האוניברסיטה העברית בירושלים
THE HEBREW UNIVERSITY OF JERUSALEM

Research Methods in the Study of Europe and Germany (54699)

Lesson 6

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Structure of the Class

1. **Assignment Testing Hypotheses**

2. **Research Design**

3. **Methodology**

Testing Hypotheses

Testing Hypotheses

- **Predictions** from theory, to be confirmed or falsified.

- Hypotheses explain relationship between variables:

How / Why IV affect DV.

- **The 3 conditions:**

1. Is there a relationship between the variables? (***correlation***)
2. Is this a real relationship or a fake relationship? (***alternatives***)
3. Does the independent variable (A) precede the dependent variable (B) in time? (***causal mechanism***)

Assignment – From R.Q. to Hypotheses

- Develop 3 research questions on topics you consider "puzzling".
- Then, you are asked to propose 3 potential explanations for each of the questions ("hypotheses"), based on the rules we learned.

<u>Example from student in 2022-2023:</u>

- *What are the reasons for Germany's implementation of the Open-Door-Policy towards Syrian refugees between the years 2015-2021?*
  - ***Hypothesis 1:*** Germany's (and Chancellor Merkel's) own experience with a "refugee crisis", relating to the separation between East and West Germany.
  - ***Hypothesis 2:*** Feelings of guilt relating to the Holocaust and the need for making amends.
  - ***Hypothesis 3:*** Germany's urgent need for workforce amid its aging population.

The Scientific Process

- Developing an idea for research - **PUZZLE**
- Elaborate a question to answer – **RESEARCH QUESTION**.
- Consolidate expected responses - **HYPOTHESES**
- Define strategy – **RESEARCH DESIGN** & **METHODOLOGY**
- **DATA COLLECTION & ANALYSIS –** are findings consistent with hypothesis?
- **CONCLUSIONS -** Change and expansion? Is it possible to confirm the hypothesis? Make changes? Further research?

Research Design

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Research Design

1. The research design is **the way(s)** in which we plan to answer the research question we set, and test the hypotheses we formulated.

2. Different designs have different **advantages and disadvantages**.

3. In light of this, the trend in research in recent years is to **combine** different designs/methods and thus benefit from the advantages and compensate for the disadvantages of each of them.

Research Design

Two main characteristics of a well-designed research:

- *Internal Validity*

High internal validity indicates that the findings are accurate and correct in the examined case. We measured our variables properly, that we found real and not simulated/false relationships.

- *External validity:*

Can our findings be generalized to a larger number of cases? If we did an experiment on a group of students, is there a good reason to believe that what we found is also true for other people?

Research Design

Two main types of research designs

- *Qualitative Research*

Research based on a small number of cases and verbal analysis.

- *Quantitative Research*

Studies based on a large number of cases and quantitative/statistical analysis.

Research Design

- **Other types of research:**
  - ***Experimental versus observational:***
    - Do researchers have control over the research?
    - Do they randomly assign subjects to experimental and control groups?
    - Do they manipulate the independent variable to see effects on the dependent variable?
    - Examples?

Research Design

- **Other types of research:**
  - ***Variable-based studies case-based studies:***
    - Do we want to know a few things about many cases? Or a lot about a few cases?
    - Are we interested in the level of variation of the dependent variable and its relationships with IV? Or interested in complexity, in detailed causal mechanisms, in non-hypothesized new insights.
    - Examples?

Methodology

Variables / indicators - Conditions

1. **Conceptual clarity**

2. **Reliability**

3. **Validity**

   a) **Internal**

   b) **External**

Conceptual clarity

- Good measurement starts with clear, well-defined concepts.

- Vague concepts lead to poor measurement:
  - Unclear.
  - Ambiguous

- That is why it is important to define well the concept being tested (conceptualization + operationalization).

Reliability

- **Consistency (will give us the same value in every measurement).**

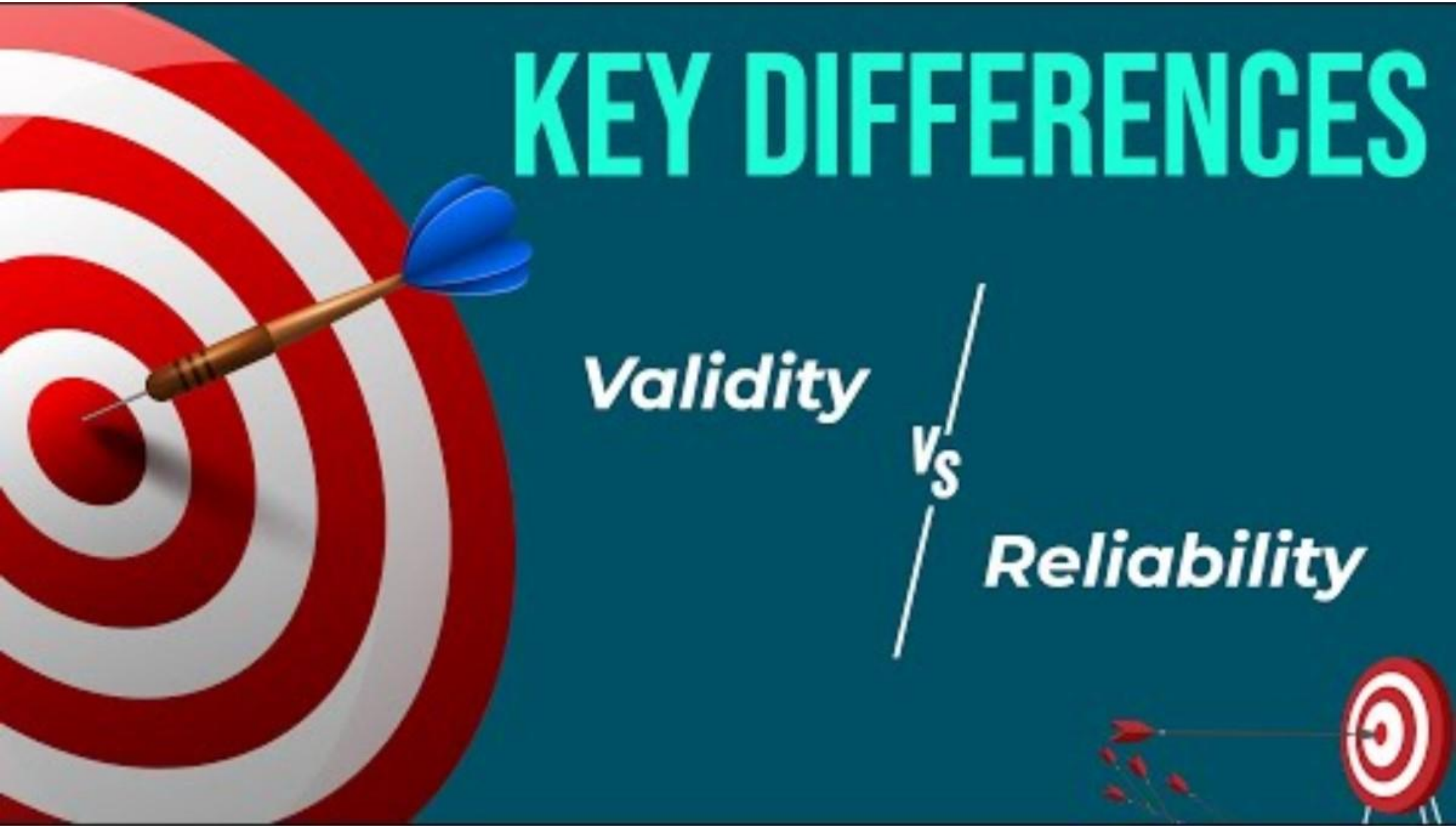
- **Generally relevant for 3 situations:**

  1. Several indicators for the same variable (ex. political positions)
  2. The same index tested at different points in time.
  3. The same index is coded by different people (inter-coder reliability).

Validity

- **How "true" the measurement is (of what it is intended to measure)**
  - *Content validity*: how comprehensive the indicator is – includes all aspects of the concept? (ex. Democracy)
  - *Construct validity:* How well does the indicator measures what it is intended to measure? (the higher the correlation, the higher the validity).

- **Internal & External Validity.**



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Wrapping Up

When reading/writing research, ask yourself:

- ✓ Are the key concepts clearly defined? Where did the definitions come from?
- ✓ Is it possible to find or think of alternative definitions for the same concept? Does the concept contain the right number of aspects?
- ✓ What is the unit of analysis? What is the measurement scale? Is this the best scale? Why or why not?
- ✓ Are the measures of each concept reliable? Valid?

Types of Methods in Qualitative Research

1. Case studies
2. Process tracing.
3. Comparative analysis.
4. Content analysis
5. Discourse analysis / Framing analysis.
6. Network analysis

Next Class

- **Lesson 7)**
  - Gathering sources and analyzing data

Thanks!

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