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The field of mixed methods has only been widely accepted for the last decade, though researchers have long been using multiple methods, just not calling them "mixed." Mixed methods research takes advantage of using multiple ways to explore a research problem.

Basic Characteristics

- Design can be based on either or both perspectives.
- Research problems can become research questions and/or hypotheses based on prior literature, knowledge, experience, or the research process.
- Sample sizes vary based on methods used.
- Data collection can involve any technique available to researchers.
- Interpretation is continual and can influence stages in the research process.

Why Use Mixed Methods?

The simple answer is to overcome the limitations of a single design. A detailed answer involves:

- To explain and interpret.
- To explore a phenomenon.
- To develop and test a new instrument.
- To serve a theoretical perspective.
- To complement the strengths of a single design.
- To overcome the weaknesses of a single design.
- To address a question at different levels.
- To address a theoretical perspective at different levels.

What are some strengths?

- Can be easy to describe and to report.
- Can be useful when unexpected results arise from a prior study.
- Can help generalize, to a degree, qualitative data.
- Helpful in designing and validating an instrument.
- Can position research in a transformative framework.

What are some weaknesses?

- Time required.
- Resolving discrepancies between different types of data.
- Some designs generate unequal evidence.
- Can be difficult to decide when to proceed in sequential designs.
- Little guidance on transformative methods.

Methodologist John Creswell suggested a systematic framework for approaching mixed methods research. His framework involves four decisions to consider and six strategies.

Four Decisions for Mixed Method Designs (Creswell, 2003, p. 211)

1. What is the implementation sequence of data collection?
2. What method takes priority during data collection and analysis?
3. What does the integration stage of finding involve?
4. Will a theoretical perspective be used?

Six Mixed Methods Design Strategies (Creswell, 2003)

1. ***Sequential Explanatory***
    - Characterized by: Collection and analysis of quantitative data followed by a collection and analysis of qualitative data.
    - Purpose: To use qualitative results to assist in explaining and interpreting the findings of a quantitative study.

2. ***Sequential Exploratory***
    - Characterized by: An initial phase of qualitative data collection and analysis followed by a phase of quantitative data collection and analysis.
    - Purpose: To explore a phenomenon. This strategy may also be useful when developing and testing a new instrument

3. ***Sequential Transformative***
    - Characterized by: Collection and analysis of either quantitative or qualitative data first. The results are integrated in the interpretation phase.
    - Purpose: To employ the methods that best serve a theoretical perspective.

4. ***Concurrent Triangulation***
    - Characterized by: Two or more methods used to confirm, cross-validate, or corroborate findings within a study. Data collection is concurrent.
    - Purpose: Generally, both methods are used to overcome a weakness in using one method with the strengths of another.

5. ***Concurrent Nested***
    - Characterized by: A nested approach that gives priority to one of the methods and guides the project, while another is embedded or "nested."
    - Purpose: The purpose of the nested method is to address a different question than the dominant or to seek information from different levels.

6. ***Concurrent Transformative***
    - Characterized by: The use of a theoretical perspective reflected in the purpose or research questions of the study to guide all methodological choices.
    - Purpose: To evaluate a theoretical perspective at different levels of analysis.