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Innovations in Trauma Research Methods, 2008

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This issue of the *Journal of Traumatic Stress* contains a special section devoted to highlights from the fifth and final annual NIH-funded Conference on Innovations in Trauma Research Methods (CITRM), held in Evanston, Illinois, on November 16th and 17th, 2008. CITRM was designed to be a conference that focused on research methods, not content, in the area of psychological trauma. As at the four previous conferences, CITRM 2008 included presentations dealing with diverse aspects of the research process, including study design, sampling, measurement, ethics, and data analysis.

The article by Newman and Kaloupek (this issue; pp. xxx-yyy) focuses on ethical aspects of designing and conducting trauma research studies. The authors concentrate on the basic ethical principles of autonomy (respecting individuals' independence and protecting those individuals with diminished capacity) and beneficence (doing no harm and maximizing possible benefits and minimizing possible harms associated with research participation). It is noteworthy and comforting that their review of the literature indicates that most trauma research participants refer to their participation in positive terms and experience little, if any, distress from their participation. Equally noteworthy is that relatively few studies have empirically examined ethical aspects of trauma research. Thus, among the authors' suggestions is for researchers to systematically collect data to enlarge the evidence base on which ethically informed research design decisions can be made. A specific recommendation is to study whether, and under what conditions, trauma-exposed individuals might have diminished capacity or be at heightened risk for emotional upset, and thus require special precautions that may affect recruitment procedures or study design.

In 2008, the Institute of Medicine (IOM) of the National Academy of Sciences report on treatment of posttraumatic stress disorder concluded, to the surprise of many, that the research evidence was inadequate to determine the efficacy of any treatment for PTSD except for exposure therapies. The conclusion was based primarily on methodological limitations in the existing randomized clinical trials. Leon and Davis (this issue; pp. xxx-yyy) address some of the key shortcomings in PTSD treatment trials identified by the IOM panel and make thoughtful and useful suggestions for better practice. They discuss the problems created by research participant attrition, use of multiple outcomes, and

inappropriate groups for comparison to active treatment. They recommend state-of-the-art methods to handle missing data (other than the problematic “last observation carried forward” method), adjust for multiple outcomes, and select a credible comparator.

The article by Creswell and Zhang (this issue; pp. xxx-yyy) provides readers with a primer for the use of mixed methods designs in trauma research. Mixed methods is a methodological approach that involves the collection of qualitative and quantitative data within the context of a single study or well-designed series of studies. It is well-suited to either refine and better understand an established construct such as PTSD or begin the process of identifying factors for consideration in a newly studied construct. The authors first define mixed methods studies and provide an overview of four core features. They address strategies for combining or integrating the findings from qualitative and quantitative study components and go on to describe four mixed methods designs that systematically vary whether quantitative data are collected prior to, following, or concurrent with the collection of qualitative data. The authors identify an example of a mixed methods study in the trauma literature and provide the reader with five alternatives for potential follow-up studies.

The article by Suvak, Walling, Iverson, Taft, and Resick (this issue; pp. xxx-yyy) is centered on the use of multilevel regression for the analysis of longitudinal data. Multilevel regression is ideal for such repeated-measures data because it enables the researcher to consider associations between variables within persons as between-persons or individual differences characteristics. These characteristics, in turn, can be associated with other between-persons variables. Using longitudinal data from a large sample of rape and robbery victims, Suvak et al. begin by presenting a simple model for the relation between symptoms of intrusion and avoidance. They next develop the logic for a growth curve variation, wherein separate models document the within-person associations between time (since trauma) and scores on intrusion and avoidance. Finally, the authors combine the separate growth curve representations into a composite model, thereby expanding the usual univariate growth curve approach to a multivariate approach and directly addressing individual differences in and the relation between change in intrusion and change in avoidance.

Keane (this issue; pp. xxx – yyy) closes this special section with thoughts on the dual importance of both substantive conceptualization and methodological advancements to the enhancement of knowledge of psychological trauma and its consequences. He also provide a brief retrospective on the contributions of the CITRM conference series and a call for continuing development of new methods and technologies and their dissemination to the community of trauma researchers.

Although enthusiasm for research methods remains strong among trauma researchers, CITRM will not be continuing. CITRM was funded for five years by the National Institute of Mental Health and we have used that funding to hold five successful conferences. (Please see our related article¹ for suggestions on how to write a National Institutes of Health conference grant proposal). CITRM developed as an outgrowth of activities of the Research Methods Special Interest Group (RM-SIG) of ISTSS more than seven years ago. Now that CITRM has ended, the RM-SIG will again serve as a primary vehicle for advancing research methods among trauma researchers. The Co-Chairs of the RM-SIG, Dean Lauterbach and Patrick Palmieri, invite suggestions for methods-related programming at annual ISTSS meetings, and encourage membership and active participation in the RM-SIG to help develop novel ways to disseminate and make use of research methods to advance trauma research.

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