

Enhancing Evidence-based Policy: Principles and Practice from a Case Study of Australian Firearms Legislation

McPhedran, S., & Baker, J. (2008). *Current Issues in Criminal Justice*, 20(2).

Executive Summary

Rationale

- Evidence-based policy should be built on rigorous research.
- The current study examined ways to enhance policy through improved research quality.
- Key research principles and scientific concepts were explained using the example of Australian firearms legislation research.

Achieving Best Practice

- Each piece of research has different strengths and weaknesses.
- Despite their different methods and limitations, the Australian firearms research studies produce consistent results.
- Collectively, the research demonstrates that the legislative reforms did not impact on firearm homicide, and that firearm and non-firearm suicides may have been influenced by broader social changes.
- In situations where the accumulated studies do not show this level of consistency, it is important to adopt best practice guidelines.
- These guidelines include:
 - Being aware of the shortcomings of different types of statistical analyses.
 - Selecting methods that fit the data well.
 - Treating knowledge as a cumulative process.
- No single analysis method is consistently superior to other methods, particularly for analysing trends over time.
- Different methods can produce different results from the same data.
- In selecting an analysis method, it is important to consider issues such as the number of years of data available, and whether the method or model can be applied to the data at hand without violating crucial assumptions.

Conclusions

- It is necessary to apply caution when interpreting statistical outcomes and the conclusions based upon those results, even if method selection is carefully considered.
- Applying the basic principles and concepts discussed in this study can enhance the quality of research and subsequent policy.