GETTING STARTED WITH MIXED METHODS RESEARCH

MIXED METHODS RESEARCH strategically integrates or combines rigorous quantitative and qualitative research methods to draw on the strengths of each. Mixed methods approaches allow researchers to use a diversity of methods, combining inductive and deductive thinking, and offsetting limitations of exclusively quantitative and qualitative research through a complementary approach that maximizes strengths of each data type and facilitates a more comprehensive understanding of health issues and potential resolutions. Mixed methods may be employed to produce a robust description and interpretation of the data, make quantitative results more understandable, or understand broader applicability of small-sample qualitative findings.

INTEGRATION refers to the ways in which qualitative and quantitative research activities are brought together to gain greater insight. Mixed methods is NOT simply having quantitative and qualitative data available or analyzing and presenting data findings separately. The integration process can occur during data collection, analysis, or presentation of results.

RESEARCH CONSULTS
The Harvard Catalyst Community Engagement program offers consults with researchers and community stakeholders to support your community engaged research projects. This includes supporting linkages between researchers and community partners, providing tips on developing community advisory boards, identifying strategies for building community engagement into study design, and providing feedback on community-engaged grant proposals.

Please email community@catalyst.harvard.edu to set up a brief consult.

BASIC MIXED METHODS RESEARCH DESIGNS

Convergent Parallel Design
- Quantitative Data Collection and Analysis
- Qualitative Data Collection and Analysis
  - Compare or relate
  - Interpretation
  - Discuss areas of convergence or divergence between the quantitative & qualitative results

Explanatory Sequential Design
- Quantitative Data Collection and Analysis
  - Follow up with
- Qualitative Data Collection and Analysis
  - Interpretation
  - Determine what quantitative results need further explanation

Exploratory Sequential Design
- Qualitative Data Collection and Analysis
  - Builds to
- Quantitative Data Collection and Analysis
  - Interpretation
  - Use qualitative results to develop a new instrument or taxonomy for quantitative strand

WEBSITE: https://catalyst.harvard.edu/programs/communityengagement/communityresources.html

Rationale for Using Mixed Methods

• Obtain different, multiple perspectives, validation
• Build comprehensive understanding
• Explain statistical results in more depth
• Have better contextualized measures
• Track the process of program or intervention
• Study patient-centered outcomes & stakeholder engagement

FIVE KEY QUESTIONS FOR GETTING STARTED
1. What do you want to know?
2. What will be the detailed quantitative, qualitative, and mixed methods research questions that you hope to address?
3. What quantitative & qualitative data will you collect and analyze?
4. What rigorous methods will you use to collect data and/or engage stakeholders?
5. How will you integrate the data in a way that allows you to address #1?

EXEMPLAR MIXED METHODS RESEARCH STUDY
The EQUALITY study² used an exploratory sequential design to identify the optimal patient-centered approach to collect sexual orientation data in the emergency department.

Qualitative data collection & analysis: Semi-structured interviews with patients of different sexual orientation, age, and race/ethnicity and health care professionals of different roles, age, and race/ethnicity

Builds into: Themes identified in the interviews were used to develop questions for the national survey

Quantitative data collection & analysis: Representative national survey of patients and health care professionals about gender identity and sexual orientation reporting in healthcare

OTHER RESOURCES
Introduction to Mixed Methods Research: Harvard Catalyst’s eight-week online course offers an opportunity for investigators who want to understand and apply a mixed methods approach to their research.

Best Practices for Mixed Methods Research in the Health Sciences: This guide provides a detailed overview of mixed methods designs, best practices, and application to various types of grants and projects.

Mixed Methods Research Training Program for the Health Sciences (MMRTP): Selected scholars for this summer training program hosted by Johns Hopkins’ Bloomberg School of Public Health have access to webinars, resources, an in-person retreat to discuss their research project, and are matched with mixed methods expert consultants.

Michigan Mixed Methods: University of Michigan Mixed Methods Program offers a variety of resources including short web videos and recommended reading.

To use a mixed methods approach, you may want to first brush up on your qualitative skills. Below are a few helpful resources specific to qualitative research:

• Qualitative Research Guidelines Project: A Comprehensive Guide for Designing, Writing, Reviewing and Reporting Qualitative Research.

• Fundamentals of Qualitative Research Methods: What is Qualitative Research: A six module web video series covering essential topics in qualitative research, including what is qualitative research and how to use the most common methods, in-depth interviews and focus groups.

² https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2621833