

Mixed Methods Research

Background

- **Mixed Methods:** qualitative and quantitative approaches are used in one study and are integrated by design
 - **PROS:** mitigate weakness of each approach, answer more complex questions
 - **CONS:** paradigmatic conflict, potential for losing balance
- **quasi-mixed/multiple methods:** both quantitative and qualitative data are present, but no mixing of data
- Mixed Methods \neq Quasi-Mixed Methods!

Design

- **timing:** which comes first, qualitative or quantitative?
 - **concurrent:** planned at the same time, not necessarily collected or analyzed at the same time
 - **sequential:** analysis of one stage informs the next stage
- **emphasis:** which is more important/dominant?
 - capital letter indicate emphasis

		Timing	
		Concurrent	Sequential
Emphasis	Equal Status	QUAL+QUAN	QUAL → QUAN QUAN → QUAL
	Dominant Status	QUAL + quan QUAN + qual	QUAL → quan quan → QUAL QUAN → qual qual → QUAN

Common Simple Designs:

Sequential explanatory

QUAN → qual

Sequential exploratory

QUAL → quan

Sequential transformative

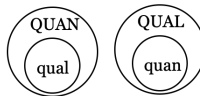
Advocacy lens
QUAN → qual

Advocacy lens
QUAL → quan

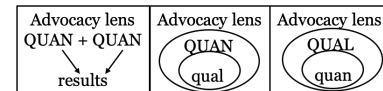
Concurrent triangulation

QUAN + QUAL
↓
results

Concurrent nested



Concurrent transformative



Survey Quality

In *sequential exploratory* designs, we often use interviews for the QUAL portion and a survey for the quan portion. This is often followed by a QUAN → qual phase as well. When designing a survey, we need to consider the following:

Validity

- **face validity:** does the item or scale appear (to experts) to measure the desired construct?
- **content validity:** does the scale measure the full range of relevant content?
- **construct validity:** does the scale measure *only* the intended theoretical construct?
- **criterion validity:** how well does the instrument measure the intended construct?

Reliability

- **stability:** same instrument yields same results from same respondent at different times
- **equivalence:** two different measures yield similar results from same respondents
- **internal consistency:** how well different, but related, items all measure the same thing

Quality Considerations

While we must consider the validity and reliability of the quant and qual strands, we look to **legitimation** to ensure quality of mixing.

Legitimation₁: a process of continuous evaluation of all mixed methods study procedures for consistency between the research purpose and resulting inferences

Legitimation Types₂: sample integration, inside-outside, weakness minimization, sequential, conversion, paradigmatic mixing, commensurability, multiple validities, political

[1] Onwuegbuzie, A. J., & Johnson, R. B. (2006). *The validity issue in mixing research*. *Research in the Schools*, 13(1), 48-63.

[2] Collins, K. M. T., Onwuegbuzie, A. J., Johnson, R. B. (2012). *Securing a place at the table: A review and extension of legitimation criteria for the conduct of mixed research*