Workshop: Information behaviour of scholars: methodological issues and examples

Polona Vilar
Department of LIS&BS, Faculty of Arts, University of Ljubljana
"Research is to see what everybody else has seen, and to think what nobody else has thought"

(Albert Szent-Györgi, Hungarian biochemist)
Why we need methodology?

• Methodology: how we find out
  • Principles, logic, evidence to advance our goal of learning/recording
• Methods: ways, tools, techniques
• Methods
  • Ensure consistency
  • Ensure the least possible amount of errors, missed facts
  • Enable avoidance of human factor
  • Enable valid and comparable results
  • Ensure best possible way to explore reality through structured personal experience
  • Offer choice of possible ways of asking and looking for answers
Reasons for human errors

• People are by nature poor nonobjective observers
  • Omission, addition
• We tend to oversimplify
• We tend to notice more things which support our opinions, claims; and ignore opposite evidence
• We often make up data to support our claims.
• We are often influenced by our ego.
• We do not want to find new evidence, because we already know how things stand
  • Prejudice, stereotypes
• We tend to mystify things we do not understand
Possible methodologies in HIB studies (1)

- Asking what people do/think
  - Questionnaires
    - By ordinary mail, personal, e-mail, web
  - Interviews
    - Face-to-face, by telephone, by email
  - Focus groups
  - Critical incident technique
    - Respondents describe a specific event
  - Delphi technique
    - Experts reach consensus on a certain topic
- Strengths/weaknesses
Possible methodologies in HIB studies (2)

- Observing what people actually do
  - Observation in natural (context appropriate) situations
  - Observation in experiments
  - Inobtrusive – web logs, transaction logs (e.g. catalogue)
  - Purposeful – researcher puts himself in a certain cultural or social role

- Strengths/weaknesses
Example: Studies of scholarly use of scientific literature

- Two main methodological approaches:
  - Use of surveys and interviews to examine scholars’ perceptions and opinions of the scholarly communication system,
  - Bibliometric evidence – on inobtrusive studies of what scientists download, read, and cite.
Methods of measurement and analysis

- Two types of methods:
  - Measurement: observation, data gathering
  - Analysis: discovering characteristics of data

- They are intertwined and interdependent
Methods of measurement

- Observation of experimental conditions
- Questionnaires, interviews
- Intensive interviews (ethnographic, focus groups)
- Observation of participants
- Diaries (self-reporting, electronic, on paper)
- Gathering of other evidence of behaviour (e.g. paper or electronic documents, links)

Methods of analysis

- Statistical (e.g. analysis of variance, significance testing)
- Theory testing
- Building of models
- Case studies
- Content analysis
- Discourse analysis
- Network analysis
- Historical analysis
- Meta-analysis
Directions of HIB studies

• Quantitative studies
  • Mostly till 80’s, mostly statistical data

• Qualitative studies
  • Richer data, more complex studies
  • Not based on hypotheses

• Mixed method studies

• Characteristics of contemporary HIB studies
  • Small groups
  • Observation, unstructured interviews, focus groups
  • Less studies of large groups with questionnaires and structured interviews
  • Attempts of shaping information seeking models and of analysis and re-shaping of older (‘classical’) models
Tasks

• Papers
  • Highlited parts on research questions and methodology

• Read, discuss:
  • What did they want to study? = RQ’s
  • Why did they want to study that?
  • How did they study it?
  • Why did they decide on that approach? = Methodology
  • Could they have used some other method(s)?

• Present it to other participants