Madhabi Chatterji: Research Themes


I’ve thought about, and written extensively on the merits and utility of traditional study designs, such as, randomized controlled trials, for making causal inferences about the effectiveness of social interventions, policies and programs in field settings. My search for improved study designs led to a proposal for a counter-methodology, the Extended Term Mixed Methods (ETMM) designs (see my Educational Researcher paper, 2004/05). ETMM is a systems-based approach for performing impact evaluations of complex social programs and entities. My most recent publications on this topic came out in Health Education & Behavior (2014) and Evaluation and Program Planning (2016).

2. Designing Assessments, Validation, Validity and Test Use Issues

I have long-standing research and teaching interests in methodological topics related to test/instrument design, validation, and construct validity issues. I have developed a user-centered and iterative framework for designing and validating construct measures guided by, and situated in the contexts of assessment use, called the “Process Model”. Recently, I began investigating measurement challenges, validity issues and consequences that arise for stakeholders when tests/assessment tools are multi-purposed in new assessment contexts, such as, with different populations or for high stakes decision-making. With colleagues in the global mental health field, I recently conducted critical reviews and psychometric studies of existing instruments of mental health constructs to evaluate how well the tools functioned with refugee populations in Arab-speaking regions. Contact me for sample papers.

3. Standards-based Education Reforms, Educational Equity and Closing Achievement Gaps

I also have long-standing interests in standards-based educational reforms, educational equity and evidence-based approaches to help reduce learning gaps in underachieving, disadvantaged or disenfranchised students. The Proximal Assessment for Learner Diagnosis (PALD) approach to reducing learning gaps is a cognitively-based, teacher-mediated, formative classroom assessment approach that we developed with NSF-funding, and on which research is continuing. I have also investigated achievement gaps in students using large scale datasets from the U.S. and overseas settings. Contact me for sample papers on this theme.

4. Assessment Policy: Promoting Meaningful Use

At the Assessment and Evaluation Research Initiative (AERI: www.tc.edu/aeri), our aim is to promote meaningful use of assessment and evaluation information in practice and policy contexts, across disciplines and internationally. A recent AERI project involved a collaboration with colleagues in health education and biomedical technology, through which we developed a national, standards-based curriculum in health information technology. A report of that study was published in Pedagogy in Health Promotion (2016). AERI’s assessment work is listed under the Conferences and Forums and the Publications menus of our website (www.tc.edu/aeri). See the 2014 Education Week blog, Assessing the Assessments and the edited book, Validity and Test Use, for some interesting policy discussions of K-12 assessments.