

Everything Begins with a Question

GLCb1008 Introduction to Methodology of Social Sciences

Aim of this lecture

- Topic selection
- Research aims
- Research questions and hypotheses
- Operationalization
- Methods selection

Role of research design

- Outlines the main points of research plan
- Forces the researcher to argue, question, focus and evaluate
- Provides answers to three basic questions:
 - What do you aim to study?
 - How do you intend to do the research?
 - What is reason to provide such an analysis?
- In practical meaning – the design saves the researcher a lot of time

How to start a research?

- Identification of the topic?
- Raising questions?
- Formulation of hypotheses?
- Data availability check?
- Calculation of costs?

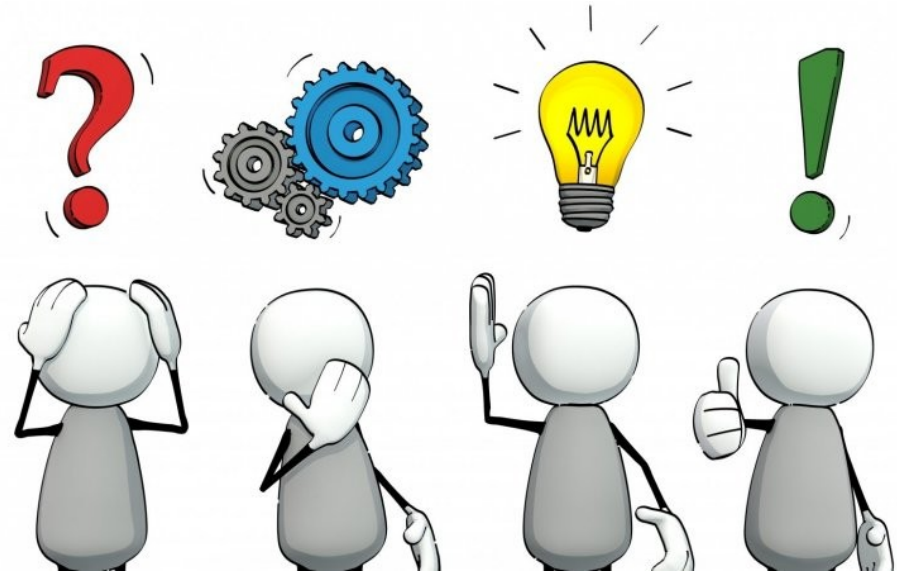
Step by Step

1. Topic and goals (*+ reading*)
2. Research questions (*+ reading*)
3. Hypotheses (*+ reading*)
4. Methods (*+ reading*)
5. Data collection
6. Data analysis
7. Results



Topic and Inspiration

- College courses
- Extracurricular activities
- Your future career
- Discussions with others
- Reading



Goals of your research

- No need to analyse everything
- Typical goals:
 - Description
 - Exploration
 - Understanding
 - Prediction
- Narrow your research in various terms (goals, questions, methods)

The research hierarchy (Punch)

- 1) Research area
- 2) Research topic
- 3) General research questions
- 4) Specific research questions
- 5) Data collection questions

Research area and topic

- Define them to focus and narrow your research
- Area:
 - A general issue of concern
 - Includes several topics
 - One or few words (terrorism, poverty of young people, non-voters)
- Topic:
 - More specific issue
 - Falls within an area (with further topics)

	Research area		Research topic
1.	Domestic violence	1.	Incidence of domestic violence
		2.	Forms of domestic violence
		3.	Victims of domestic violence
2.	Members of political parties	1.	Motivations to join parties
		2.	Socio-demographics of party members
		3.	Ambitions of party members
		4.	Powers of party members within parties
3.	Disinformation media	1.	Content of DMs production
		2.	Audience of DMs
		3.	Governments' activities against DMs
		4.	Impact of DMs on society

'What' questions

- Lead to descriptive answers
- Focus on discovering the characteristics and patterns of social phenomena
- *What factors affect success at job interviews?*
- *What is the relationship between physical activity and health?*
- *What are the consequences of high inflation?*

'Why' questions

- Ask for reasons of existence or patterns of social phenomena
- Focus on understanding and explaining relationships between events
- *Why do political parties use spin doctoring?*
- *Why do people join public demonstrations?*
- *Why do students study social sciences?*

'How' questions

- Focus on practical aspects of empirical world
- They concern on change and intervention
- *How can the trust towards political elites increase?*
- *How can people become more active citizens?*
- *How can governments reduce regional disparities in their countries?*

Research questions

- A sequence what → why → how
- First we describe, then we explain and finally we propose a solution
- Not necessary to include all three types into a single research project
- Wording vs content of questions

Research Questions

- Well formulated questions help the research and vice versa
- Empirical criterion:
 - What data we need to answer the question?
- If RQ do not lead to certain data, there is no way to answer the questions

Research Questions

- Beware of normative RQ
- *Is it correct to apply gender quota?*
- *Was the election of E. Macron a good decision of French citizens?*
- Normative RQ cannot be answered using empirical data
- Solution – modification of RQ (this changes also their content)
- *Do French citizens think that electing E. Macron for president was a good decision?*

Hypotheses

- *Logical conjecture about the nature of relationships between two or more variables expressed in the form of a testable statement (O'Leary 2004)*
- Main elements:
 - Testability
 - Relationship between at least two variables
 - Expectation backed by the literature
- *'Increasing unemployment rate leads to higher local support of extreme parties.'*

Hypotheses

- Not a necessary part of any research
- Hypotheses are used for testing theories
- Key questions:
 - Does the theory suggest a relationship between variables?
 - Does it suggest the direction of such relationship?
- Placing hypotheses **before** the theory is senseless

Hypotheses

- Hypotheses vs null hypotheses
- Being sceptical as a key approach
- We incline to favour null hypotheses
- Theories are never confirmed for eternity

Does more transparency of institutions lead to higher satisfaction of citizens with democracy?

More transparency of institutions leads to higher satisfaction of citizens with democracy.

What is the effect of amount of sugar on willingness of people to drink tea?

The amount of sugar affects the willingness of people to drink tea.

- Hypothesis 1: *'More life experience leads to better career paths.'*
- What is *'life experience'*?
- What is a *'better career path'*?
- Hypothesis 2: *'Higher GDP allows countries to follow more ambitious national interests'*
- What are *'national interests'*?

Operationalization

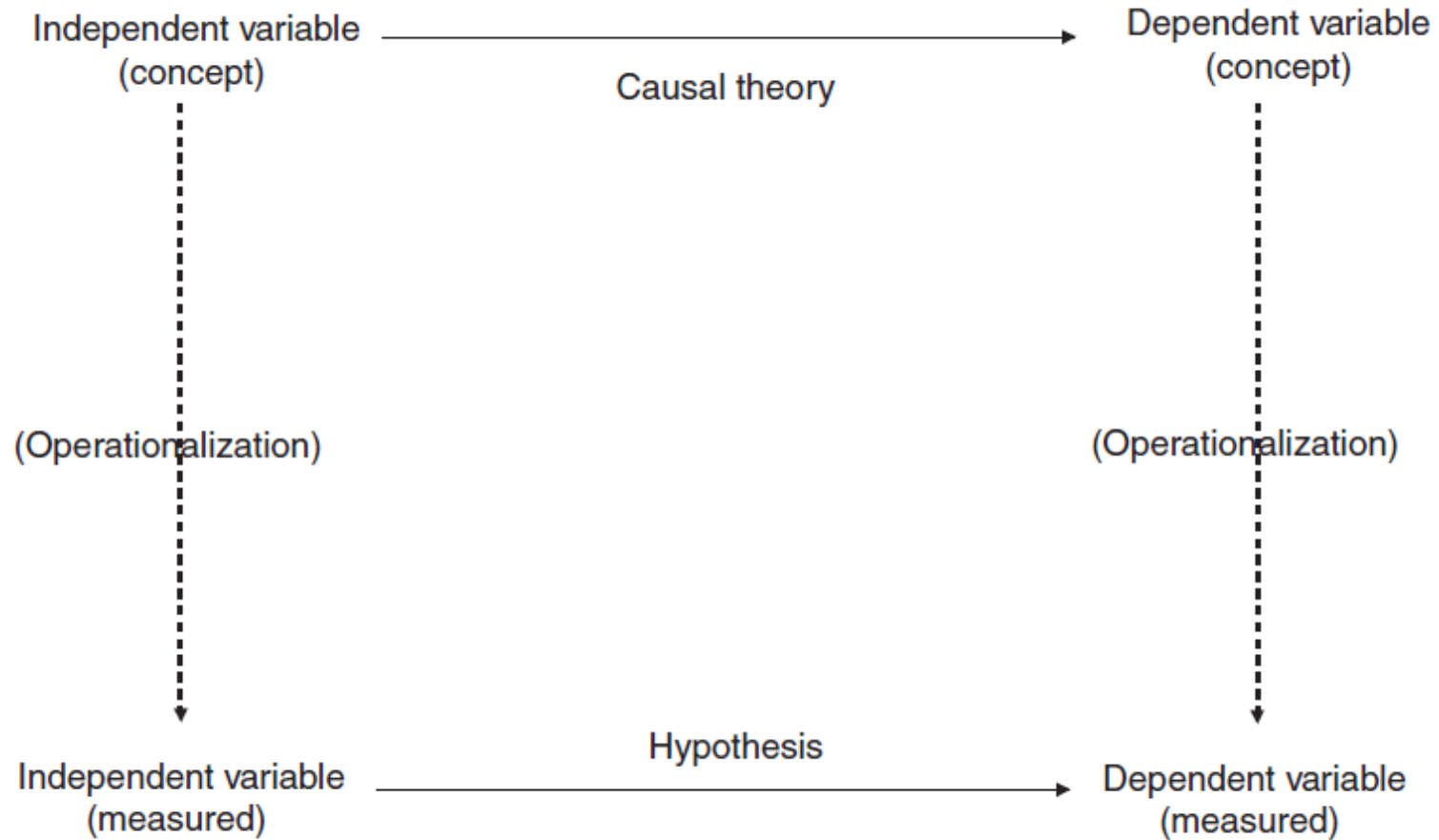
- Concepts:
 - Term - name
 - Intension – characteristics
 - Extension – empirical scope
- Transformation of concepts into measurable items
- By operationalizing we define measurement of social phenomena that is hardly (or not at all) measurable directly

Example of a concept (Democracy)

- Intension:
 - Regular free and fair elections
 - Checks and balances
 - Independent media
 - Opposition free to control

- Extension:
 - Number of countries in the world

Operationalisation



Compare these definitions

1. **Nice persons** – persons who are kind and caring and who everyone likes
 2. **Nice persons** – persons who smile at least ten times a day and when other people are asked how they like them, these persons receive a mean value of at least 8 on a 0-10 scale
- Which of these two helps you more to identify a nice person in the real world?

Operationalization

- Terrorist group
- Electoral success
- Tasty food
- Popularity
- Successful exam
- Educated person

Be a Researcher

- Topic: *Occurrence of violence in Europe due to high inflation.*
- Find some research questions
- Formulate hypotheses (we assume that we have a theory)
- Operationalize

Methods Selection

- The final stage of the planning process
- Goals, questions and hypotheses decide what methods to use
- Become familiar with the method

Some Good Rules to Follow

1. Well set goals (and the topic) save you time and energy
2. Methods are not your goals, but only the tools to achieve your aims
3. Proper reading is a must
4. Research design and planning is essential
5. Do not forget on ethics and research limits