

## **Why Do Evaluation Researchers in Crime and Justice Choose Non-Experimental Methods?**

Lum, C. and Yang, S-M. (2005). Why do evaluation researchers in crime and justice choose non-experimental methods? *Journal of Experimental Criminology*, 1, 191-213.

### **BACKGROUND**

This study examines why researchers choose (or do not choose) to conduct experimental evaluations. An experimental design is considered the “gold standard” in evaluation research, leading researchers to best understand the effects of a tested treatment. An experimental design establishes this standard by randomly allocating a population of interest (or sample thereof) into different conditions, treatments, or programs to isolate the effects of those conditions from other possible factors that may contribute to group differences. Random allocation allows for the assumption of equivalence between treatment and comparison groups, a necessary condition to rule out other confounding factors that might explain differences between groups after treatment.

Prior research has found differences in the outcomes between experimental and non-experimental studies, with non-experimental studies more likely to find positive or favorable results, which perhaps lead to false conclusions about the effectiveness of a program. Despite positive benefits of experiments, they are infrequently used. Common criticisms of experiments include practical and ethical concerns. However, there may be other reasons for which experiments are not often used, such as the academic background and training of researchers, as well as funding pressure from the government or other external agencies.

### **DATA AND METHODS**

The data for this study comes from the updated Maryland Report by Sherman et al. (2002)<sup>1</sup> which at the time had compiled the population of evaluations across a variety of criminal justice arenas (policing, corrections, communities, schools, etc.). The Maryland Report had ranked each study according to their methodological rigor, which identified randomized controlled experiments. The authors sampled 80 studies from the experiments, and 80 from all other studies in the Maryland report. A survey was sent to the first author of the selected studies. The final response rate was 83 responses, with 46 from the experiments group and 37 from the non-experiments group. The survey consisted of questions related to the subjects' academic background, methods courses during their graduate studies, the selection of the methodology for the particular study, and experience with randomized experiments.

### **FINDINGS**

The results suggest that traditional objections to experiments may not be as salient as initially believed and that funding agency pressure as well as academic mentorship may have important influences on the use of randomized controlled designs. Although formal education was generally considered important by the entire sample, we found that informal training mechanisms such as collegiality, mentorship, and experience may matter as much as formal education in terms of methodological decision making. Those who conducted experiments in criminal justice were more likely to have colleagues or students subsequently go on to conduct experiments than study authors of nonexperiments. Also, those who conducted an experiment were more likely to have been influenced by an outside entity such as funding agencies in terms of choosing experimentation. Respondents were asked to cite both advantages and disadvantages of their methodological choice. Those who used experiments were more likely to cite advantages of experiments, such as causality and controlling for internal validity. Disadvantages mostly centered around cooperation of individuals or institutions to participate. Non-experimenters cited practicality as the major advantage, and lack of control for internal validity as the disadvantage of non-experiments.

In total, this study suggests that traditional objections to experimentation may not be as salient as perhaps initially believed. Encouraging experiments can be accomplished through addressing and overcoming practical concerns, urging funding agencies to require more rigorous evaluation designs, fostering mentorship in doing experiments, and encouraging disciplinary norms (particularly within the discipline of criminology) towards experimentation.

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<sup>1</sup> Sherman, L. W., Farrington, D. P., Welsh, B. C., & MacKenzie, D. L. (2002). *Evidence-based crime prevention*. London, UK: Routledge.