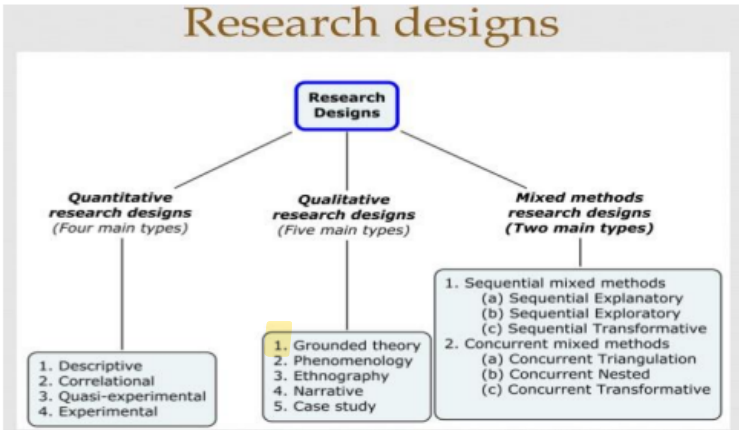


MIXED METHODS RESEARCH



Research designs



قراءة يا جماعة هو أصلا ملخص للي قبل

Mixed Methods Research (MMR)



researchers collect and analyse both quantitative and qualitative data within the same study to understand a research problem



• Frequently referred to as the 'third methodological orientation'

• Johnson et al. (2007, p. 123) defined "mixed method research" as: "... the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration."

mixed

data linkage

integration

qualitative and quantitative

The researcher Mixes qualitative and quantitative data at the same time (concurrently) or one after the other (sequentially).



Criteria	Qualitative research	Quantitative research
Purpose	To understand and interpret social interactions	To test hypotheses, look at cause and effect and make predictions.
Group studied	Smaller	Larger
Variables	Study of the whole (not variables).	Specific variables studied.
Form of data collected	Qualitative data, such as open ended responses, interviews, participant observation, and field notes.	Quantitative data based on precise measurement using structured and validated data collection instruments.

Criteria	Qualitative research	Quantitative research
Type of data analysis	Identify patterns, features and themes	Identify statistical relationships
Results	Particular or specialised findings that are less generalizable.	Generalised findings that can be applied to other populations.
Scientific method	Bottom-up- the researcher generates a new theory from the collected data.	Top- down- the researcher tests the theory with the data.

inductive

deductive

مهمّات ونصّ الباست عليهم

You have a sense that scores are not telling you the entire story. If you just asked a few people about the concept you might obtain a better understanding...mixed methods research provides a more complete understanding of the research problem than either quantitative or qualitative alone.

When do you use mixed methods research?

• Interpretation of data from one design only might be misleading, for example, a structured questionnaire about teachers' emotions regarding teaching practices may only show negative or positive emotion without adequately explain the event that triggered the emotions

Rationale	Explanation
Triangulation (convergence)	Using quantitative and qualitative methods so that findings may be mutually corroborated (Quantitative analyses employ descriptive and inferential statistics, whereas qualitative analyses produce expressive data that provide descriptive details (often in narrative form) to examine the study's research objectives)
Expansion	<ul style="list-style-type: none"> The first phase has findings that require explanation qualitatively (to explain results or how mechanisms work) in causation models. Unexpected findings that need to be explained
Exploration	An initial phase is required to develop an instrument, identify variables to study or develop a hypothesis that requires testing (Explore qualitatively then develop an instrument)
Complementarity	Using different methods to address different parts of the phenomenon, to integrate two different but connected answers to a research question: one reached via a quantitative approach and the other by means of a qualitative one.
Offset weaknesses (compensation)	Ensures that weaknesses of each method are minimised.

مهمّات

Planning of MMR

- Four questions must be addressed by the researcher during the planning stage of mixed methods research:
1. In what sequence will the qualitative and quantitative data collection be implemented?
 2. What relative priority will be given to the qualitative and quantitative data collection and analysis?
 3. At what stage of the project will the qualitative and quantitative data be integrated?
 4. Will an overall theoretical perspective be used to guide the study?

- Priority in mixed methods design is the relative weight assigned to the qualitative and quantitative research components.

- Sometimes priority is referred to as dominance.

- **QUAN** or **quan** refers to quantitative data.
- **QUAL** or **qual** refers to qualitative data.
- **MM** refers to mixed-methods.
- **→** data collected sequentially.
- **+** data collected simultaneously.
- **=** converged data collection.
- **()** one method embedded in the other.

Criteria						
Timing	Designs	Weighting	Mixing/ stage of integration	Notation	Theoretical perspective	Description
Sequential	Explanatory	Usually quantitative	Interpretation phase	QUAN→qual	May be present	The researcher seeks to elaborate on or expand the findings of one method with another method
	Exploratory	Usually qualitative	Interpretation phase	QUAL→quan		
	Transformative	Qualitative, quantitative or equal	Interpretation phase	qual→quan or quan→qual	Use of theoretical perspective (e.g. advocacy)	
Concurrent	Triangulation	Preferably equal; can be quant or qual	Interpretation or analysis phase	QUAN + QUAL	May be present	The researcher converges two types of data at same time to provide an inclusive analysis of the research
	Embedded	Qualitative or quantitative	Analysis phase	QUAN(qual) or QUAL(quant)		
	Transformative	Qualitative, quantitative or equal	Usually analysis phase, can be interpretation phase too	qual + quan or quan + qual	Use of theoretical perspective (e.g. advocacy)	

SEQUENTIAL EXPLANATORY DESIGN

• The reason for favouring sequential explanatory design is that quantitative design in the first stage will portray the objective statistical findings from the group in general. Afterwards, a qualitative approach can be used to discover subjective nuances from participants as individuals and explain the phenomenon behind the numbers that cannot be described merely by the quantitative data

• It is denoted by 'QUAN → qual' which represents the quantitative study occurs first and has greater weight in addressing the study's aims, and the qualitative study follows to explain quantitative results

- Used when you want to explain the initial quantitative results in more depth with qualitative data

- The rationale for this approach is that the quantitative data and their subsequent analysis provide a general understanding of the research problem. The qualitative data and their analysis refine and explain those statistical results by exploring participants' views in more depth.

- Data analysis is usually connected, and integration usually occurs at the data interpretation stage.
- To reiterate, key characteristics:
 - Data collection priority (Quantitative data).
 - Sequence (First quantitative data then qual).
 - Use of data (to refine, elaborate).

Past paper

1-Which of the following can be considered as a reason for conducting mixed methods research:

- Explanation.
- Offset weaknesses of quantitative and qualitative research and draw on strengths.
- All of the options are correct.
- Instrument development

Ans : C

2-Which of the following is a weakness of mixed methods research?

- Do not allow for methodological flexibility.
- Words, pictures, and narrative can be used to add meaning to numbers.
- Little information on transformative designs.
- Inhibits scholarly interaction.

Ans : C

3-The notation of mixed methods research 'QUAL → quan' indicates to:

- Sequential Exploratory.
- Parallel Triangulation.
- Concurrent Triangulation.
- Sequential Explanatory

Ans : A

4-MMR which is used when unexpected results arise from quantitative studies:

- Sequential explanatory design