

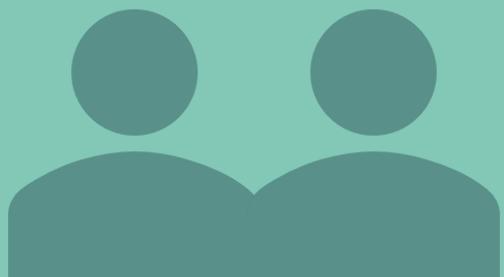


Use reliability and validity to evaluate the quality of your research

*Week 2 HRA2*

# Can we trust the results?

You're working as GM for a Myriad Hotel.  
The bosses Charles & Stefan are visiting.  
They ask you: 'What can we do at our Myriad  
hotels to increase guest satisfaction?'



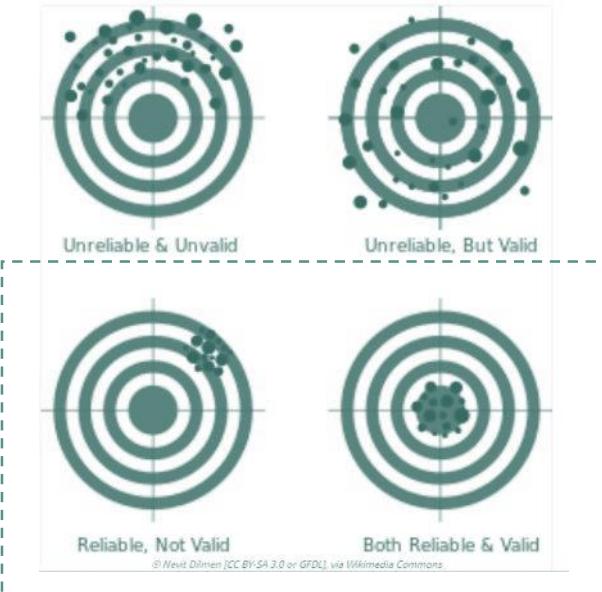
There are 54 rooms/guests  
48 deluxe suites and 6 executive suites  
18 business guests and 34 leisure guests

**You interviewed 9 guests**

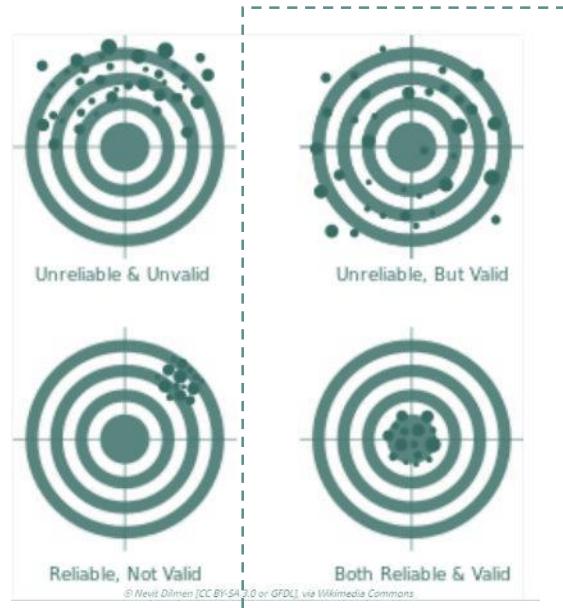
Increasing guests satisfaction:

- What do their customers value?  
*E.g. F&B, front desk, shuttle service,  
swimming pool*
- How to measure customer satisfaction?  
*E.g. NPS, reviews, #complaints*

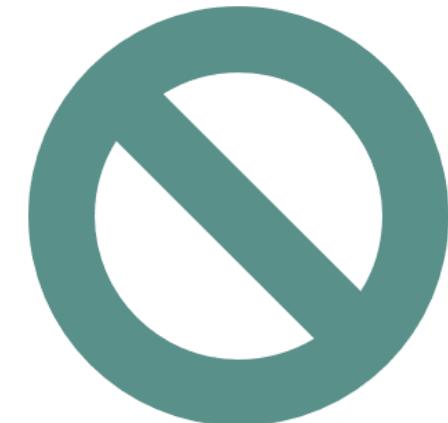
# Use reliability and validity to evaluate the quality of your research



Reliability: is there consistency?

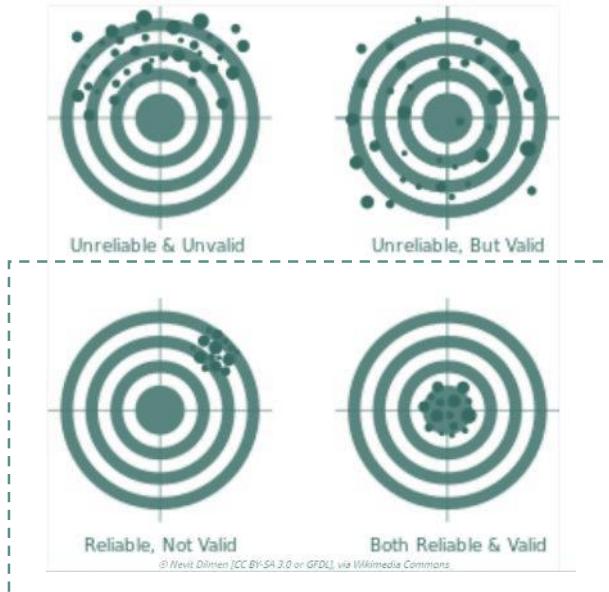


Validity: are you reaching your desired goal?

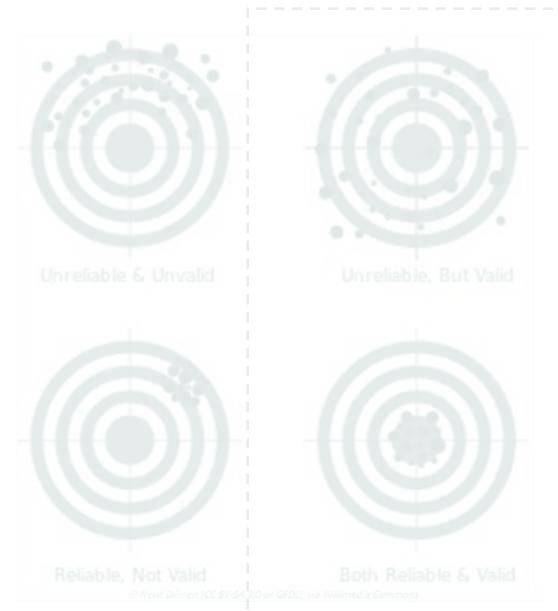


Threats to validity and reliability

# Use reliability and validity to evaluate the quality of your research



**Reliability:** is there consistency?



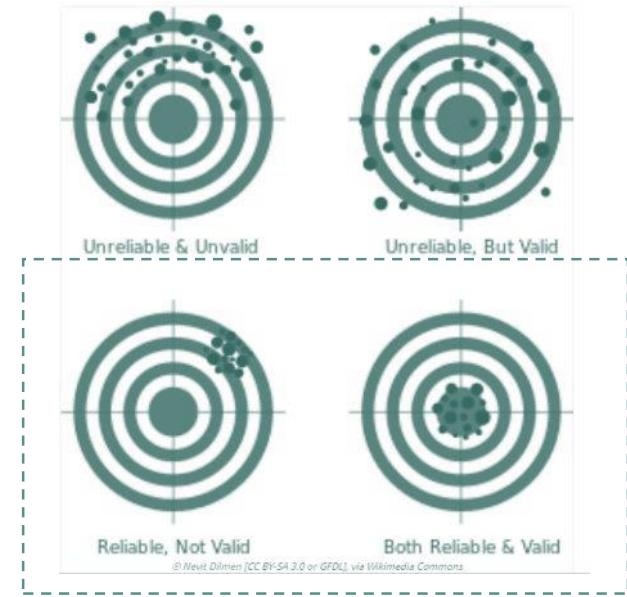
**Validity:** are you reaching your desired goal?



**Threats to validity and reliability**

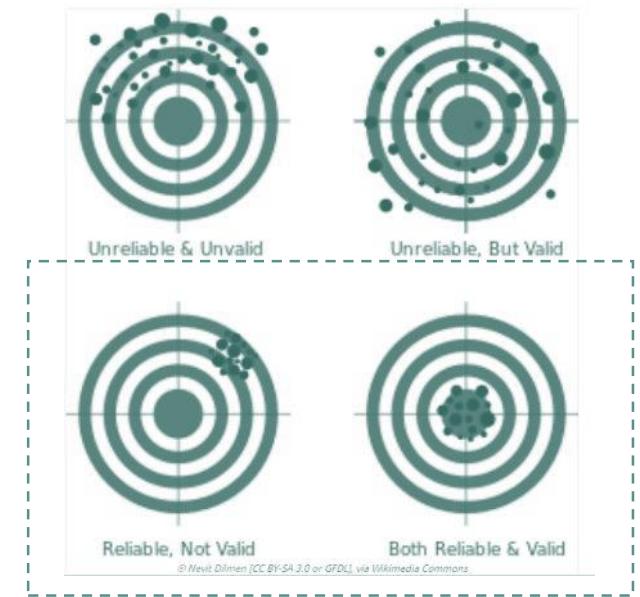
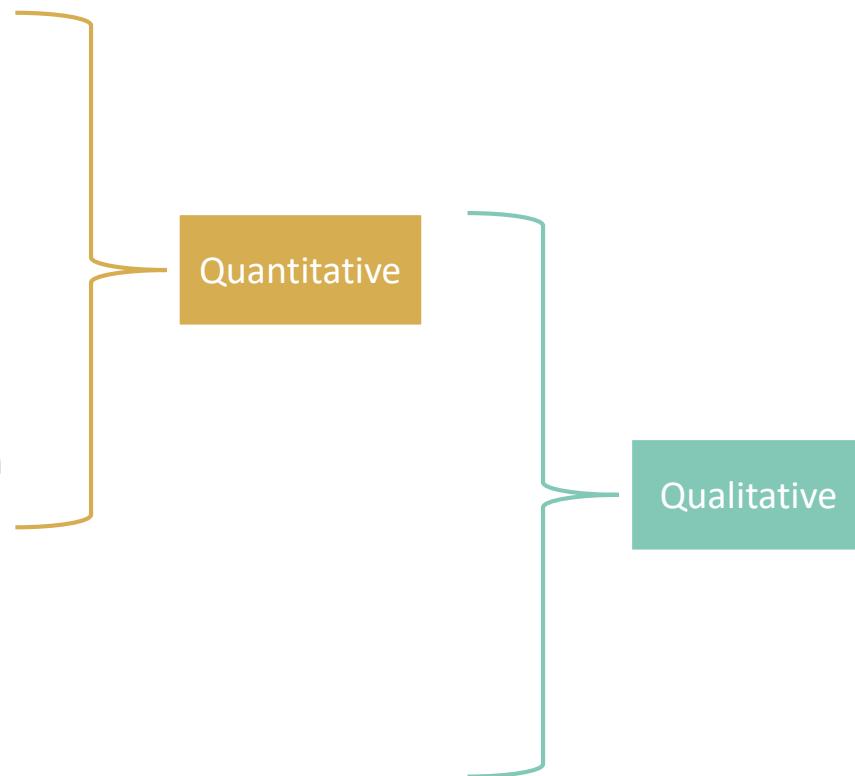
# Reliability: Is it consistent?

- ◆ Would the results hold when you or someone else performs the experiment/research again?
- ◆ Mestreechs keteerke (Maastricht's fifteen minutes)

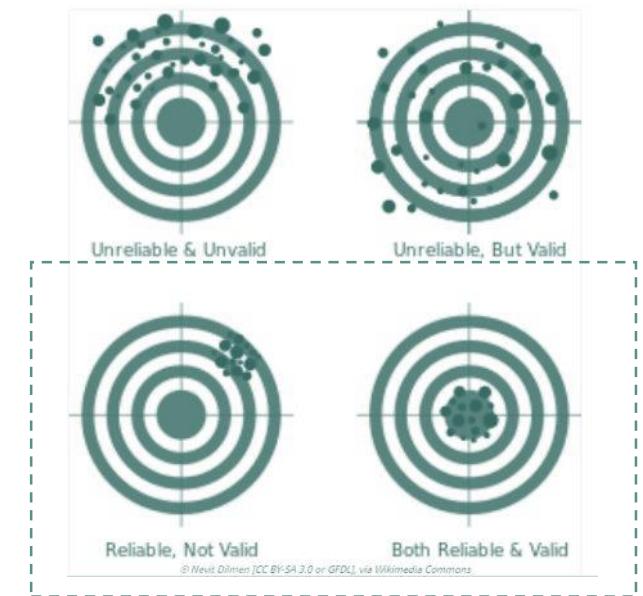
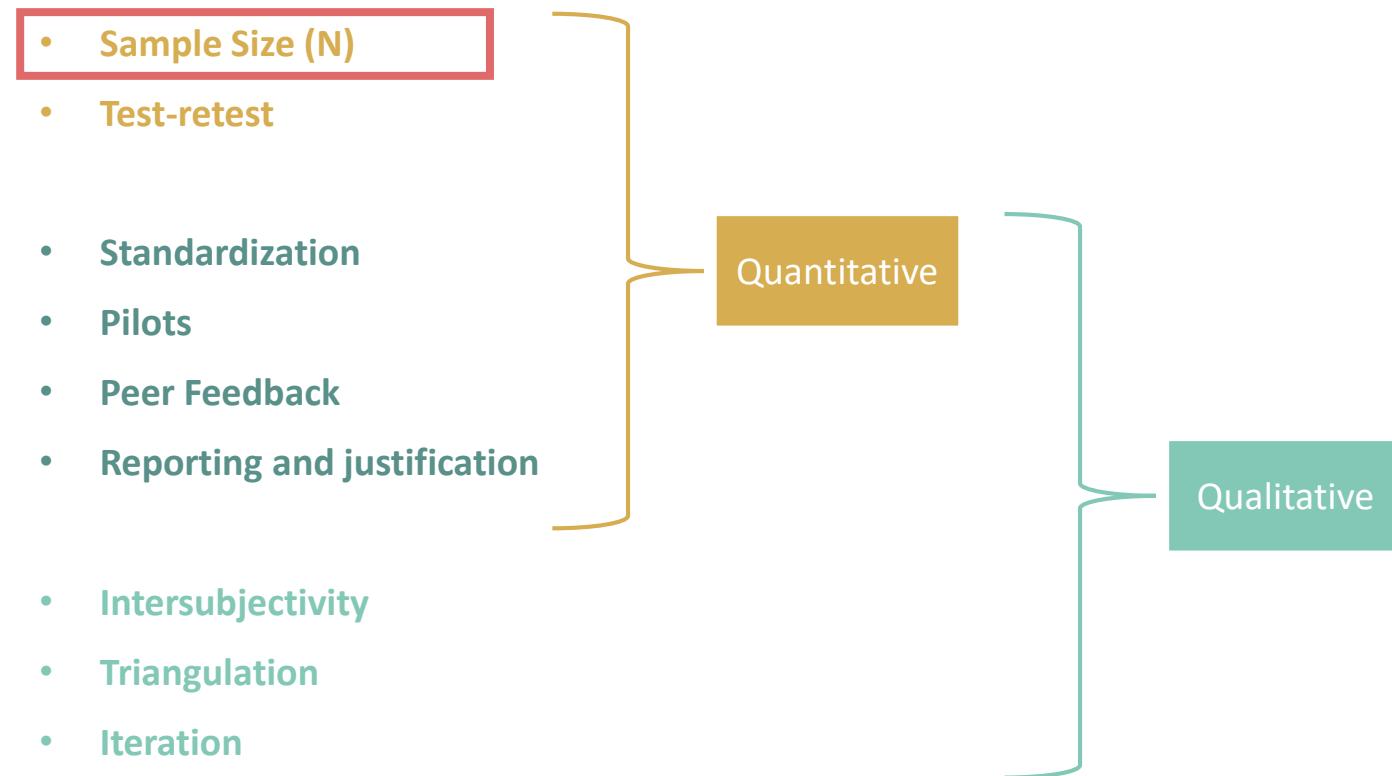


# Reliability: Is it consistent?

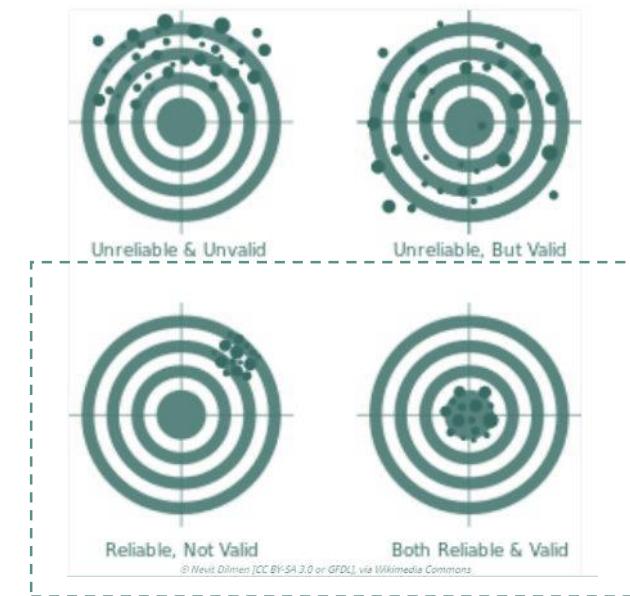
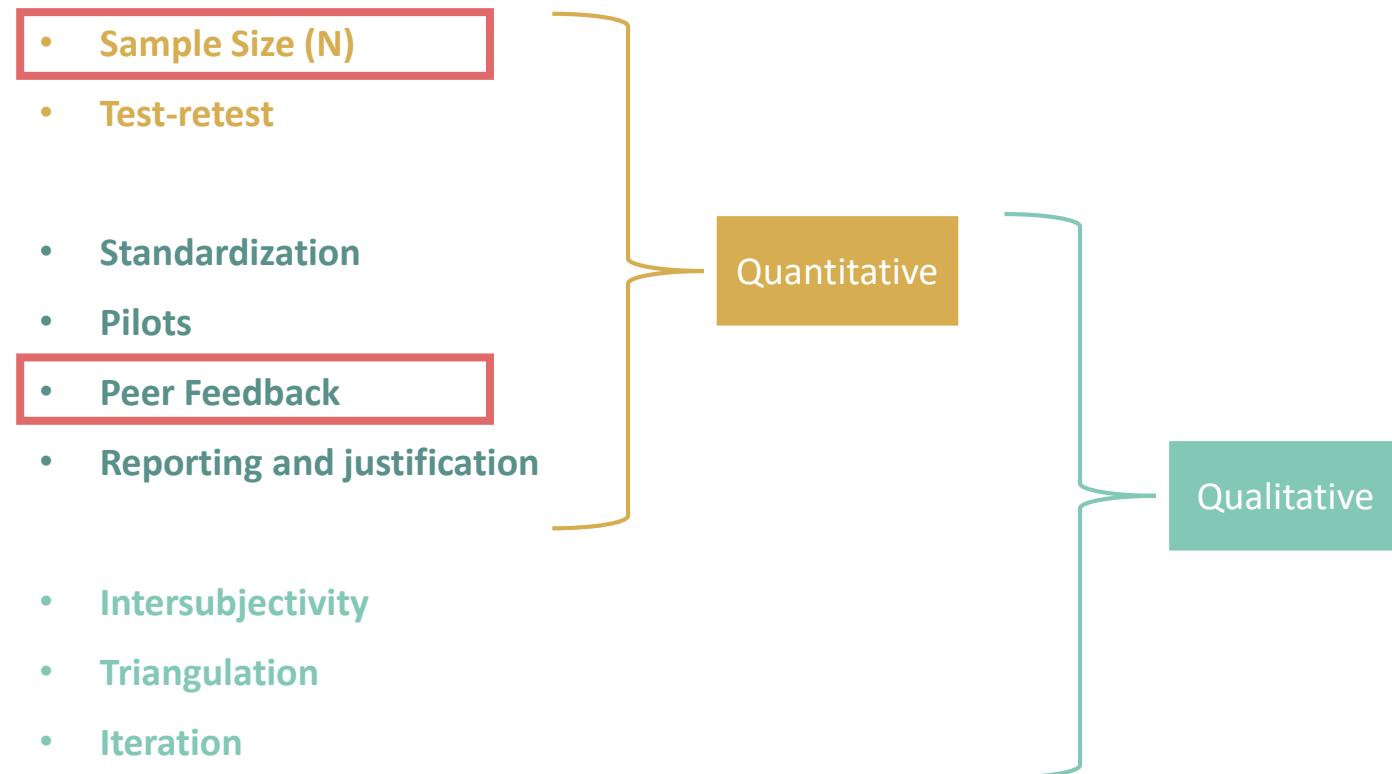
- Sample Size (N)
- Test-retest
- Standardization
- Pilots
- Peer Feedback
- Reporting and justification
- Intersubjectivity
- Triangulation
- Iteration



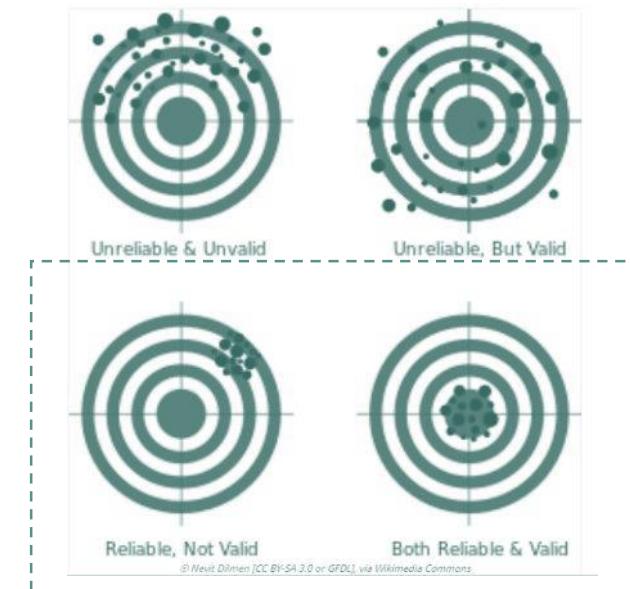
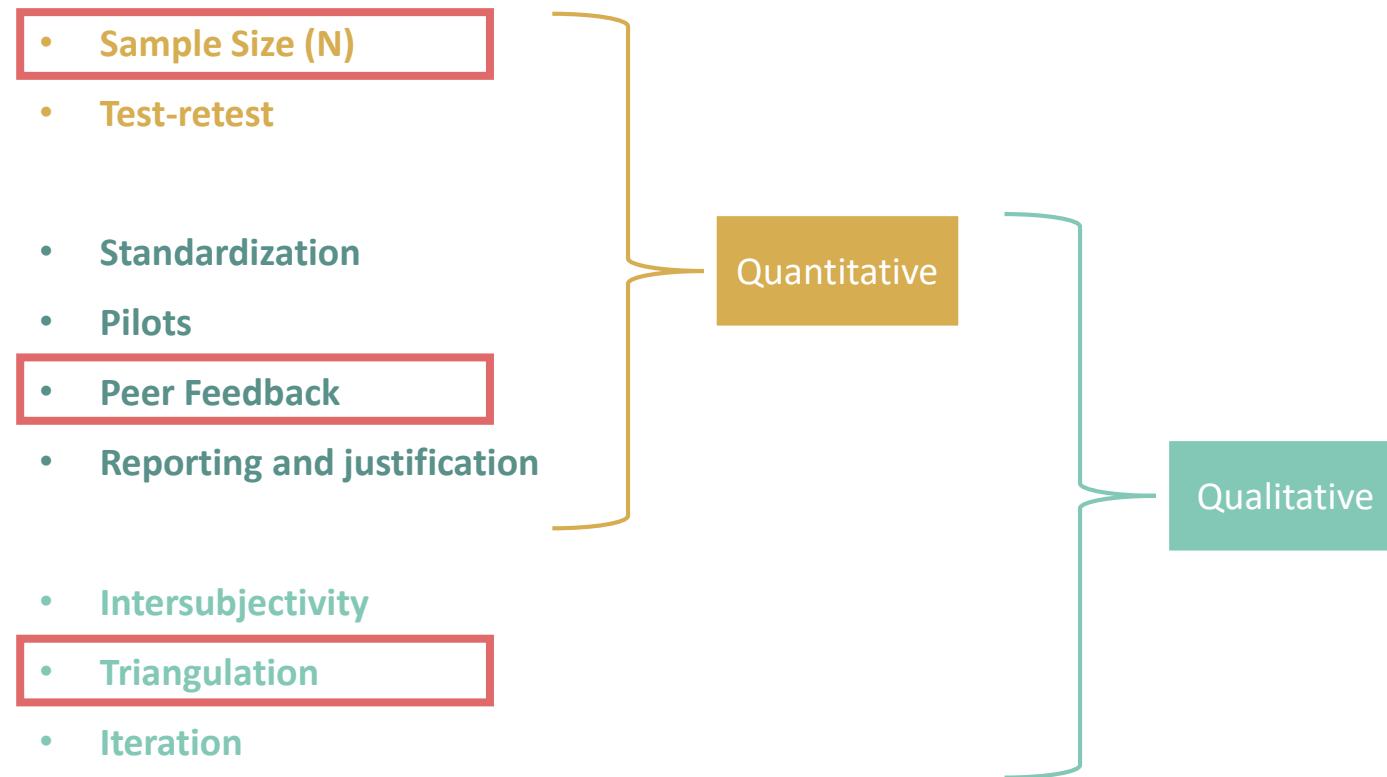
# Reliability: Is it consistent?



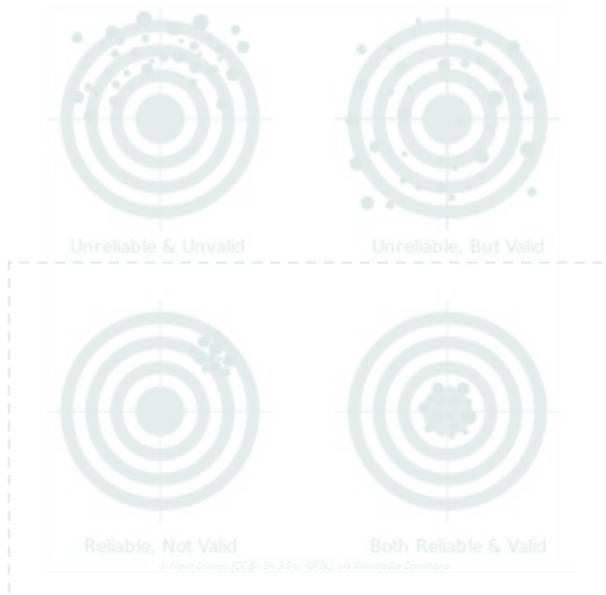
# Reliability: Is it consistent?



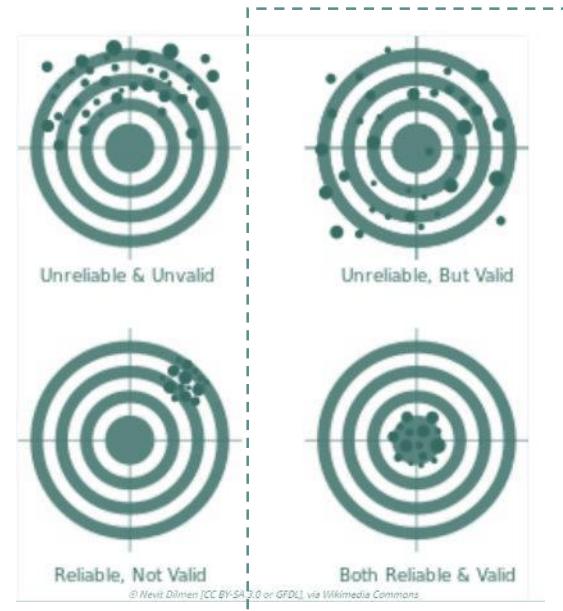
# Reliability: Is it consistent?



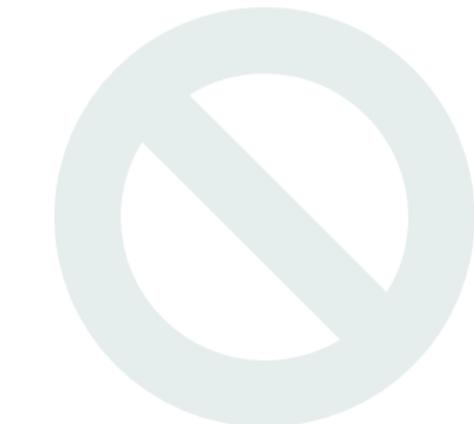
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Reliability: is there consistency?

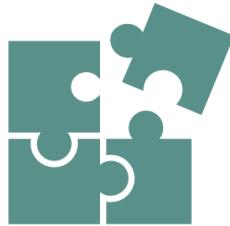
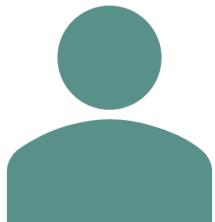


Validity: are you reaching your desired goal?



Threats to validity and reliability

# Validity: are you reaching your desired goal?



## Face Validity

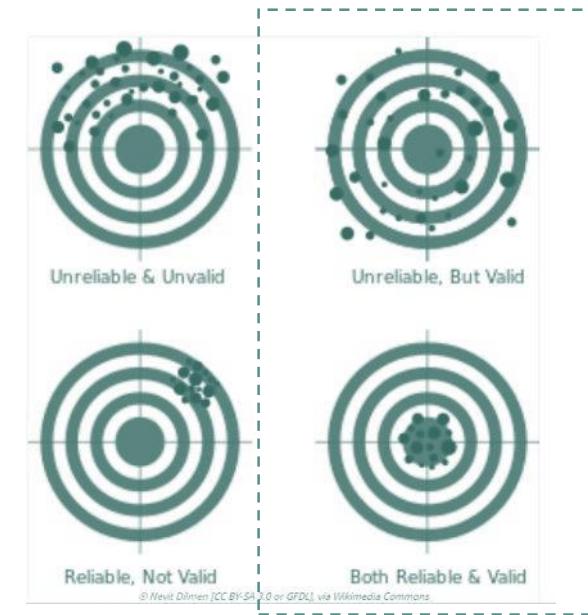
*Expert judgement*

## Content Validity

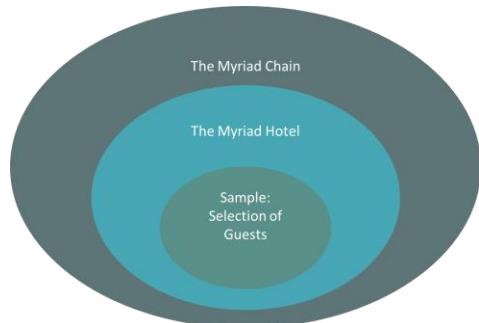
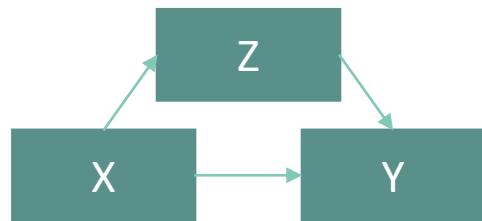
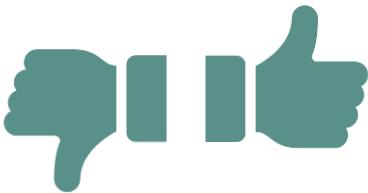
*Completeness*

## Criterion Validity

Does one measurement correlate with another?



# Validity: are you reaching your desired goal?



## Construct Validity

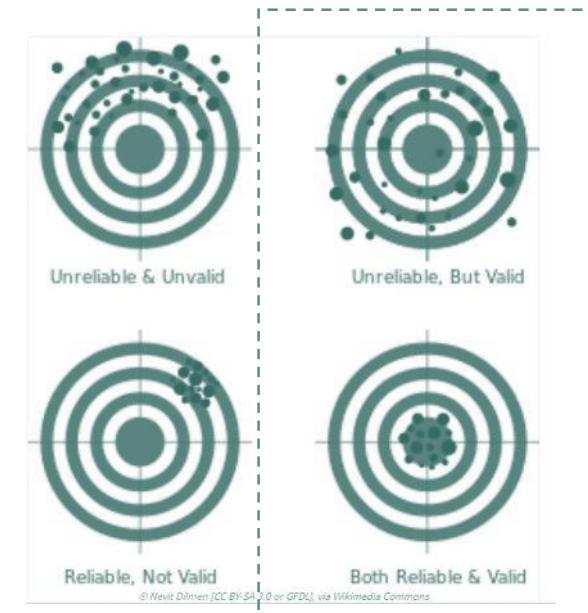
*Am I measuring what I want to measure?*

## Internal Validity

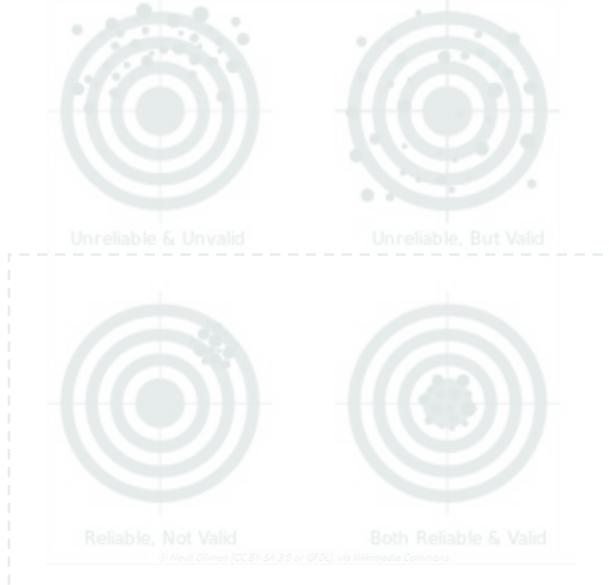
*Causality  $X \rightarrow Y$  without  $Z$  influencing the relation*

## External validity

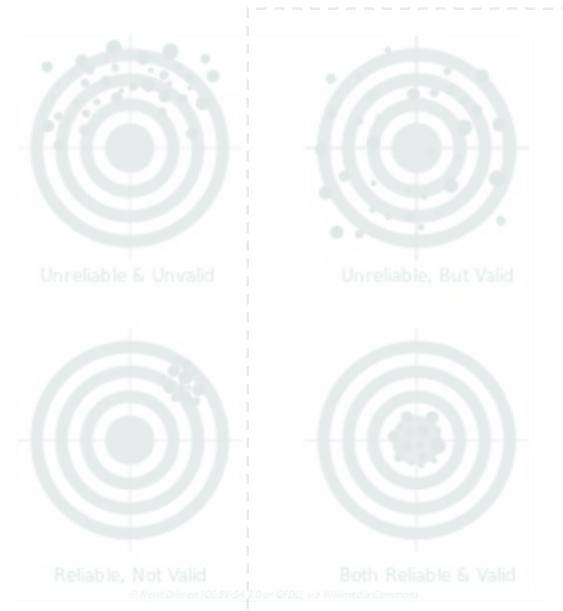
*Can you generalise your results?*



# Use reliability and validity to evaluate the quality of your research



**Reliability:** is there consistency?



**Validity:** are you reaching your desired goal?



**Threats to validity and reliability**

# Threats to reliability and validity



**Participant error**



**Participant bias**



**Observer error**



**Observer bias**

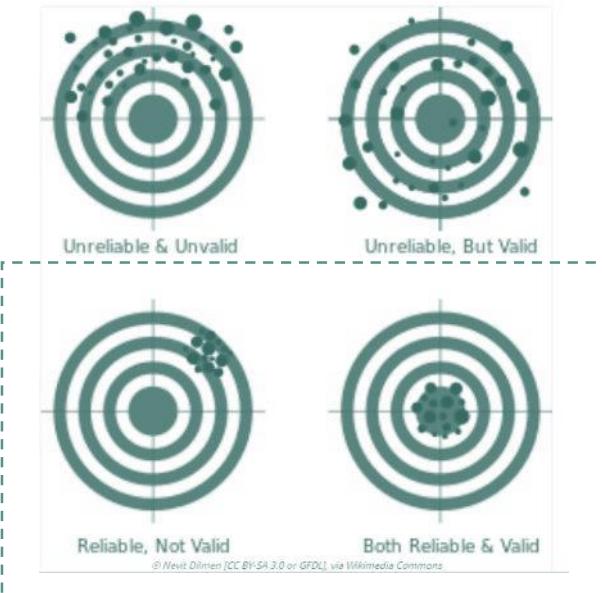


**Situational contaminants**

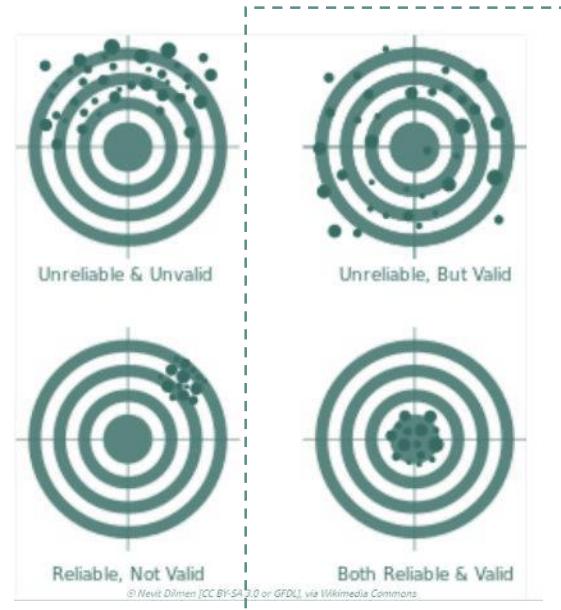


**Instrument clarity**

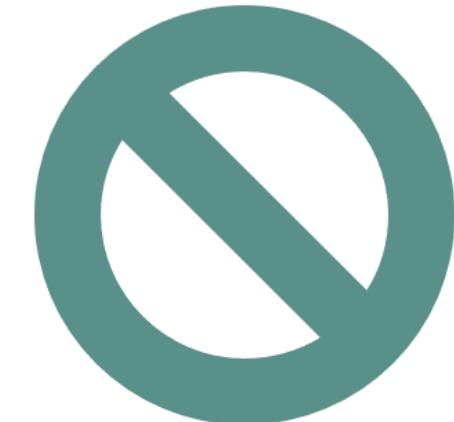
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**Reliability:** is there consistency?



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**Threats to validity and reliability**