

# **Mixed Methods Procedures (1)**

---

CS 7123, Spring 2025

**Maryam Tabar, Ph.D.**

# Mixed Methods: Generic Guide

**Table 10.1** A Checklist of Questions for Designing a Mixed Methods Procedure

	Is a basic definition of mixed methods research provided?
	Are the reasons given for using both quantitative and qualitative data?
	Does the reader have a sense for the potential use of mixed methods research?
	Are the criteria identified for choosing a mixed methods design?
	Is the mixed methods design identified?
	Is a visual model presented that illustrates the research strategy?
	Is the proper notation used in presenting the visual model?
	Are procedures of data collection and analysis mentioned as they relate to the chosen design?
	Are the sampling strategies for both quantitative and qualitative data collection mentioned for the design?
	Are specific data analysis procedures indicated for the design?
	Are the procedures for validation mentioned for the design and for the quantitative and qualitative research?
	Is the narrative structure of the final dissertation or thesis mentioned, and does it relate to the type of mixed methods design being used?

Source: Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, by John W. Creswell and J. David Creswell

# Mixed Methods: Basic Description

---

- Collection and analysis of both qualitative (open-ended) and quantitative (closed-ended) data in response to research questions or hypotheses.
- Value and rationale for the choice of mixed methods
  - At a general level: Minimizing the limitations of qualitative and quantitative ones
  - At a practical level: an ideal approach if the researcher has access to both quantitative and qualitative data
  - At a procedural level?

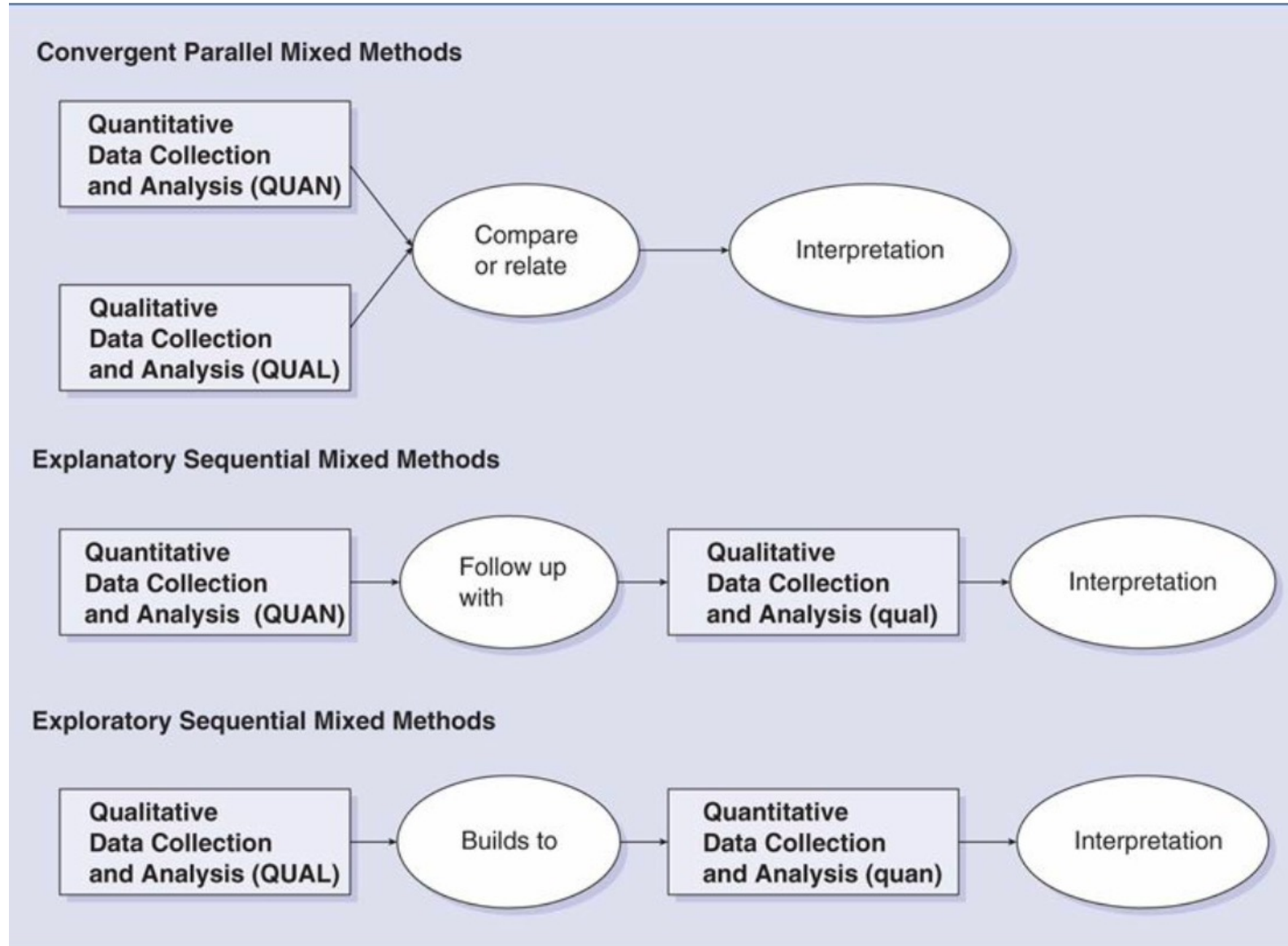
# Mixed Methods: Procedural Level Strengths

---

- More complete understanding of research problems/questions
  - Comparing different perspectives drawn from quantitative and qualitative data
  - Explaining quantitative results with a qualitative follow-up data collection and analysis
  - Developing better measurement instruments by first collecting and analyzing qualitative data and then administering the instruments to a sample
  - Understanding experimental results by incorporating the perspectives of individuals
  - Developing a more complete understanding of changes needed for a marginalized group through the combination of qualitative and quantitative data
  - Having a better understanding the need for and impact of an intervention program through collecting both quantitative and qualitative data over time

# Mixed Methods: Three Basic Types

---



# Convergent Parallel Mixed Methods

---

- Description of Design
- Data Collection
- Data Analysis
- Interpretation
- Validity

# Convergent Parallel Mixed Methods

---

- Description of Design
  - collect both quantitative and qualitative data, analyze them separately, and then compare the results to see if the findings confirm or disconfirm each other
  - Key assumption: qualitative and quantitative data provide different types of information—often detailed views of participants qualitatively and scores on instruments quantitatively—and together they yield results that should be the same.

# Convergent Parallel Mixed Methods

---

- Description of Design
- Data Collection
  - collect both qualitative and quantitative data using the same or parallel variables, constructs, or concepts.
  - For example: If the concept of self-esteem is being measured quantitatively, the same concept is asked during the qualitative data collection process, such as in an open-ended interview.



# Convergent Parallel Mixed Methods

---

- Description of Design
- Data Collection
- Data Analysis
  - side-by-side comparison to see if one (qualitative/quantitative) confirms the other
  - joint display of data in a table or a graph

# Convergent Parallel Mixed Methods

---

- Description of Design
- Data Collection
- Data Analysis
- Interpretation
  - typically written into a discussion section of the study
  - The discussion section includes a report comparing the results from the two databases and notes whether there is convergence or divergence between the two sources of information.
  - When divergence occurs, steps for follow-up exist.

# Convergent Parallel Mixed Methods

---

- Description of Design
- Data Collection
- Data Analysis
- Interpretation
- Validity
  - establishing both quantitative validity (e.g., construct) and qualitative validity (e.g., triangulation)
  - Potential threats to validity in using the convergent approach,
    - Such as?

---

# **In-Class Activity on Convergent Parallel Mixed Methods**