



*To Rapid Evidence Assess or  
systematic review? An  
example using persistent  
and prolific offenders*

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## What follows

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- Rapid Evidence Assessment vs. Systematic Review
- An example using persistent and prolific offenders
- Implications



# Rapid Evidence Assessment (REA)

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- Rapid Evidence of Assessment
- A tool for policy making  
([www.gsr.gov.uk](http://www.gsr.gov.uk))
- Assessment of the available evidence in  
six months or less.



<b>Strengths</b>	<b>Weaknesses</b>
Quick synthesis of available evidence meet policy and research needs	Shortening the systematic review risks introducing bias
Uses systematic review methods so is transparent, rigorous and replicable	Acknowledgement bias important so that judgements can be made about the reliability of the REA
Can be used to answer a range of policy questions	Danger of reaching inconclusive findings
Enables accumulative body of evidence developed over time	Not full coverage of all available literature
Can form the basis of a more detailed full systematic review	May draw conclusions that miss large amounts of evidence



## Why Systematic reviews?

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- A tool for policy making
- Take between one and two years to conduct
- Includes ALL available literature
- Reduces publication bias
- Objective and transparent assessment



## An example: An REA of interventions for persistent and prolific offenders

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- Defining the population
- Varying definitions
- Account for large proportion of crimes

*Wolfgang et al (1972) Delinquency in a persistent offender cohort*  
*Hagell & Newburn (1994) Persistent young offenders*



# The methodology: REA

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- Literature searches
  - (articles between 1995-2007, 7 databases searched)
- Pre-screening (four reviewers)
- Development of inclusion/exclusion criteria
- Data extraction and synthesis
- Timetable for the project



# The methodology: REA

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- What was not included:
  - Studies containing less than 100 participants  
(Farrington, 2006, Journal of Experimental Criminology, 2, 121-141.)
  - Grey literature (specific databases) – risk of publication bias
  - Government/policy reports – risk of publication bias
  - Double data extraction of all studies
  - Studies ordered but not obtained by end of study period  
(n=112)



# The findings: Systematic review

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<b>Included items</b>	<b>Number of additional potential papers</b>
Studies containing less than 100 participants	11
Grey literature sources (Index of Theses & ZETOC)	133
Government websites (Home Office, Corrections services of Canada, NCJRS, National Institute of Justice)	10

# The evidence of publication bias....

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- **Stern & Simes (1997)**

- Reviewed 748 eligible studies – 10 year period
- Those with positive results much more likely to be published
- Significantly shorter time to publication (4.8 years vs. 8.0 years)

- **Wilson, (2008)**

- Reviewed Campbell Crime and Justice Systematic Reviews
- Approx half of all literature included in the systematic reviews was grey literature.

*Stern & Simes (1997), BMJ, 315, 640-645.*

*Wilson, (2008) The Importance of a Comprehensive Document Search for Systematic Reviews, Jerry Lee Symposium, May 2008, Washington.*



# Double data extraction vs. single?

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Bushcemi et al. (2006), Journal of Clinical Epidemiology, 59 (7), 697-703.

- Single data extraction resulted in more errors than double data extraction (21.7%,  $p=0.019$ )
- Average time (36%,  $p=0.003$ )

Gotzsche et al. (2007), JAMA, 298 (4), 430-438.

- 27 meta analyses, 63% contained errors



# Conclusions and Implications

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- REA or Systematic Review?
- Depends upon the subject matter?
- The importance of reducing bias
- Being specific about the research question

# Conclusions and Implications

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- Caveats of caution for REAs
- Expectations of policy makers
- Present the degree of certainty about the available evidence

## Contact Details

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