

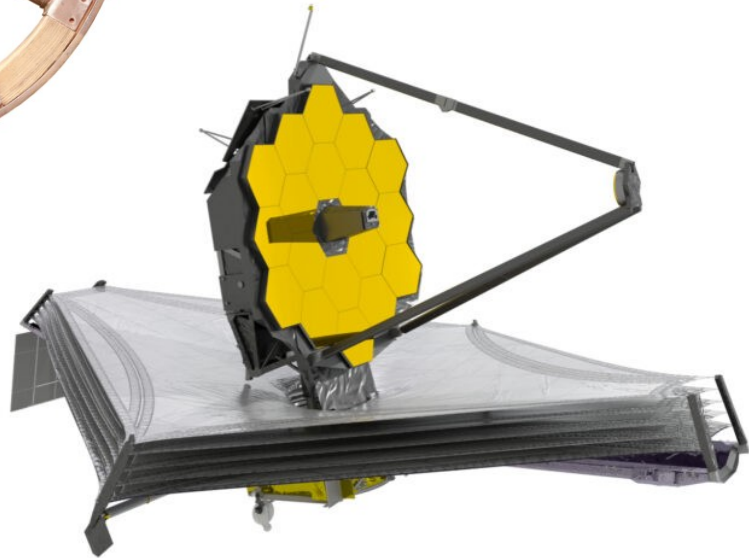
Basics of Social Science Inquiry

GLCb1008 Basics in social research methodology

Aim of this lecture

- Role of science and scientific research
- Types of explanation
- Qualitative and quantitative research
- Research ethics
- Where to look for sources?

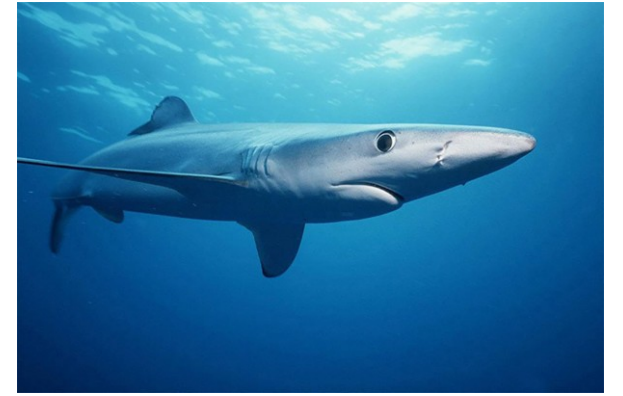
Imagine a World Without Science



What is Science?

- There is no single definition
- Even scientists differ in their views (not to mention all the other people)
- A way of learning and understanding the world around us:
 - Conscious
 - Deliberate
 - Rigorous

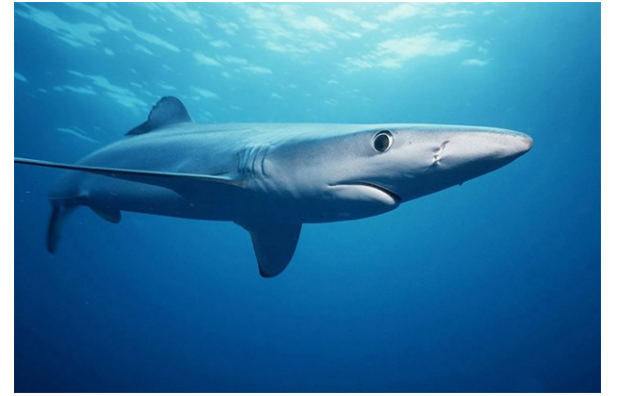
Are Sharks Dangerous?



- Most people think they are but how do they know?
- Direct experience (observation)
 - How many people have met a shark in an ocean?
- Other ways
 - Acquiring information for other sources
 - Traditions, authorities
 - A question of trust

The Way of Science

- Very often scientists lack a direct experience too
- Application of specific criteria (unlike traditions)
- Two pillars of scientific assertion
 - Logical support – what we claim needs to make sense
 - Empirical support – what we claim cannot contradict the reality
- Now what about the sharks?



What is Knowledge Good For?

- We use knowledge (not only) to anticipate what comes next
- Causal reasoning
 - Factors in the present affect some phenomenon in the future
 - A cause and a consequence
- Probabilistic reasoning
 - Causal patterns are probabilistic
 - A cause does not **always** lead to the expected consequence

Studying Hard Increases Your Grade

- We may expect that:
 - Reading the literature
 - Attending the lectures
 - Asking questions
 - Studying before the exam

→ will eventually improve your grade

- Does it mean that everyone following this advice will obtain an A?



The Role of Science

- Makes the concepts of causality and probability more explicit
 - Provides precise techniques to work with these concepts
 - Outperforms basic human inquiry
- Adopting scientific approaches makes our predictions less inaccurate
- Avoids making predictions without any understanding
 - Ever heard about the Dunning-Kruger Effect?

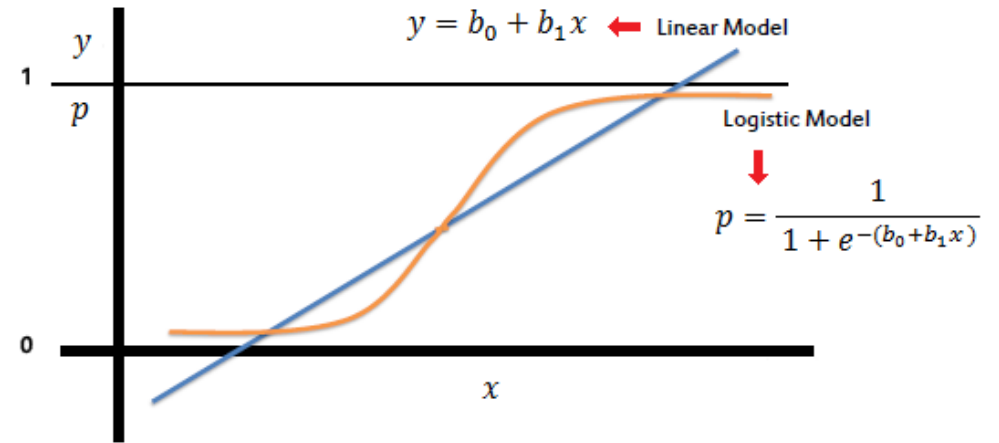
The Role of Science

- Science also aims to eliminate common errors in human inquiry
 - Inaccurate Observations
 - Overgeneralization
 - Selective observation

The Basics of Social Science

- Concerns the social reality
- Generally lower trust of the public
- Key features:
 - Theories
 - Data collection
 - Data analysis
 - tools to observe and understand our field

One but not the Same



- Two different approaches with a similar goal
- **Quantitative research:**
 - Large number of observations
 - Less amount of data per observation
 - Typical aim is to test theories
 - Associated issues – experiments, surveys, statistics

One but not the Same



- Two different approaches with a similar goal
- **Qualitative research:**
 - Small number of observations (even one)
 - A large amount of data per observation
 - Detailed knowledge of the analysed case
 - Typical aim is to generate theories
 - Associated issues – case studies, small-N studies, interviews, focus groups

Let's Design a Research

- Civic Participation of Poor People
- Some issues we could investigate
 - Are poor people active citizens?
 - What are the ways poor people participate?
 - What are their motivations to (not) participate?
- Many goals, many ways to follow

Quantitative Approach

- Are poor people active citizens?
- Questionnaire:
 - Representative sample of adult population of a country ($N \approx 1,000$)
 - Questions on various ways of participation (demonstrations, boycotts, petitions, community service etc.)
 - Questions on further issues (not just the income)
- In the end we may find that people with the lowest income are 4.7 times less likely to sign a petition compared to the wealthiest citizens

Qualitative Approach

- What are their motivations to (not) participate?
- Interviews
 - A non-representative sample of low income people (N ≈ 20)
 - Face-to-face interviews, 60-90 minutes each
 - Detailed questions to understand the motives and goals of participants concerning civic participation
- In the end we may find that most of our respondents stopped any participation after they lost their jobs and had to focus on their individual needs rather than some communal goals

Quantitative or Qualitative?

- Thompson (2004):
 - 'Only a few sociologists would openly deny the logic of combining the strengths of both quantitative and qualitative methods in social research. . . . In practice, however, [..] social researchers have regrettably become increasingly **divided** into two camps, many of whose members know little of each other even if they are not explicitly **hostile**.'*
- It is not a competition!
- Both require a solid training in methods
- Mutual dependence (see next lectures)
- Mixed method research

Ethics in Research (basics)

- A key issue in planning any research
- How to approach participants of the research?
- Milgram's experiment
- Stanford prison experiment

Ethics in Research (basics)

- Main features:
 - Voluntary participation
 - No harm to the participants
 - Anonymity and confidentiality
 - Deception
- Informed consent
- What if ethical features collide with main goals of our research?

Information Sources

- Primary sources
 - Interviews, focus groups, surveys, experiments
- Secondary sources
 - Books, articles, conference papers
 - Open resources by public institutions
 - Large datasets with various availability
- Do you know where to search?