The Global Policing Database: Building the Evidence Base

By

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The University of Queensland, Brisbane (2023)

Introducing the Global Policing Database

The Global Policing Database (GPD) is a searchable repository that captures information about all published and unpublished quantitative evaluations (systematic reviews, randomized controlled trials (RCT) and a range of quasi-experimental designs) of police and policing interventions conducted since 1950. The GPD is created and annually updated using expansive systematic search methods to ensure comprehensive inclusion of published and unpublished evaluations of policing interventions from across the globe. The GPD repository of eligible studies is built through a series of systematic screening stages that are described in this document. The GPD is designed for use by police, researchers, social welfare practitioners, and policy makers to inform evidence-based policy and practice. It captures evaluations of interventions conducted by police, with police and on police and is distinct from other policing repositories because the GPD:

- includes any type of police or policing intervention. For example, we include interventions that target problem people, situations and places; police programs that assist victims; interventions that develop organizational capacities (including technologies); practices that improve interviewing techniques; and programs that enhance police wellbeing, and more.
- does not limit on intervention outcome. The GPD goes beyond crime and disorder outcomes, collecting studies that include outcomes such as fear of crime, perceptions of police, organizational effectiveness, physical and mental wellbeing, and more.
- **only includes high quality evaluation research.** All eligible studies in the GPD use quantitative methods using systematic review, RCT and a wide range of quasi-experimental designs to ascertain program impact on a stated outcome.

This summary document provides users of the GPD information about the search and screening methods of the GPD that may need to be cited and referenced in reports, systematic reviews, rapid reviews or any other output that references the GPD.

GPD Systematic Search Strategy

The University of Queensland (UQ) in Australia is home to the GPD and is where our staff access global networks of libraries, academic databases, government documents and publicly available websites to build the GPD. The GPD team conducts an annual update harvest search to ensure the GPD remains current and inclusive of the most recent published and unpublished studies meeting our GPD criteria.

Search terms

To ensure optimum sensitivity and specificity, the GPD search strategy utilises a combination of freetext and controlled vocabulary search terms (see Table 1). Because controlled vocabularies and search capabilities vary across databases, the exact combination of search terms and field codes are adapted to each database. The free-text search terms for the GPD are provided in Table 1 (below) and are grouped by substantive (i.e., some form of policing) and evaluation terminology. Although the search strategy may vary slightly across search locations, it follows several general rules:

- Search terms are combined into search strings using Boolean operators "AND" and "OR".
 Specifically, terms within each category are combined with "OR", and categories will be combined with "AND". For example: (police OR policing OR "law#enforcement") AND (analy* OR ANCOVA OR ANOVA OR ...).
- Compound terms (e.g., law enforcement) are considered single terms in search strings by using quotation marks (i.e., "law*enforcement") to ensure that the database searches for the entire term rather than separate words.
- Wild cards and truncation codes are used for search terms with multiple iterations from a stem word (e.g., evaluation, evaluate) or spelling variations (e.g., evaluat* or randomi#e).
- If a database has a controlled vocabulary term that is equivalent to "POLICE", the term is combined in a search string that includes both the policing and evaluation free-text search terms. This approach ensures that the search retrieves documents that do not use policing terms in the title/abstract but have been indexed as being related to policing in the database. An example of this approach is the following search string: (((SU: "POLICE") OR (TI,AB,KW: police OR policing OR "law*enforcement")) AND (TI,AB,KW: intervention* OR evaluat* OR compar* OR ...)).
- For search locations with limited search functionality, a broad search that uses only the policing free-text terms is implemented.
- Multidisciplinary database searches are limited to relevant disciplines (e.g., include social sciences but exclude physical sciences).
- Search results are refined to exclude specific types of documents that are not suitable for systematic reviews (e.g., newspapers, front/back matter, book reviews).

Policing search terms	Evaluation search term	15		
police	analy*	data	outcome*	result*
policing	ANCOVA	effect*	paramet*	"risk#ratio*"
"law*enforcement"	ANOVA	efficacy	"post-test"	sampl*
constab*	"ABAB design"	eval*	posttest	"standard deviation*"
detective*	"AB design"	experiment*	"post test"	statistic*
sheriff*	baseline	hypothes*	predict*	studies
	causa*	impact*	"pre-test"	study
	"chi#square"	intervent*	pretest	survey*
	coefficient*	interview*	program*	"systematic review*"
	"comparison	longitudinal	"propensity score*"	"t#test*"
	condition*"	MANCOVA	quantitative	"time#series"
	"comparison group*"	MANOVA	"quasi#experiment*"	treatment*
	"control condition*"	"matched group"	questionnaire*	variable*
	"control group*"	measure*	random*	variance
	correlat*	"meta-analy"	RCT	
	covariat*	"odds#ratio*	regress*	
	"cross#section*"			

Table 1. Free-text search terms for the GPD systematic search

Search Locations

To reduce publication and discipline bias, the GPD harvesting search strategy adopts an international scope and involves searching for literature across several disciplines (e.g., criminology, law, political science, public health, sociology, social science and social work). The search harvests a comprehensive range of published (i.e., journal articles, book chapters, books) and unpublished literature (e.g., working papers, governmental reports, technical reports, conference proceedings, dissertations) by implementing a search strategy across bibliographic/academic, grey literature, and dissertation databases and repositories. The final search locations and solutions are shown in Table 2.

Table 2. GPD search locations

Indexed & academic databases		Content coverage included in record	Full / modified search	Search modifications
ProQuest	Criminal Justice	Yes	Full	None.
	Dissertation and Theses Database Global	Not Available	Modified	Social Sciences subset.
	Political Science	Yes	Full	None.
	Periodical Archive Online	Yes	Full	None.
	Research Library	Yes	Modified	Social Sciences subset.
	Social Science Journals	Yes	Full	None.
	Sociology	Yes	Modified	Search 2 unique journal titles and non-serial
	Sociology	Yes	woonned	content only.
	Applied Social Sciences Index and Abstracts	Yes	Full	None.
	International Bibliography of the Social Sciences	Yes	Full	None.
	Public Affairs Information Service	Yes	Full	None.
	Social Services Abstracts	Yes	Modified	Search 5 unique journal titles and non-serial
		165		content only.
	Sociological Abstracts	Yes	Full	None.
	Worldwide Political Sciences Abstracts	Yes	Modified	Search 9 unique journal titles and non-serial content only.
EBSCO	Academic Search Premier	Yes	Full	None.
	Criminal Justice Abstracts	Yes	Full	None.
	EconLit	Yes	Full	None.
	MEDLINE with Full-Text (for initial search 1950-2014)	Yes	Full	None.
	Social Sciences Full-Text	Yes	Full	None.

Indexed & academic databases		Content coverage included in record	Full / modified search	Search modifications
OVID	International Political Science Abstracts	Not Available	Full	None.
	PsycARTICLES	Yes	Modified	Search 4 unique journal titles only.
	PsycEXTRA	Not Available	Full	None.
	PsycINFO	Yes	Full	None.
	Social Work Abstracts	Not Available	Full	None.
Web of Science	Current Contents Connect – Social and Behavioural	Vec	Modified	Search 1 unique journal title and non-serial
	Sciences Edition	Yes		content only.
	Book Citation Index (Social Sciences and Humanities)	Not Available	Full	None.
	Conference Proceedings Citation Index (Social Sciences and Humanities)	Not Available	Full	None.
	MEDLINE with Full-Text (for searches 2015 onwards)	Yes	Full	None.
	Social Science Citation Index	Yes	Full	None.
Informit	Australian Attorney General Information Service	Yes	Full	None.
	Australian Criminology Database (CINCH)	Yes	Full	None.
	Australian Federal Police Database	Yes	Full	None.
	Australian Public Affairs Full-Text	Yes	Full	None.
	DRUG	Yes	Full	None.
	Health & Society Database	Yes	Modified	Search unique journal titles and non-serial content only.
	Humanities and Social Sciences Collection	Yes	Full	None.
Gale-Cengage	Expanded Academic ASAP	Yes	Full	None.

Indexed & academic databases		Content coverage included in record	Full / modified search	Search modifications
Standalone & open				Search 4 unique journal titles in Law and
access database	Cambridge Journals Online	Yes	Modified	Political Science collections and full search of
				Social Studies collection.
	Directory of Open Access Journals	Yes	Full	None.
	HeinOnline	Yes	Modified	Law Journals Online collection only.
	JSTOR	Yes	Modified	Search unique titles across the Law, Political
				Science, Public Health, Public Policy, Social
				Work and Sociology collections only. The
				Criminal Justice collection had no unique
				content and so will be excluded from the
				search. Only 10% of content in this database
				have abstracts and a full-text search returns
				>250,000 results because of inability to
				construct complex search strings. Therefore,
				a modified search of the unique titles across
				these collections will be more pragmatic
				than a full search of the database.
	Oxford Scholarship Online	Yes	Full	None.
	Sage Journals Online and Archive (Sage Premier)	Yes	Modified	Search 5 unique journal titles and non-serial
	Sage Journals Online and Alchive (Sage Frenher)	165		content only.
	ScienceDirect	Yes	Full	None.
	SCOPUS	Yes	Full	None.

Indexed & academic databases		Content coverage included in record	Full / modified search	Search modifications
	SpringerLink	Yes	Full	Although this database has low uniqueness when combined with the full set of databases, a full search using only the policing search terms will be more pragmatic than a modified search on unique titles because of the restricted search functionality of this database.
	Taylor & Francis Online	Yes	Modified	Although this database has low uniqueness when combined with the full set of databases, a full search using only the policing search terms will be more pragmatic than a modified search on unique titles because of the restricted search functionality of this database.
	Wiley Online Library	Yes	Full	None.
	California Commission on Peace Officer Standards & Training Library	No	Full	None.
	Cochrane Library	No	Full	None.
	CrimeSolutions.gov	No	Full	None.
	Database of Abstracts of Reviews of Effectiveness (DARE)	No	Full	None.
	FBI – The Fault (Reports and Publications)	No	Full	None.
	Evidence-Based Policing Matrix	No	Full	None.

Indexed & academic databases		Content coverage included in record	Full / modified search	Search modifications
	International Initiative for Impact Evaluation Database (3ie)	No	Full	None.
	National Criminal Justice Reference Service	No	Full	None.
	Safety Lit Database	No	Full	None.
	Australian Institute of Criminology	No	Full	None.
	Bureau of Police Research and Development (India)	No	Full	None.
	Canadian Police Research Catalogue	No	Full	None.
	Centre for Problem-Oriented Policing	No	Full	None.
	College of Policing (including POLKA and Crime Reduction Toolkit)	No	Full	None.
	European Police College (CEPOL)	No	Full	None.
	Evidence for Policy and Practice Information and Coordinating Centre	No	Full	None.
	National Research Institute of Police Science (Japanese)	No	Full	None.
	Office of Community Oriented Policing Services	No	Full	None.
	Police Executive Research Forum (US)	No	Full	None.
	Police Foundation (US)	No	Full	None.
	Tasmania Institute of Law Enforcement Studies (Australia)	No	Full	None.
	Policing Online Information System (POLIS, Europe)	No	Full	None.
	Scottish Institute for Policing Research	No	Full	None.
	Centre of Excellence in Policing and Security (Australian, now archived)	No	Full	None.

Indexed & academic databases		Content coverage included in record	Full / modified search	Search modifications
	Alcohol and Alcohol Problems Science Database (ETOH, now archived)	No	Full	None.
	African Journals Online	No	Full	None.
	Campbell Collaboration Library of Systematic Reviews	No	Full	None.
	Criminal Justice Press (Crime Prevention Studies, volumes 1-27)	No	Full	None.
	Danish National Police (Politi)	No	Full	None.
	Drug Policy Alliance – Lindesmith Library (Online Resource Library)	No	Full	None.
	DrugScope	No	Full	None.
	Finnish Police (Poliisi)	No	Full	None.
	GeoRef	No	Full	None.
	German Federal Criminal Police Office (Bundeskriminalamt)	No	Full	None.
	Home Office (United Kingdom)	No	Full	None.
	Indian Citation Index (Social Science and Humanities Subset)	No	Full	None.
	Institute for Law and Justice	No	Full	None.
	Jill Dando Institute of Crime Science (JDI)	No	Full	None.
	Justice Research and Statistics Association- State Statistical Analysis Centers	No	Full	None.
	Ministry of Justice (United Kingdom)	No	Full	None.

Indexed & academic databases		Content coverage included in record	Full / modified search	Search modifications
	Netherlands Institute for the Study of Crime and Law	No	Full	None.
	Enforcement (NSCR)			
	Netherlands Police (Politie)	No	Full	None.
	New Zealand Ministry of Justice	No	Full	None.
	New Zealand Police	No	Full	None.
	Norwegian Ministry of Justice and the Police	No	Full	None.
	Royal Canadian Mounted Police	No	Full	None.
	SAGE Knowledge	No	Full	None.
	Swedish National Council on Crime Prevention (Brå)	No	Full	None.
	Swedish Police Service	No	Full	None.
	Urban Institute	No	Full	None.
	YU-DSpace Repository	No	Full	None.

GPD Systematic Screening Approach

Inclusion Criteria

Each record harvested in the initial GPD search (1950 to 2014) and then every annual GPD systematic search since then must satisfy three inclusion criteria to be included as an eligible study in the GPD: (1) date the document is produced (published or unpublished), (2) the type of intervention being about police or policing, and (3) the type of study design. There are no restrictions applied to the types of outcomes, participants, settings or languages considered eligible for inclusion in the GPD.

The first criterion is that the document must be published or unpublished since 1950. Annual harvests require the document to be published or unpublished in the specific year of the update search.

The second criterion is the requirement that eligible studies <u>must</u> contain an impact evaluation of a police or policing intervention. Policing interventions are defined as some kind of a strategy, program, technique, approach, activity, campaign, training, directive, or funding/organisational change that involves police in some way (other agencies or organisations can be involved). Police involvement is broadly defined as:

- Police initiation, development or leadership
- Police are recipients of the intervention or the intervention is related, focused or targeted to police practices
- Delivery or implementation of the intervention by police.

The GPD defines police as:

- Public police or personnel employed by the public police
- Practitioners are considered to be police if they have police-like powers (e.g., arrest/detainment, search and seizure)
- Support staff working in a police agency (e.g., forensic investigators).

Other words for "**police**" include (but are not limited to):

- Sheriff
- Europol
- SWAT
- FBI
- Military police
- Campus police
- Police dogs
- Police horses

- Law enforcement
- Interpol
- Secret service
- School Resource Officers
- Detective
- Drug Enforcement Agency (DEA)
- Crime scene / forensic investigator
- Secret services.

The third criterion is that all eligible studies must include a quantitative impact evaluation of a police or policing interventions that utilise systematic reviews (with or without meta analysis), randomised experimental (e.g., RCTs) or quasi-experimental evaluation designs with a valid comparison group that does not receive the intervention. The GPD includes designs where the comparison group receives 'business-as-usual' policing, no intervention, or an alternative intervention (treatment-treatment designs). The list of research designs included in the GPD are as follows:

- Randomised controlled trial
- Review (with/without meta-analysis)
- Matched comparison group design with baseline measures
- Matched comparison group design without baseline measures
- Unmatched comparison group design with baseline measures
- Unmatched comparison group design without baseline measures
- Crossover design (counterbalanced/randomised)
- Design using multivariate controls not captured by other listed designs
- Short interrupted time-series design with comparison group (less than 25 pre- and 25 postintervention observations)
- Long interrupted time-series design with/without comparison group (more than or equal to than 25 pre- and 25 post-intervention observations)
- Regression discontinuity design
- Raw correlational design
- Cost-benefit analysis
- Other eligible design (specified in a textbox).

The GPD excludes single group designs with pre- and post-intervention measures as these designs are highly subject to bias and threats to internal validity.

Systematic Screening

To establish eligibility, records captured by the GPD search are progressed through a series of systematic screening stages which are visually summarised in Figure 1 (below), with additional detail provided in the following subsections.

All research staff working on the GPD undergo standardised training before beginning work within any of the stages detailed below. Staff then complete short training simulations to enable an assessment of their understanding of the GPD protocols and highlight any areas for additional training. In addition, random samples of each staff's work are regularly cross-checked to ensure adherence to protocols. Disagreements about screening decisions between staff are mediated by either the project manager or GPD chief investigators.

Stage One – Title and Abstract Screening

After removing duplicates, the title and abstract of records captured by the GPD systematic search (and annual updates) are screened by trained research staff to identify potentially eligible studies satisfying the criteria:

- Document is dated between 1950 present
- Document is unique (i.e., not a duplicate)
- Document is about police or policing
- Document is an eligible document type (see list below).

Records are excluded if the answer to any one of the criteria is unambiguously 'No' otherwise, the document proceeds to Stage 2 screening and classified as potentially eligible. Records classified as eligible at the title and abstract screening stage progress to full-text document retrieval and the next screening stages.

Ineligible document types include:

- Advertisements (e.g., of upcoming conferences)
- Newspaper articles
- Book review or book notes
- Editorials
- Erratums
- Epilogue or prologues
- Music, audio-visual material, movie or television show reviews
- Poetry
- Letters or letters to the editor, obituary
- Table of contents
- Pieces of original legislation
- Index, front matter, back matter, glossary
- Document listing publications received or abstracts that have been withdrawn
- Email interviews or radio/television transcripts.

Stage Two – Full-Text Eligibility Screening

Wherever possible, a full-text electronic version of a document that passes through to Stage Two screening is located and imported into our software screening platform. For records without an electronic version, a hardcopy of the record is located through the University of Queensland library to enable full-text eligibility screening. The full-text of each document is screened to identify studies that satisfy the following criteria:

- Document is dated between 1950 present (or for annual updates, it is dated as produced in the harvest year)
- Document is unique
- Document reports a quantitative statistical comparison

- Document reports on police or policing evaluation
- Document reports in a quantitative impact evaluation of a policing intervention
- Evaluation uses an eligible research design.

Experiments/Randomized Controlled Trials

The GPD defines experiments as studies which compare groups or individuals who receive an intervention with those who do not. This comparison of the 'treatment condition' (those who receive the intervention) and 'control condition' (those who do not receive the intervention or receive a different intervention) is also called a counterfactual analysis. Further, in order to be considered 'experimental', the intervention recipients must have been randomly allocated to the treatment and control conditions.

Quasi-Experiments

The GPD defines quasi-experiments as studies which compare groups or individuals who receive an intervention with those who do not, but there is no random allocation to a treatment or control condition. The comparison of the 'treatment condition' (those who receive the intervention) and 'control condition' (those who do not receive the intervention or receive a different intervention) is also called a counterfactual analysis. Unlike experimental studies, participants in quasi-experimental studies are not randomly allocated to their different conditions.

Specific research designs, as per the terms researchers use for them, may include:

- Design with matched control group comparison
- Design with unmatched control group comparison
- Long-interrupted time-series design (designs with 25 or more pre- and post-intervention observations).

Systematic Reviews

Systematic reviews are studies that synthesise the evidence on a particular topic from pre-existing research. Researchers first identify their research question and develop a set of criteria against which to include or exclude studies. Then, rather than conducting a new experiment or analysing one dataset, they will use a pre-specified '**search strategy**' (step-by-step process) to search for existing studies on their topic and evaluate their relevance ('**screen**') based on their criteria. In order to classify as a systematic review eligible for inclusion in the GPD, these studies must report their inclusion criteria, search strategy, and number of studies included at each stage of screening.

Some systematic reviews simply discuss their findings in text, although some may also statistically analyse the numerical data from their included studies (see **Meta-Analysis**). A systematic review does <u>not</u> need to contain a meta-analysis to be included in the GPD.

SYSTEMATIC SEARCH AND HARVESTING (ANNUAL) OF PUBLISHED & UNPUBLISHED DOCUMENTS

EXPORT SEARCH RESULTS

• Bibliographic data and abstracts exported into EndNote

Data cleaned and duplicate records removed

IMPORT SEARCH RESULTS INTO THE GPD SOFTWARE PLATFORM

This is where we keep the **full repository** of the GPD, including all full text documents and all decisions made at each screening stage

SCREEN TITLES AND ABSTRACTS FOR ELIGIBILITY

- 1. Between 1950 present?
- 2. Not a duplicate document?
- 3. About police or policing?
- 4. Eligible document type?
- If not clearly excluded on any criteria...

DOCUMENT RETRIEVAL & STORAGE

- Retrieve electronic and hard copies of all eligible documents
 - Attach electronic version of documents to the record

SCREEN FULL-TEXT OF DOCUMENTS FOR FINAL ELIGIBILITY

- 1. Between 1950 present?
- 2. Not a duplicate document?
- 3. Quantitative statistical comparison?
- 4. Policing intervention?
- 5. Quantitative impact evaluation?
- 6. Eligible research design?
- If 'Yes' to all...

CODE STUDY INFORMATION FROM ELIGIBLE DOCUMENTS

- 1. Publication date
- 2. Intervention country
- 3. Research design
- **4.** Type of policing intervention
- 5. Problem targeted
- 6. Evaluation outcome measure(s)

GLOBAL POLICING DATABASE (GPD)

Eligible studies only

Web-based

Searchable on coded information

Updated annually