) OR (drug adj2 traffick\*) OR (drug adj2 supply) OR (drug adj2 possess\*))) AND (TITLE-ABS-KEY (metaanalys?s OR meta?analys?s OR (review W/3 evidence) OR (systematic\* PRE/2 review) OR meta\*narrative OR (realist W/2 review) OR (campbell W/3 review) OR (cochrane W/3 review))) AND (LIMIT-TO (PUBYEAR, 2017) OR LIMIT-TO (PUBYEAR, 2016) AND (LIMIT-TO (LANGUAGE, "English"))

#### **ERIC** (via ProQuest)

Searched on 9<sup>th</sup> October 2017 using Advanced search option. **N= 11**.

ALL((abduct\* OR aggress\* OR (anti\*social PRE/2 behavior\*) OR arrest\* OR arson\* OR assault\* OR blackmail OR "bodily harm" OR burglar\* OR "calls for service" OR convict\* OR counterfeit\* OR crim\* OR delinquent\* OR ((dr\*nk OR dangerous) PRE/2 drive\*) OR DUI OR explosion\*OR firearm OR fraud OR homicide OR incarcerate\* OR incest OR infanticide OR kidnapping OR (knife NEAR/2 crim\*) OR (law NEAR/2 breaking) OR manslaughter OR (money PRE/2 laundering) OR murder OR offend\* OR prostitute\* OR (public PRE/1 disorder) OR rape OR recidivism\* OR convict\* OR re-offend\* OR reoffer\* OR riot\* OR robber\* OR shoot\* OR shoplift\* OR terror\* OR theft\* OR unlawful OR vandalism OR violent\* 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 traffic\*) OR (drug NEAR/2 supply) OR (drug NEAR/2 possess\*))) AND ALL((prevent\* OR deter\* diver\* OR reduce\* OR control\* OR increase\* OR impact OR (cost PRE/1 effective\*) OR (cost PRE/1 benefit) OR displace\* OR (diffuse\* PRE/2 benefit))) AND ALL((meta\*analy\* OR (review NEAR/5 evidence) OR (review NEAR/5 literature) OR (review NEAR/5 evaluation) OR (systematic\* PRE/2 review) OR "comprehensive bibliography" OR "integrate\* Review" OR "comprehensive Review" OR (quantitative NEAR/2 review) OR (qualitative NEAR/2 review) OR (thematic NEAR/2 analy\*) OR meta\*narrative OR (data NEAR/2 extract\*) OR (data NEAR/2 integrate\*) OR (narrative NEAR/2 review) OR (realist NEAR/2 review) OR (campbell NEAR/3 review) OR (cochrane NEAR/3 review))) NOT (150 Speeches/meeting Papers AND 131 Reference Materials - Bibliographies AND 120 Opinion Papers AND 160 Tests/questionnaires AND 043 Dissertations/theses - Practicum Papers AND 052 Guides - Classroom - Teacher AND 132 Reference Materials - Directories/catalogs AND 072 Book/product Reviews AND 090 Legal/legislative/regulatory Materials)

Limits: Published between 01-09-2016 – 30-09-2017, English only

### **IBSS (via ProQuest)**

Searched on 9<sup>th</sup> October 2017. N=78.

ALL((abduct\* OR aggress\* OR (anti\*social PRE/2 behavior\*) OR arrest\* OR arson\* OR assault\* OR blackmail OR "bodily harm" OR burglar\* OR "calls for service" OR convict\* OR counterfeit\* OR crim\* OR delinquent\* OR ((dr\*nk OR dangerous) PRE/2 drive\*) OR DUI OR explosion\*OR firearm OR fraud OR homicide OR incarcerate\* OR incest OR infanticide OR kidnapping OR (knife NEAR/2 crim\*) OR (law NEAR/2 breaking) OR manslaughter OR (money PRE/2 laundering) OR murder OR offend\* OR prostitute\* OR (public PRE/1 disorder) OR rape OR recidivism\* OR convict\* OR re-offend\* OR reoffer\* OR riot\* OR robber\* OR shoot\* OR shoplift\* OR terror\* OR theft\* OR unlawful OR vandalism OR violent\* 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 traffic\*) OR (drug NEAR/2 supply) OR (drug NEAR/2 possess\*)) ) AND ALL((prevent\* OR deter\* diver\* OR reduce\* OR control\* OR increase\* OR impact OR (cost PRE/1 effective\*) OR (cost PRE/1 benefit) OR displace\* OR (diffuse\* PRE/2 benefit))) AND ALL((meta\*analy\* OR (review NEAR/5 evidence) OR (review NEAR/5 literature) OR (review NEAR/5 evaluation) OR (systematic\* PRE/2 review) OR "comprehensive bibliography" OR "integrate\* Review" "comprehensive Review" OR (quantitative NEAR/2 review) OR (qualitative NEAR/2 review) OR (thematic NEAR/2 analy\*) OR meta\*narrative OR (data NEAR/2 extract\*) OR (data NEAR/2 integrate\*) OR (narrative NEAR/2 review) OR (realist NEAR/2 review) OR (campbell NEAR/3 review) OR (cochrane NEAR/3 review))).

Limits: Published 01-09-2016 – 30-09-2017, English only

# **ProQuest Theses and Dissertations (ProQuest Dissertations & Theses Global)**

Searched on 9<sup>th</sup> October 2017. N= 17.

(ALL((abduct\* OR aggress\* OR (anti\*social PRE/2 behavior\*) OR arrest\* OR arson\* OR assault\* OR blackmail OR "bodily harm" OR burglar\* OR "calls for service" OR convict\* OR counterfeit\* OR crim\* OR delinquent\* OR ((dr\*nk OR dangerous) PRE/2 drive\*) OR DUI OR explosion\*OR firearm OR fraud OR homicide OR incarcerate\* OR incest OR infanticide OR kidnapping OR (knife NEAR/2 crim\*) OR (law NEAR/2 breaking) OR manslaughter OR (money PRE/2 laundering) OR murder OR offend\* OR prostitute\* OR (public PRE/1 disorder) OR rape OR recidivism\* OR convict\* OR re-offend\* OR reoffer\* OR riot\* OR robber\* OR shoot\* OR shoplift\* OR terror\* OR theft\* OR unlawful OR vandalism OR violent\*

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 traffic\*) OR (drug NEAR/2 supply) OR (drug NEAR/2 possess\*))) AND ALL((prevent\* OR deter\* diver\* OR reduce\* OR control\* OR increase\* OR impact OR (cost PRE/1 effective\*) OR (cost PRE/1 benefit) OR displace\* OR (diffuse\* PRE/2 benefit)) ) AND ALL((meta\*analy\* OR (review NEAR/5 evidence) OR (review NEAR/5 literature) OR (review NEAR/5 evaluation) OR (systematic\* PRE/2 review) OR "comprehensive bibliography" OR "integrate\* "comprehensive Review" OR (quantitative NEAR/2 review) OR (qualitative NEAR/2 review) OR (thematic NEAR/2 analy\*) OR meta\*narrative OR (data NEAR/2 extract\*) OR (data NEAR/2 integrate\*) OR (narrative NEAR/2 review) OR (realist NEAR/2 review) OR (campbell NEAR/3 review) OR (cochrane NEAR/3 review))) AND (la.exact("ENG") AND pd(20140101-20160920))) AND (subt.exact("molecular biology" OR "school administration" OR "cultural anthropology" OR "cellular biology" OR "american literature" OR "american history" OR "genetics" OR "oncology" OR "american studies" OR "nutrition" OR "neurosciences" OR "teacher education" OR "biomedical engineering" OR "microbiology" OR "art history" OR "materials science" OR "british and irish literature" OR "computer science" OR "public administration" OR "mechanical engineering" OR "electrical engineering" OR "music" OR "marketing" OR "curricula" OR "immunology" OR "rhetoric" OR "philosophy" OR "pharmacy sciences" OR "european history" OR "linguistics" OR "language arts" OR "chemical engineering" OR "civil engineering" OR "bilingual education" OR "comparative literature" OR "educational leadership" OR "finance" OR "modern literature" OR "religious history" OR "surgery" OR "history" OR "gerontology" OR "biochemistry" OR "neurology" OR "curriculum development" OR "labor relations" OR "reading instruction" OR "kinesiology" OR "agronomy" OR "industrial engineering" OR "theology" OR "science education" OR "agricultural economics" OR "environmental engineering" OR "physiology" OR "analytical chemistry" OR "archaeology" OR "forestry" OR "area planning & development" OR "mathematics education" OR "accounting" OR "zoology" OR "entomology" OR "art education" OR "military studies" OR "higher education administration" OR "journalism" OR "anatomy & physiology" OR "organic chemistry" OR "biomedical research" OR "film studies" OR "psychobiology" OR "speech therapy" OR "spirituality" OR "management" OR "economics" OR "medicine" OR "pharmacology" OR "theater" OR "operations research" OR "plant biology" OR "botany" OR "economic theory" OR "energy" OR "food science"))

Limits: Published 2016-2017, English only

#### Sociological Abstracts (via ProQuest)

Searched on 2<sup>nd</sup> October 2017. **N= 250 (based on an incomplete search string -** only able to combine the second (outcomes) and the third (type of review) tiers).

AB,TI((prevent\* OR deter\* OR diver\* OR reduce\* OR control\* OR increase\* OR impact OR (cost PRE/1 effective\*) OR (cost PRE/1 benefit) OR displace\* OR (diffuse\* PRE/2 benefit))) AND AB,TI((meta\*analy\* OR (review NEAR/5 evidence) OR (review NEAR/5 literature) OR (review NEAR/5 evaluation) OR (systematic\* PRE/2 review) OR "comprehensive bibliography" OR "integrate\* Review" OR "comprehensive Review" OR (quantitative NEAR/2 review) OR (qualitative NEAR/2 review) OR (thematic NEAR/2 analy\*) OR meta\*narrative

OR (data NEAR/2 extract\*) OR (data NEAR/2 integrate\*) OR (narrative NEAR/2 review) OR (realist NEAR/2 review) OR (campbell NEAR/3 review) OR (cochrane NEAR/3 review)))

Limits: Published 01-09-2016 – 30-09-17, English only

#### **Social Policy and Practice (via Ovid)**

Searched on 2<sup>nd</sup> October 2017. **N= 77**.

(abduct\* or aggressi\* or (anti\*social adj2 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) adj2 driv\*) or DUI or explosi\* or firearm or fraud or homicide or incarcerat\* or incest or infanticide or kidnapping or (knife adj2 crim\*) or (law adj2 breaking) or manslaughter or (money adj2 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 adj2 misuse) or (drug adj2 abuse) or (drug adj2 market) or (drug adj2 deal\*) or (drug adj2 traffick\*) or (drug adj2 supply) or (drug adj2 possess\*)).ab,ti. OR ("anti?social" adj2 "behavio\* ").ab,ti. AND (prevent\* or deterr\* or diver\* or reduc\* or control\* or increas\* or impact or (cost adj1 effective\*) or (cost adj1 benefit) or displace\* or (diffus\* adj2 benefit)).ab,ti. AND (meta analy\* or meta?analy\* or meta\*analy\* or (review adj5 evidence) or (review adj5 literature) or (review adj5 evaluation) or (systematic\* adj2 review) or "comprehensive bibliography" or "Integrat\* Review" or "comprehensive Review" or (quantitative adj2 review) or (qualitative adj2 review) or (thematic adj2 analy\*) or meta\*narrative or (data adj2 extract\*) or (data adj2 integrat\*) or (narrative adj2 review) or (realist adj2 review) or (campbell adj3 review) or (cochrane adj3 review)).ab,ti.

Limits: Published 2016 -2017

# PsycEXTRA (via Ovid)

Searched on 2<sup>nd</sup> October 2017. N= 11.

(abduct\* or aggressi\* or (anti\*social adj2 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) adj2 driv\*) or DUI or explosi\* or firearm or fraud or homicide or incarcerat\* or incest or infanticide or kidnapping or (knife adj2 crim\*) or (law adj2 breaking) or manslaughter or (money adj2 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 adj2 misuse) or (drug adj2 abuse) or (drug adj2 market) or (drug adj2 deal\*) or (drug adj2 traffick\*) or (drug adj2 supply) or (drug adj2 possess\*)).ab,ti. OR ("anti?social" adj2 "behavio\* ").ab,ti. AND (prevent\* or deterr\* or diver\* or reduc\* or control\* or increas\* or impact or (cost adj1 effective\*) or (cost adj1 benefit) or displace\* or (diffus\* adj2 benefit)).ab,ti. AND (meta analy\* or meta?analy\* or meta\*analy\* or (review adj5 evidence) or (review adj5 literature) or (review adj5 evaluation) or (systematic\* adj2 review) or "comprehensive bibliography" or "Integrat\* Review" or "comprehensive Review" or

(quantitative adj2 review) or (qualitative adj2 review) or (thematic adj2 analy\*) or meta\*narrative or (data adj2 extract\*) or (data adj2 integrat\*) or (narrative adj2 review) or (realist adj2 review) or (campbell adj3 review) or (cochrane adj3 review)).ab,ti.

Limits: Published 2016 –2017, Human, English Language

#### **Web of Science**

Searched on 2<sup>nd</sup> October 2017. N= 200.

TS=((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\*))) AND TS=((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))) AND TS=((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)))

Limits: Published 2016 –2017, English, WEB OF SCIENCE CATEGORIES: (CRIMINOLOGY PENOLOGY)

**NCJRS** (using College's access via OpenAthens access). Searched on 10<sup>th</sup> October 2017. N=0

(abduct\* OR aggress\* OR (anti\*social PRE/2 behavior\*) OR arrest\* OR arson\* OR assault\* OR blackmail OR "bodily harm" OR burglar\* OR "calls for service" OR convict\* OR counterfeit\* OR crim\* OR delinquent\* OR ((dr\*nk OR dangerous) PRE/2 drive\*) OR duci OR explosion\*OR firearm OR fraud OR homicide OR incarcerate\* OR incest OR infanticide OR kidnapping OR (knife NEAR/2 crim\*) OR (law NEAR/2 breaking) OR manslaughter OR (money PRE/2 laundering) OR murder OR offend\* OR prostitute\* OR (public PRE/1 disorder) OR rape OR recidivism\* OR convict\* OR re-offend\* OR reoffer\* OR riot\* OR robber\* OR shoot\* OR shoplift\* OR terror\* OR theft\* OR unlawful OR vandalism OR violent\* 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 traffic\*) OR (drug NEAR/2 supply) OR (drug NEAR/2 possess\*)) AND (meta\*analy\* OR (review NEAR/5 evidence) OR (review NEAR/5 literature) OR (review NEAR/5 evaluation) OR (systematic\* PRE/2 review)

OR "comprehensive bibliography" OR "integrate\* Review" OR "comprehensive Review" OR (quantitative NEAR/2 review) OR (qualitative NEAR/2 review) OR (thematic NEAR/2 analy\*) OR meta\*narrative OR (data NEAR/2 extract\*) OR (data NEAR/2 integrate\*) OR (narrative NEAR/2 review) OR (realist NEAR/2 review) OR (campbell NEAR/3 review) OR (cochrane NEAR/3 review))

#### **ASSIA** (via ProQuest)

Searched on 9<sup>th</sup> October 2017, using the same search string as the one used for Sociological Abstracts (comprising three tiers). **N= 144**.

ALL((abduct\* OR aggress\* OR (anti\*social PRE/2 behavior\*) OR arrest\* OR arson\* OR assault\* OR blackmail OR "bodily harm" OR burglar\* OR "calls for service" OR convict\* OR counterfeit\* OR crim\* OR delinquent\* OR ((dr\*nk OR dangerous) PRE/2 drive\*) OR DUI OR explosion\* OR firearm OR fraud OR homicide OR incarcerate\* OR incest OR infanticide OR kidnapping OR (knife NEAR/2 crim\*) OR (law NEAR/2 breaking) OR manslaughter OR (money PRE/2 laundering) OR murder OR offend\* OR prostitute\* OR (public PRE/1 disorder) OR rape OR recidivism\* OR convict\* OR re-offend\* OR reoffer\* OR riot\* OR robber\* OR shoot\* OR shoplift\* OR terror\* OR theft\* OR unlawful OR vandalism OR violent\* 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 traffic\*) OR (drug NEAR/2 supply) OR (drug NEAR/2 possess\*)) ) AND ALL((prevent\* OR deter\* diver\* OR reduce\* OR control\* OR increase\* OR impact OR (cost PRE/1 effective\*) OR (cost PRE/1 benefit) OR displace\* OR (diffuse\* PRE/2 benefit))) AND ALL((meta\*analy\* OR (review NEAR/5 evidence) OR (review NEAR/5 literature) OR (review NEAR/5 evaluation) OR (systematic\* PRE/2 review) OR "comprehensive bibliography" OR "integrate\* Review" OR "comprehensive Review" OR (quantitative NEAR/2 review) OR (qualitative NEAR/2 review) OR meta\*narrative OR (data NEAR/2 extract\*) OR (data NEAR/2 integrate\*) OR (narrative NEAR/2 review) OR (realist NEAR/2 review) OR (campbell NEAR/3 review) OR (cochrane NEAR/3 review)))

Limits: Published 01-09-2016- 30-09-17, English only

#### PsycINFO (via Ovid)

Searched on 9<sup>th</sup> October 2017. Used the same Search string as that used in searching PshychEXTRA (the original search string was not accepted in Ovid). **N=672**.

(abduct\* or aggressi\* or (anti\*social adj2 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) adj2 driv\*) or DUI or explosi\* or firearm or fraud or homicide or incarcerat\* or incest or infanticide or kidnapping or (knife adj2 crim\*) or (law adj2 breaking) or manslaughter or (money adj2 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 adj2 misuse) or (drug adj2 abuse) or (drug adj2 market) or (drug adj2 deal\*) or (drug adj2 possess\*)).ab,ti. OR

("anti?social" adj2 "behavio\* ").ab,ti. AND (prevent\* or deterr\* or diver\* or reduc\* or control\* or increas\* or impact or (cost adj1 effective\*) or (cost adj1 benefit) or displace\* or (diffus\* adj2 benefit)).ab,ti. AND (meta analy\* or meta?analy\* or meta\*analy\* or (review adj5 evidence) or (review adj5 literature) or (review adj5 evaluation) or (systematic\* adj2 review) or "comprehensive bibliography" or "Integrat\* Review" or "comprehensive Review" or (quantitative adj2 review) or (qualitative adj2 review) or (thematic adj2 analy\*) or meta\*narrative or (data adj2 extract\*) or (data adj2 integrat\*) or (narrative adj2 review) or (realist adj2 review) or (cochrane adj3 review)).ab,ti.

Limits: Published 2016-2017, Human, English only

#### **Campbell library**

Search run on 9<sup>th</sup> October 2017, **N=1**. Only one review was identified under the 'Crime and Justice co-ordinating group' published 2016-2017, and was imported into EPPI Reviewer.

https://www.campbellcollaboration.org/component/jak2filter/?ltemid=1352&issearch=1&isc=1 &category\_id=101&xf\_3\_from=2016-09-01&xf\_4[0]=1&xf\_8[0]=3&ordering=publishUp

# **Cochrane library (via Wiley)**

Search run on 9<sup>th</sup> October 2017. **N=138** (when limited to reviews only (excluding protocols)).

abduct\* OR aggressi\* OR (anti\*social N2 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) N2 driv\*) OR explosi\* OR firearm OR fraud OR homicide OR incarcerat\* OR incest OR infanticide OR kidnapping OR (knife N2 crim\*) OR (law N2 breaking) OR manslaughter OR (money N2 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 N2 misuse) OR (drug N2 abuse) OR (drug N2 market) OR (drug N2 deal\*) OR (drug N2 traffick\*) OR (drug N2 supply) OR (drug N2 possess\*)

Limits: Publication Year from 2016 to 2017, in Cochrane Reviews (Reviews and Protocols) (Word variations have been searched)

**Criminal Justice Abstracts** (searched using College access via OpenAthens on EBSCO) on 9<sup>th</sup> October 2017. **N=422.** 

((meta\*analy\*) OR (review N5 evidence) OR (review N5 literature) OR (review N5 evaluation) OR (systematic\* W2 review) OR "comprehensive bibliography" OR "integrat\* review" OR "comprehensive review" OR (quantitative W2 review) OR (qualitative W2 review) OR (thematic W2 analy\*) OR meta\*narrative OR (data W2 extract\*) OR (data W2 integrat\*) OR (narrative W2 review) OR (realist W2 review) OR (campbell W3 review) OR (cochrane W3 review)) AND (abduct\* OR aggressi\* OR (anti\*social N2 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) N2 driv\*) OR explosi\* OR firearm OR fraud OR homicide OR incarcerat\* OR incest OR infanticide OR kidnapping OR (knife N2 crim\*) OR (law N2 breaking) OR manslaughter OR (money N2 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 N2 misuse) OR (drug N2 abuse) OR (drug N2 market) OR (drug N2 deal\*) OR (drug N2 traffick\*) OR (drug N2 supply) OR (drug N2 possess\*))

Limits: September 2016 – September 2017, English only.

#### Criminal Justice Database (searched via ProQuest using College of Policing login):

Searched and imported on 16<sup>th</sup> October 2017. **N= 291**.

((meta\*analy\*) OR (review N5 evidence) OR (review N5 literature) OR (review N5 evaluation) OR (systematic\* W2 review) OR "comprehensive bibliography" OR "integrat\* review" OR "comprehensive review" OR (quantitative W2 review) OR (qualitative W2 review) OR (thematic W2 analy\*) OR meta\*narrative OR (data W2 extract\*) OR (data W2 integrat\*) OR (narrative W2 review) OR (realist W2 review) OR (campbell W3 review) OR (cochrane W3 review)) AND (abduct\* OR aggressi\* OR (anti\*social N2 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) N2 driv\*) OR explosi\* OR firearm OR fraud OR homicide OR incarcerat\* OR incest OR infanticide OR kidnapping OR (knife N2 crim\*) OR (law N2 breaking) OR manslaughter OR (money N2 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 N2 misuse) OR (drug N2 abuse) OR (drug N2 market) OR (drug N2 deal\*) OR (drug N2 traffick\*) OR (drug N2 supply) OR (drug N2 possess\*))

Limits: Published between 01.09.2016 – 30.09.2017, English only

# Appendix B: Website hand-searching methods

Institution	Search
Washington State Institute for Public Policy	Reports Page "crime reduction", Year 2016 onwards
Danish National Centre for Social Research	Research - Research Publications - "crime reduction" "2016 and "2017"
Australian Institute of Criminology	AIC publications - category "crime prevention", "policing",
Bra - Swedish National Council For Crime Prevention	"Crime prevention" and "crime reduction" with "systematic review"
Public Safety Canada	Policing - Crime Prevention Tools and Resources - More Crime Prevention Publications and Reports; "Crime prevention" filtered by year - 2016 and 2017; "Countering Crime";
Home Office	Gov.uk - Research and Analysis published after 01/09/2016
Ministry of Justice	Gov.uk - Research and Analysis published after 01/09/2016
EPPI Centre	Chronological list of systematic reviews; Index list of systematic review topics; research reports
US Department of Justice	Reports and Publications; including COPS; office of the attorney general; office of the deputy attorney general; office of the associate attorney general; access to justice DEA; FBI; Office of Victims of Crime; US Attorneys; Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking.
Rand Corporation	Research; Published Research; "Crime" - Research;
Rand Corporation	Research; Published Research; "Crime and Violence Prevention - Research"
Rand Corporation	"Criminal Justice"
US Centre for Disease Control and Prevention	No "crime" or "crime reduction/prevention category". Searched "systematic review"
US Government Accountability Office	Report and Testimonies; Custom Date Range 01/09/2016 - 30/09/2017); Reduced Search via advanced search must include "crime" 01/09/2016 - 30/09/2017
US National Institute of Justice	"Crime Prevention" by date 2016 onwards; "All publications", by date, 2016 onwards;
Institute for Law and Justice	"Crime" by search; manual look through categories policing, public housing, private security
Vera Institute for Justice	Search of available publications released 2016 and post 2016
Police Foundation	Manual search through all publications
Police Executive Research Forum	Chronological list of all available publications post 2016

Urban Institute	Search "crime" by date 2016 and forward
European Crime Prevention Network	Manual search through all research publications; Filter "Systematic reviews"
Swedish Police	No publications available via website
Norwegian Ministry of Justice	Intervention, crime prevention, crime reduction, systematic review
Canadian Police College	Intervention, crime prevention, crime reduction, systematic review
Finnish Police	Intervention, crime prevention, crime reduction, systematic review
Netherlands Police	Intervention, crime prevention, crime reduction, systematic review
New Zealand Police	Intervention, crime prevention, crime reduction, systematic review