ADVANCES IN MIXED METHODS DESIGN

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METHODS AND DESIGN OPTIONS

- Quantitative approaches such as experimental, quasi-experimental, causal-comparative, correlational, survey, and single-case designs
- Qualitative approaches such as group processes (e.g., focus groups or some indigenous methods), case studies, ethnographic research, phenomenological research, and PAR
- Mixed methods includes collection and analysis of both quantitative and qualitative data with integration of the processes and data at various levels and stages in a study or a sequence of studies (Mertens, 2009, TRE, p. 165).

MM Design Options in the Early Years of MM Development Concurrent Design

Quantitative and Qualitative occur more or less simultaneously

Sequential Design: Quantitative Followed by Qualitative

OR

Sequential Design: Qualitative Followed by Quantitative



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Anti-paradigm war Post-Transformative Pragmatic Constructivist positivism Dialectical **Pluralism** MM PARADIGMATIC POSITIONS

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PRAGMATIC PARADIGM

Assumptions	Beliefs
Axiology	Gain knowledge in pursuit of desired ends as influenced by the researcher's values and politics
Ontology	Single reality but individually experienced
Epistemology	Appropriate to the study
Methodology	Match methods to questions; mixed methods

Seguential data collection Procedures Qualitative phone interviews with 18 Japanese women who had advance consent procedure Products Experiences with advance consent process QUALITATIVE Concurrent data collection Overall results QUANTITATIVE and interpretation quantitative and Procedures qualitative Survey of 82 Japanese women who had advance Procedures consent for epidural

Products

 Attitudes about advance consent procedure Email survey of 78 health professionals

Products |

- Quantative data on attitudes
- Qualitative data on experiences

Fetters, Yoshioka, Greenberg, Gorenflo, & Yeo, 2007

POSTPOSITIVIST PARADIGM

Assumption	Beliefs
Axiology	Respect/privacy Beneficence/min harm; Justice
Ontology	One reality
Epistemology	Objective
Methodology	Quantitative; Randomized controlled trials (RCTs); Black box MM

ualitative Phase Recruit participants; collect demographic data

Conduct qualitative interviews

Peterson et al., 2013

Methods Phase

Pilot test using control and experimental conditions

Adminster baseline questionnaires

Conduct followup inteviews with pilot participants (quant and qual)

Weekly team meetings to review participant and interviewer feedback

Developed study protocols

Phase 3. RCT

Assign participants to experimental and control groups

Collect baseline data (e.g., stress scale, depression scale, exercise scale)

Bimonthly follow-up phone calls to assess interval events and health behavior

Participants in the hypertenison group use electronic pill monitors

Asthma and cardiac groups use the kilocalorie/week index

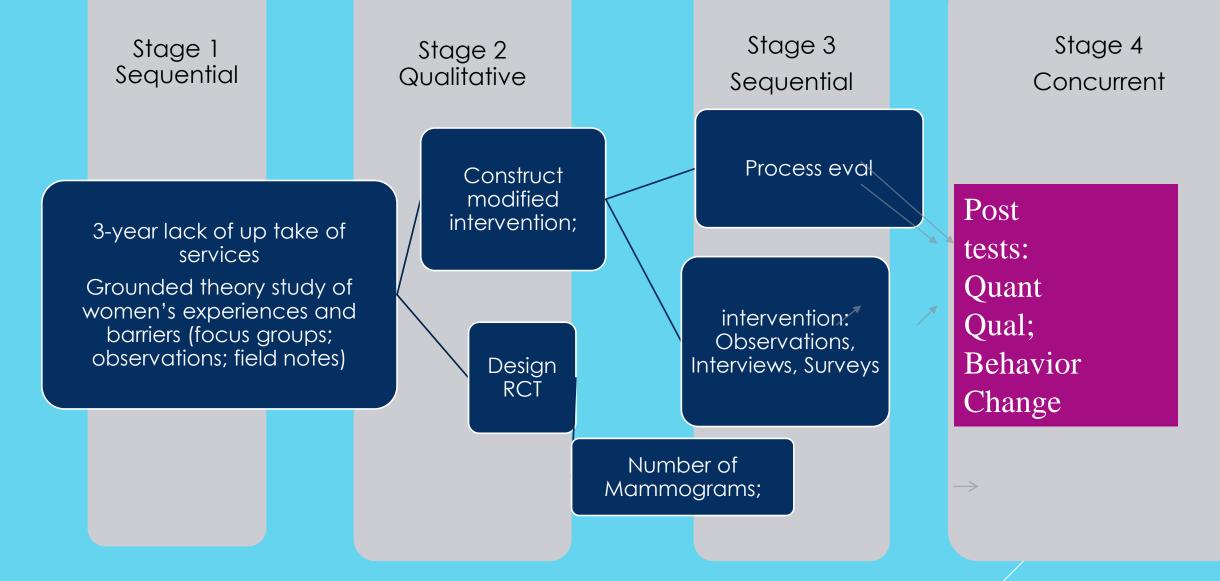
Baseline measures repeat after the intervention

CONSTRUCTIVIST PARADIGM

Assumption	Beliefs
Axiology	Balanced Representation; rapport
Ontology	Multiple socially constructed realities
Epistemology	Interactive
Methodology	Qualitative approaches

- ▶ How well do recruitment procedures work?
- How well does the intervention respond to the culture and context of the target population?
- To what extent does the target population reflect the range of diversity with regard to the overall goals of the project? Who is left out? Why?
- To what extent is ethics praxis built into the recruitment and evaluation process?
- How well does the target population understand what they are consenting to?
- To what extent do participants accept the outcome/s of randomization? Are participants willing to be randomized?
 - Hesse Biber (2013)

SAMPLE CONSTRUCTIVIST QUESTIONS



CONSTRUCTIVIST VALUES DRIVEN MIXED METHODS (PUSCHEL & THOMPSON, 2011 CITED IN HESSE BIBER, 2013)

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TRANSFORMATIVE PARADIGM

Assumptions	Beliefs
Axiology	Cultural respect; promote social justice & human rights; address inequities; reciprocity
Ontology	Multi-faceted; consequences of privilege
Epistemology	Interactive; trust
Methodology	Transformative, dialogic, mixed methods

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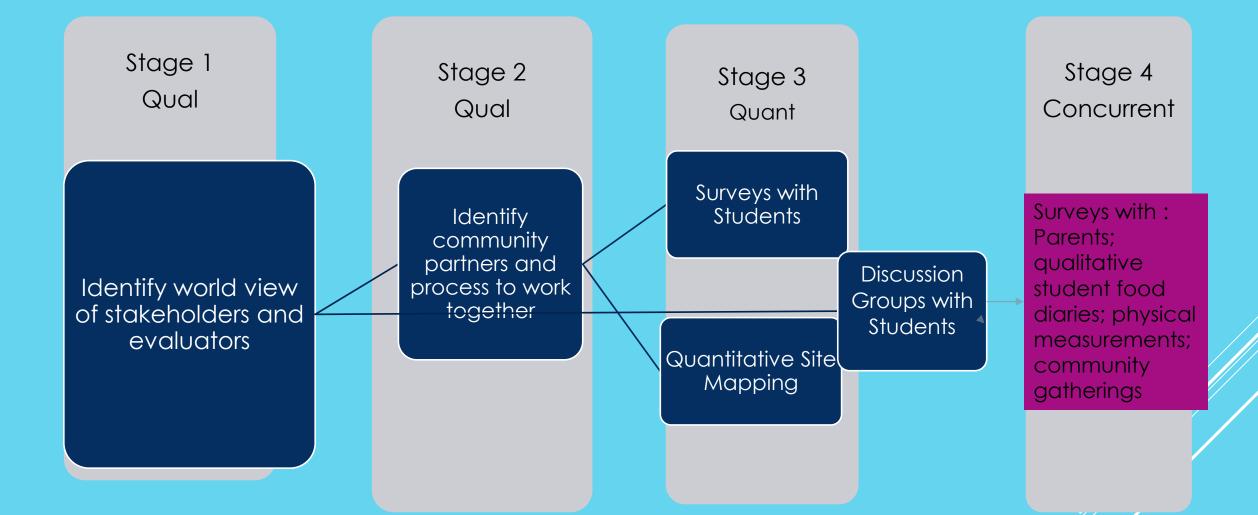
TRANSFORMATIVE ETHICS: METHODOLOGICAL IMPLICATIONS

Who are the major stakeholders and what do you think you know about the cultural norms and beliefs of these groups?

How could you use mixed methods to:

- identify the cultural norms and beliefs that might be operating in the community?
- appropriately engage members of the community?
- How would you take into account the expertise, knowledge, and strengths of the community in order to provide a platform for authentic engagement between the evaluator and the community?

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TRANSFORMATIVE MIXED METHODS DESIGN: TRENTON OBESITY STUDY

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- Preserves assumptions of original paradigms (Post-Positivist, Constructivist, Pragmatic, Transformative
- Processes and data from each part of the study are brought into dialogue with each other
- MM researcher's role is to facilitate the dialogue with differences being respectfully acknowledged and explored
- Often done with teams of researchers who represent different paradigms.

DIALECTICAL PLURALISM

Johnson and Schoonenboom, 2015

Quant

- Extant data on breast feeding
- Mother's satisfaction

Concurrent

- RCT
 comparing
 group vs.
 routine care
- Case studies

Integration

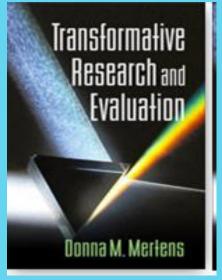
- No difference between groups (RCT)
- Qual: Reasons for low attendance

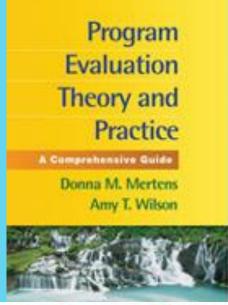
BREAST FEEDING IN SCOTLAND (HODDINOTT, BRITTEN & PILL 2010)

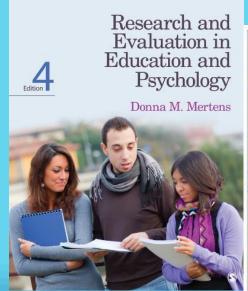
- Bledsoe, K. (2008). Transformative mixed methods. Presentation at the American Evaluation Association, Denver CO. (Cited in Mertens (2015) Research and Evaluation in Education and Psychology, 4th ed. Thousand Oaks, CA: Sage.)
- Fetters, M.D., Yoshioka, T., Greenberg, G.M, Gorenflo, D.W., Yeo, S.A. (2007). Advance consent in Japanese during prenatal care for epidural anesthesia during childbirth. *Journal of Mixed Methods Research*, 1(4), 333-365.
- Hesse-Biber, S. (2013). Thinking outside the randomized controlled trials experimental box: Strategies for enhancing credibility and social justice. In D.M. Mertens & S. Hesse Biber (Eds.), New Directions for Evaluation, 138, 49-60.
- Hoddinott, P., Britten, J., & Pill, R. (2010). Why do interventions work in some places and not in others: A breastfeeding support group trial. *Social Science & Medicine*, 70, 769-778.
- Peterson, J.C., Czaijkowski, S., Charlson, ME., Link, A.R., Wells, M.T., Isen, A.M., Mancuso, C.A., Allegrante, J.P., Boutin-Foster, C., Ogedegbe, G., Jobe J.B. (2013). Translating basic behavioral and social science research to clinical application: The EVOLVE mixed methods approach. Journal of Counseling and Clinical Psychology, 81(2), 217-230.
- Puschel, K., & Thompson, B. (2011). Mammogram screening in Chile: Using mixed methods to implement policy planning at the primary care level. The Breast, 20, 540-545.

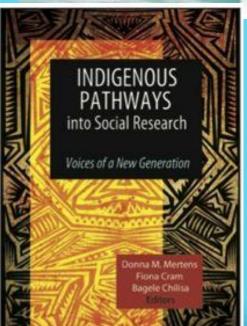
REFERENCES FOR STUDIES INCLUDED IN THE PRESENTATION

RESOURCES









- Mertens, D. M. & Wilson, A. (2012).
 Program Evaluation Theory and Practice: A Comprehensive Guide. NY: Guilford.
- Mertens, D. M. (2015). Research and evaluation in education and psychology: Integrating diversity with qual, quant and mixed methods. 4th ed. Thousand Oaks, CA: Sage.
- Mertens, D. M. (2009). Transformative research & evaluation. NY: Guilford.
- Mertens, D. M. & Ginsberg, P.
 (2009).(Eds.) Handbook of Social Research Ethics. Thousand Oaks, CA: Sage.
- Mertens, D.M., Cram, F., & Chilisa, B. (Eds.) (2013). Indigenous pathways.
 Walnut Creek, CA: Left Coast Press.

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