Modern Meta-Analytic Methods in Prevention Science

Guest Editors:
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The journal *Prevention Science* invites manuscripts for a special issue on "Modern Meta-Analytic Methods in Prevention Science." Meta-analyses that statistically synthesize evidence from multiple research studies identified using systematic review methods can play a critical role in advancing evidence-informed prevention science. Conventional meta-analytic methods are now widely applied in the prevention field; however, the statistical methods of meta-analysis have evolved rapidly to permit more complex and meaningful questions of interest to prevention scientists. This special issue seeks to highlight modern but underutilized advanced meta-analytic methods for synthesizing prevention research evidence identified using systematic review methods.

**Background & Rationale for Special Issue**

Meta-analysis, defined broadly as the statistical synthesis of findings from multiple research studies, is often used to synthesize evidence identified as part of a systematic review. Meta-analyses that synthesize evidence identified as part of systematic review can play a critical role in the evidence-based practice movement in the field of prevention science. Traditional meta-analytic methods for statistically synthesizing aggregate-level study findings are now widespread in the field of prevention science; however, statistical methods for research synthesis continue to evolve rapidly. There are many modern techniques that offer unique promise for addressing the pressing questions facing the field of prevention science—such as individual participant data meta-analysis, meta-analytic structural equation modeling, network meta-analysis, and meta-analytic methods for handling dependencies—yet those methods are currently underutilized by prevention scientists. This special issue seeks to advance the field in this area by presenting applied demonstrations on how to implement these meta-analytic techniques alongside exemplar meta-analyses demonstrating the application of these techniques in prevention-related topic areas.

For this special issue of *Prevention Science*, we invite submissions of the following types:

1) Applied demonstrations of modern, advanced statistical meta-analysis methods that highlight the method’s utility and relevance to prevention topics.

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Catherine P. Bradshaw, Ph.D., *Editor, Prevention Science Journal*

*Associate Editors:* Abigail A. Fagan · Frances Gardner · Keith Herman · George Howe · Hanno Petras · Nathaniel Riggs
2) Completed meta-analyses based on a systematic review in the field of prevention that use one or more modern meta-analytic technique for synthesizing evidence.

This special issue will include three invited manuscripts providing applied demonstrations of network meta-analysis methods, meta-analytic structural equation modeling methods, and multivariate and robust variance estimation methods for handling dependencies. We therefore invite additional submissions that will provide unique contributions toward the aims of the special issue. All manuscripts included in the special issue must provide data and software code that can be used to replicate results.

Authors interested in contributing a manuscript for this special issue are asked to submit a letter of intent by December 15, 2019, that includes the following: (1) tentative title; (2) brief description of 500 words or less; (3) brief justification of how the proposed submission contributes to the aim of the special issue; (4) author affiliations and contact information for corresponding author. The guest editors will review the letters of intent for fit with the special issue and work to provide an inclusive set of papers that best advances empirical or methodological knowledge in meta-analytic approaches in the field of prevention. Letters of intent should be sent electronically as PDF files to Emily Tanner-Smith, etanners@uoregon.edu with the subject line noted as "Special Issue of Prevention Science: Modern Meta-Analytic Methods." All letters of intent will be reviewed by January 15, 2020, and invited contributors will be asked to submit a manuscript by May 1, 2020. Manuscripts will be sent out for full peer review in accordance with the standard Prevention Science review guidelines.

Questions concerning letters of intent can be directed to the guest editors, Emily Tanner-Smith, Sean Grant, and Evan Mayo-Wilson.

Manuscript formats can include original empirical submissions, systematic reviews, meta-analyses, brief reports etc. For additional information on the journal and author guidelines, see http://link.springer.com/journal/11121.