Symposium Justification
Synthesizing Evidence in Public Policy Contexts:
The Challenge of Synthesis When There are Only a Few Studies

Session Chair: Sandra Jo Wilson
Discussant: Will Doyle

As evidenced by the frequency with which systematic reviews are funded by governmental agencies, policymakers are increasingly likely to value research synthesis as an aid to the decision-making process. A number of evidence-based practice repositories or clearinghouses have been created which attempt to summarize evidence in ways that are useful in public policy contexts, including the What Works Clearinghouse, SAMHSA’s National Registry of Evidence-based Programs and Practices, the Office of Justice Programs’ CrimeSolutions.org, and others. These repositories review and summarize evidence on programs and practices in education, social welfare, and crime and justice and, importantly, use a variety of methods for collecting appraising, and summarizing evidence. These differences have significant policy implications because different synthesis methods can lead to different conclusions about the effectiveness of programs. As policymakers rely more on evidence from research synthesis for decision making, understanding the implications behind different methodological choices for research synthesis is critical. The papers in this symposium will describe several evidence clearinghouses and examine the range of methods used to collect, appraise and summarize the evidence, highlighting the implications of the different methods for the nature and quality of evidence.

The first presentation will provide a general summary of the different methods for identifying relevant studies for evidence reviews and the various options for making decisions about the characteristics of included studies. Comparisons of the search strategies employed by several research clearinghouses will be provided, highlighting the nature of evidence that results from the different search strategies. The presenters will use studies of interventions in postsecondary education to highlight how different conclusions might result from employing different methods of identifying studies.

The second paper will discuss quality appraisal methods for assessing research studies used in systematic reviews, research syntheses, and evidence-based practice repositories such as the What Works Clearinghouse. The different ways that the methodological rigor and risk of bias of primary studies included in syntheses is assessed means that different studies with greater or lesser quality might be included in the recommendations generated from such synthesis. Using the postsecondary education literature as an example, the presenters will highlight the What Works Clearinghouse procedures and guidelines and how they impact recommendations on the extent of evidence on a topic and the level of confidence readers should have about that evidence.

The third presentation will describe the current research synthesis practice of the What Works Clearinghouse (WWC) as well as several alternative models, including inverse-variance weighted fixed effect and random effects meta-analysis and Bayesian meta-analysis. The presenters will begin with an overview of the context of the WWC’s intervention reports, with specific attention to the method used to synthesize the results of multiple studies and the context in which synthesis occurs. The differences in the various synthesis methods will be illustrated using published WWC intervention reports in which at least one synthesis across two or more studies was reported.