

Mixed Methods: Integrating your Data using Joint Displays and Integration Methods

Jodi Holtrop, PhD, and Megan Morris, PhD, MPH

Instructions: Using information from the introduction provided by Dr. Morris, read through your assigned case. Answer the three questions below the case. Consider the different mixed methods study designs listed below and select the one your group think best describes the study design for the case. Then, consider the data collection and analysis integration methods and select what might work for the case. Then, sketch out a possible data display using hypothetical data. Be prepared to share your responses and data display with the larger group.

Mixed Methods Basic Study Designs	
Study Design	Explanation
Explanatory Sequential	Data are collected over the period of time in two consecutive phases. Thus, a researcher first collects and analyzes the quantitative data. Qualitative data are collected in the second phase of the study and are related to the outcomes from the first, quantitative, phase.
Exploratory Sequential	Data are collected over the period of time in two consecutive phases. An initial phase of qualitative data collection and analysis followed by a phase of quantitative data collection and analysis.
Convergent (or Concurrent Parallel)	The researcher concurrently conducts the quantitative and qualitative elements in the same phase of the research process, weighs the methods equally, analyzes the two components independently, and interprets the results together.

Data Collection Integration Methods	
Integration Type	Data Collection Purpose
Building	One form of data collection to inform another form of data collection
Connecting	Results from one type of data collection to inform selection of subjects for another type of data collection
Exploring	Using initial qual for conducting subsequent quant
Comparing	Collecting both qual and quant with the intent to compare them
Matching	Collecting both qual and quant with specific intention to study how they relate to one another (specific constructs)
Expanding	Using qual and quant data collection to elucidate a broader yet overlapping view of a phenomenon
Diffracting	Collecting qual and quant to examine different facets of a phenomenon (or "slices")
Constructing a case	Collecting qual and quant to develop a robust understanding of a case/example



ACCORDS

ADULT AND CHILD CONSORTIUM FOR HEALTH OUTCOMES
RESEARCH AND DELIVERY SCIENCE

UNIVERSITY OF COLORADO | CHILDREN'S HOSPITAL COLORADO



Mixed Methods: Integrating your Data using Joint Displays and Integration Methods

Jodi Holtrop, PhD, and Megan Morris, PhD, MPH

Data Analysis Integration Methods	
Integration Type	Data Analysis Purpose
Explaining	Qual data to explain previous quant findings
Corroborating	Finding results from one data form to support the other
Enhancing	Using data from two types of data for increasing interpretability and meaningfulness
Initiating	Looking for contradiction or discovery by recasting questions or findings from one method of data with another
Transferring	Considering the relevance of qual findings from study participants to a larger population or phenomenon
Generalizing	Extrapolating quant findings from the study population to a larger population

Source - Chapter 10: Identifying the Intent of Integration and Illustrating Integration Features in Mixed Methods Procedural Diagrams. In: *The Mixed Methods Workbook: Activities for Designing, Implementing and Publishing Projects*. Fetters M. Sage Publications, Thousand Oaks, CA. 2020: 122-144.

CASE #1 Developing a brief method for assessing social disconnection in hospitalized patients

The purpose of this study is to explore if hospitalized patients are experiencing social disconnection and to then develop a scale/survey that can identify social disconnection that can be used easily in practice.

Qualitative Data – Interviews with stakeholders in the hospital setting (patients, clinicians, staff). Observation of patient visitors and interactions.

Quantitative Data – Based on interviews and observations, develop a survey measure with rating scales. Then give the survey to the patients and test for psychometrics and analyze survey results.

Analysis – Analyze the qualitative results into themes, then develop survey items as a result. Then analyze the survey results to determine how patients rate their social disconnection.

Questions:

- What type of mixed methods study design?
- What type of integration strategy for the data collection? For analysis?
- Draw an example joint display using hypothetical data.



ACCORDS

ADULT AND CHILD CONSORTIUM FOR HEALTH OUTCOMES
RESEARCH AND DELIVERY SCIENCE

UNIVERSITY OF COLORADO | CHILDREN'S HOSPITAL COLORADO



Mixed Methods: Integrating your Data using Joint Displays and Integration Methods

Jodi Holtrop, PhD, and Megan Morris, PhD, MPH

CASE #2 Testing the effect of two different types of training on uptake and use of medication assisted treatment in rural primary care

The purpose of this study is to determine if providing training in Medication Assisted Treatment (MAT) for opioid use to practice teams facilitates uptake of MAT provision to patients in practices.

Qualitative Data – Interviews with 3-5 different key roles in the practice. Field notes taken by observers at the trainings.

Quantitative Data – Survey of practice members participation and evaluation of the training. Rates of MAT training and use by providers by survey. EMR data pull - Use of MAT by patients.

Analysis – Analyze the qualitative data for themes and analyze the quantitative results for experience with training and MAT use post-training. Then analyze the results together.

Questions:

- What type of mixed methods study design?
- What type of integration strategy for the data collection? For analysis?
- Draw an example joint display using hypothetical data.

Notes:



ACCORDS

ADULT AND CHILD CONSORTIUM FOR HEALTH OUTCOMES
RESEARCH AND DELIVERY SCIENCE

UNIVERSITY OF COLORADO | CHILDREN'S HOSPITAL COLORADO

