

Campbell Crime and Justice Group Title Registration Form

Background and objective of this review (briefly describe the problem and the intervention).

The use of DNA testing as part of police investigative work has increased substantially since its emergence in the 1980s. Initially used primarily in serious cases, such as homicides and rapes, recent use has expanded to include additional crimes, such as property offences. The fundamental question motivating this review is: Does the use of DNA testing improve the effectiveness of the police in identifying and convicting perpetrators of crime, particularly if expanded beyond its traditional use in serious and violent offences?

Title of the review

Use of DNA Testing in Police Investigative Work for Increasing Offender Identification, Arrest, Conviction, and Case Clearance

Define the population

See section on intervention.

Intervention

The scope of the review will be limited to the use of DNA testing by police as part of their investigation of a crime. We will not consider the use of DNA testing by criminal defendants or by a prosecutor. Of particular interest is the routine use of DNA testing whenever suitable DNA evidence is found in contrast to a more limited or no usage. This review will extend to all crime types. We recognize, however, that the utility of DNA testing is likely to vary substantially across crime type.

Outcome(s) (Primary and secondary outcomes should all be mentioned)

The primary outcome of interest is the percentage of cases cleared or solved.

Methodology (What types of studies are to be included or excluded and what will be your method of synthesis? Will you use meta-analysis?)

The ideal design type would randomize cases to a DNA testing condition and a traditional investigative practices condition. We will consider any such designs that vary the degree of DNA testing used and examine one or more of the outcomes discussed above.

We will also consider quasi-experimental designs in which there is a control group that is either matched to the group using DNA testing, or identified as comparable. Inclusion of the latter designs would require statistical justification of the suitability of the control groups identified.

Interrupted time-series designs will also be included in this review, if any are found. An essential feature of these designs is multiple baseline estimates of the rate of interest (e.g., identification of a suspect) to allow for an assessment of the both the natural change and variability in this rate over time.

Basic pre-post designs with a single pre-DNA and a single post-DNA estimate will be included but these designs will be handled separately as they provide a weak basis for drawing a causal inference. Other quasi-experimental designs, such as a design that contrasts the clearance rates for different police agencies (without statistically justifying the validity of the comparisons) that vary with respect to DNA usage will be included but also reported separately.

It is anticipated that the number of studies identified will be small and that meta-analytic methods will not be suitable. Effect sizes appropriate to the study designs and outcomes will, however, be computed and reported in either table or graphic form. These effect sizes will provide descriptive information about the magnitude of any benefit (or harm) in the use of DNA testing on the relevant outcomes examined.

Do you need support in any of these areas (methodology, statistics, systematic searches, field expertise, review manager etc?)

No, we do not need any technical support. The review team has both substantive knowledge of policing and extensive experience in conducting systematic reviews and meta-analyses.

Lead reviewer(s)

David B. Wilson, Ph.D.
Associate Professor & Associate Chair
Department of Administration of Justice
George Mason University
10900 University Boulevard, MS 4F4
Manassas, VA 20110-2203
dwilsonb@gmu.edu

David Weisburd, Ph.D.
Walter E. Meyer Professor of Law and Criminal Justice
Director, Institute of Criminology
Faculty of Law
The Hebrew University
Mt. Scopus, Jerusalem 91905, Israel
&
Distinguished Professor
Department of Administrative of Justice
George Mason University
10900 University Blvd., MS 4F4
Manassas, VA 20110
msefrat@mscc.huji.ac.il, dweisbur@gmu.edu