Wrap-up: Module 4 & 5 Intro to Module 6: Case study research

2023

4 December 2023

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- A researcher finds that two items that are supposed to measure the same construct are *not* correlated. This indicates:

A. Low convergent validity
B. High convergent validity
C. Low discriminant validity
D. High discriminant validity

- During data analysis, a solution for non-response error is:

A. Avoiding bias in questionnaire items
B. Weighting
C. Probability sampling
D. Using a sampling frame

- Which statement is correct?
- I: Any dichotomous scale is a nominal scale.
- II: Category scales can either be nominal or ordinal
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A. Only statement I is correct
B. Only statement II is correct
C. Both statements are correct
D. Both statements are incorrect

Feedback weekly assignment #3

Often made mistakes

- Population is not the same as the sample
  - If you're going to survey the whole population, there's no sense taking a sample out of the population
- Likert scale
  - Likert scale is about the level of agreement for a statement, so *not* a question! → You should make statements and ask the respondent what his/her opinion is regarding this statement (e.g. strongly agree)
  - (Often goes wrong in exams too..)
- Sample frame
  - Not the same as the population or the sample. . Sample frame is the source material or device from which a sample is drawn. It is a list of those within the population who can be sample (idem)

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Sampling frame vs sampling method

- Probability sampling vs non-probability sampling
- Difference between a sample frame and a sampling method:

So we divide the citizens based on their ages as the following:

People aged 12-17 Minors

People aged 18-25 approx. Young adults

People aged 26-45 approx. Adults

People aged 46-65 approx. Middle-aged

People aged 66-85 approx. Elderly

Stratified sampling

A sample frame is where you take your sample from.

Often made mistakes

- Argumentation about sampling
  - Give argumentation about why are you using this design. Not just how you do it
- Population boundaries
  - Give your population a geographical boundarie and be specific.
  - e.g. Car owners in the Netherlands who are 18 year or older and are registered as so and not just “car owners”
  - Bad example: The Population is the Smart Textile Industry. Because suitable sensor system must be developed using smart textile in order to replace the current sensing technology
  - Good example: High-Tech & Software companies in the region of Eindhoven, Netherlands

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Interactive session

- One person presents their questionnaire items
- The others give feedback, using the checklist
  - Avoid double-barreled/twofold questions
  - Avoid ambiguous questions and words
  - Define concepts/terms properly and in advance
  - Avoid abbreviations before you introduce them
  - Use of ordinary words
  - Avoid leading or biasing questions (‘You are also likely to agree..’)
  - Social desirability
  - Avoid recall-dependent questions
  - Avoid emotionally-loaded questions
  - Avoid too long questions
  - Use words and terms that are culturally acceptable

Q&A

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Intro to module 6: Case study research

What are case studies?

- Empirical, in-depth study of **contemporary phenomenon** (“the case”) within its **real-life context**
- **many more variables of interest** than data points
- **multiple sources of evidence**, with data that needs to be **triangulated**

When to do case studies?

- “Contemporary phenomena in their real-life setting, taking into account their rich, qualitative intricacies” (Benbasat et al 1987)
- Why or how questions
  - where researchers cannot manipulate core concepts (Yin, 2018)

Case methods in MOT

- Used in thesis projects
- More to it than students (and researchers) often assume
- On the Research Methods exam, typically the lowest scores on this topic

Assignment

- Consider your research topic: What are possible cases you could work on?
  - What contemporary phenomena could give you insights?
  - What kind of how and why questions could you answer with a case?
  - What data collection methods could be suitable?

Tomorrow's lecture

- Practice with the materials of module 6: case study research
- Work on practical case
- Preparation needed!
  - Watch the learning videos from module 6 *before* the lecture