

**Society for Prevention Research
26th Annual Meeting
Washington, DC**

Pre-Conference Workshop II

Date: Tuesday, May 29, 2018

Time: 8:30 am – 5:00 pm

Overview (Meta-Review) Methods for Synthesizing Prevention Research Literature

Organizer and Presenter: Emily Alden Hennessy, Ph.D.,

Presenters: Rebecca L. Acabchuk, Ph.D, and Blair T. Johnson, Ph.D., University of Connecticut

Description:

An overwhelming and growing body of primary study and systematic review literature evaluates health behavior interventions. Overviews systematically synthesize this vast literature to improve the utility of this evidence base in basic and applied health sectors; yet, there are few practical guidelines for overview authors to use. This workshop will provide participants with concrete steps to address the unique challenges that arise when authors familiar with systematic review methods attempt to conduct an overview. Upon completion of this workshop, participants should be able to

1. Describe the role(s) of overviews and identify primary reasons for conducting one.
2. Develop literature search blocks for different databases that are sensitive to finding systematic review literature in their topic of interest.
3. Have a working knowledge of the options available for addressing overview challenges, including appropriately addressing up-to-datedness of reviews and review overlap.
4. Understand the meta-analytic options available for second-order meta-analysis.
5. Describe the different standardized tools available for assessing risk of bias and the quality of evidence in overviews.
6. Have the ability to choose and employ standardized tools appropriate for assessing risk of bias and the quality of evidence in reviews for their own overview.

Target workshop audience:

The workshop is designed for academic and policy-oriented researchers who are interested in synthesizing systematic review and/or meta-analytic literature into an overview (also known as an umbrella review or meta-review). Individuals familiar enough with synthesis literature (e.g., systematic reviews or meta-analyses) that they are aware of the general process of conducting a systematic literature review and the aims of conducting such a literature synthesis would benefit most from this one-day workshop.

Materials provided to attendees:

1. Workshop manual that includes outline, copies of the PowerPoint slides used, and links to other overview tools and resources (e.g., relevant software, risk of bias tools).

2. Sample exemplary meta-reviews
3. Key methods annotated reading list

Outline of workshop:

Sections 1-4 will be briefer as audience members who are familiar with systematic reviewing should be comfortable with some of the basics of conducting a literature search, setting inclusion/exclusion criteria, and training team members. The majority of the day will focus on Sections 5 and 6 as these are methodological challenges unique to conducting an overview:

1. Workshop introductions and outline (*Emily, Rebecca, and Blair*)
2. Define synthesis literature and role of overviews (*Emily*)
 - Highlight how overviews are different from systematic reviews and meta-analyses
 - Address particular areas in need of overviews
3. Search process (*Emily and Rebecca*)
 - Selecting search terms and crafting search blocks sensitive to identify review literature
 - Software to manage search (Hands-on)
4. Selection of papers (*Emily and Rebecca*) Inclusion/exclusion criteria
 - Identifying true synthesis literature
 - Training and monitoring team on screening and data extraction process
5. Issues unique to overviews and methods to address them (*Emily and Blair*): Up-to-datedness of review literature
 - Overlap of similar reviews (Hands-on)
 - Conducting a second-order meta-analysis (Hands-on)
6. Issues to address in all types of review literature (*Emily and Blair*):
 - Risk of bias – importance of assessment
 - Risk of bias tool options for overviews, focus on AMSTAR and ROBIS (Hands-on)
 - Rating the quality of the evidence using the GRADE approach

Presenters:

Emily Alden Hennessy has authored 8 systematic reviews and meta-analyses and is an expert in adolescent health promotion. She has an overview paper in progress on risk of bias across systematic reviews and is currently leading a team to conduct an overview addressing self-regulation mechanisms in behavioral interventions. She has presented at a number of health promotion conferences on systematic reviews, meta-reviews, and intervention effectiveness and has also participated as a guest lecturer for two meta-analysis workshops. She holds a PhD in Community Research and Action from Vanderbilt University with a quantitative methods minor and is currently a post-doctoral fellow at the Institute for Collaboration on Health, Intervention, and Policy (InCHIP). She also provides consulting services as a systematic review specialist for the International Initiative for Impact Evaluation and is a reviewer for the Methods Coordinating Group of the Campbell Collaboration.

Rebecca L. Acabchuk has worked under the guidance of research synthesis methodologist, Blair T. Johnson, for two years, and brings a wealth of teaching experience. She is an adjunct professor at both the University of Connecticut and Connecticut College, and she has led

health- related workshops and classes for over 15 years. Rebecca's current research includes conducting meta-analyses on multiple health-related topics, including yoga for cancer patients, and mindfulness interventions for college students. She also currently collaborates with Blair and Emily on a large-scale overview addressing self-regulation mechanisms in behavioral interventions. Rebecca holds a PhD in Physiology and Neurobiology from the University of Connecticut, and is currently a post-doctoral fellow at the Institute for Collaboration on Health, Intervention, and Policy (InCHIP).

Blair T. Johnson has been a prominent scientific methodologist throughout his career; especially in relation to meta-analysis, which he labels "the original big data." His substantive research has focused on social influence and behavioral health, especially HIV/AIDS, exercise and blood pressure, and most recently, strategies to improve mental and physical health to promote healthy lifestyle choices; he has published dozens of meta-analyses and overviews in these domains and others. Blair has been awarded numerous grants from the U.S. Public Health Service, usually to conduct meta-analyses and overviews, including the most recent as part of the Science of Behavior Change initiative at NIH. This work is proceeding in collaboration with Emily and Rebecca, currently focusing on self-regulation mechanisms in behavioral interventions. Blair holds a PhD in social psychology and is currently a Board of Trustees Distinguished Professor in the University of Connecticut's Department of Psychological Sciences. He is a senior editor with the journal *Social Science & Medicine* and an Associate Editor of *Psychological Bulletin*.