

# Mixed Methods Research





# Outline

- Introductions
- A definition of mixed methods research
- Typical situations in which mixed methods is used...
- Reasons for using mixed methods

# Defining Mixed Methods Research



How would  
you  
combine  
two types of  
data?

## Qualitative Text Data

- This is a sample of a text file of words that might be collected on interview transcripts, observation fieldnotes, or optically-scanned documents.

## Quantitative Numeric Data

- 2 3 4 2 5 2 3 1 1  
2 3 4 2 3 3 2 1 1  
1 5 3 4 1 2 3 1 4  
4 5 5 4 1 2 1 4 3  
3 5 1 4 2 3 1 5 5  
2 2 1 5 3 5 1 3 1  
5 3 2 2 5 1 3 2 4  
4 3 1 2 4 2 2 4 1  
5 5 4 2 1 5



# Definition

- A mixed methods study involves the collection or analysis of both quantitative and qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of the data at one or more stages in the process of research (Creswell, 2003)

# Definition unpacked

- Collects both quantitative and qualitative data
- “Mixes” them
- “Mixes” them at the same time (concurrently) or one after the other (sequentially)
- Emphasizes both equally or unequally

# Collecting both quantitative and qualitative data

- **Quantitative data**

- Close-ended scales
- Attitudinal/behavioral scales
- Behavioral checklists
- Census, attendance records

- **Qualitative data**

- Open-ended responses
- Semi-structured interviews
- Semi-structured observations
- Records/documents
- Videotapes/images

# Quantitative and qualitative data analysis

## • Quantitative analysis

- Numeric data
- Descriptive trend analysis
- Hypothesis testing, effect size, interval estimates

## • Qualitative analysis

- Text/image data
- Coding/Themes
- Description
- Interrelated themes to build a picture of the phenomenon.



# Typical situations in which mixed methods is used...

- To compare results from quantitative and qualitative research
- To use qualitative research to help explain quantitative findings
- To explore using qualitative research and then to generalize findings to a large population using quantitative research
- To develop an instrument because none are available or useful
- To augment an experiment with qualitative data

# Reasons for using mixed methods

- The insufficient argument – either quantitative or qualitative may be insufficient by itself
- Multiple angles argument – quantitative and qualitative approaches provide different “pictures”
- The more-evidence-the-better argument – combined quantitative and qualitative provides more evidence
- Community of practice argument – mixed methods may be the preferred approach within a scholarly community
- Eager-to-learn argument – it is the latest methodology
- “Its intuitive” argument – it mirrors “real life”