

Pilot study

ESF: DXH_MET2 Metodologie 2

Recap

So far we have discussed mainly the conceptual side of your projects

- Research question as a focus and a „handle“
- Hypotheses as informed expectations, and clarifications of RQ
- Variables as (observable) representations of the concepts in RQ/H and their more or less precise measures
- Designs allowing us to use the measures to create meaningful data to answer RQ

Recap

We have not talked much about

- Data analysis
- Practical side of the projects
 - There are numerous details in designs-measures-analyses which are necessary to make it work, or threaten the success of the whole study
 - It is easier to learn them hands-on trying to understand them

Overview of the projects so far

Paul Mark Ablorh	Sustainable transport	?
Tomáš Oravec	DSGE model	econometric
Lukáš Marek	Improving investment portfolio by considering market interdependencies	econometric
Valeriia Vysotckaia	Effectiveness of import quota	econometric
Zdeněk Strmiska	Impact of anti-VAT-evasion measures	econometric LL
Soňa Raszková	Determinants of successful innovative regions	econometric LL
Ondřej Špetík	How to set-up best tenders for train public transport	econometric LL - potential for simulations
Alla Kachur	Which emotions make people more cooperative	experimental
Katarína Čellárová	Being nasty in economic games	experimental
Diya Abraham	The Neural Correlates of Emotion Regulation	experimental
Jakub Pejcal	Financial health of nonprofit organisations	observation/survey
Peter Kelemen	Use of background knowledge in decisions in unexpected situations	qual
Tadeáš Pala	Financial literacy and high-risk mortgages in Ukraine	qual/quan
Michaela Floriánová	Primary Characteristics of an Average Czech Policyholder	survey
Helena Kubíčková	Support of tourism through small and medium businesses	survey

Conceptually, projects are (more or less) in progress...

... it's time to prepare a pilot study

Plan for this semester: do a small pilot study for one of your RQ

4 meetings:

- Take stock, see what's missing; measures, materials, instructions
- Finalize procedure/protocol from recruitment to debriefing, decide on participants, check ethics and seek approval
- (in the meantime) ... brush up data-analysis skills
- Reflect on pilot experience, refine data-analysis plan and power analysis

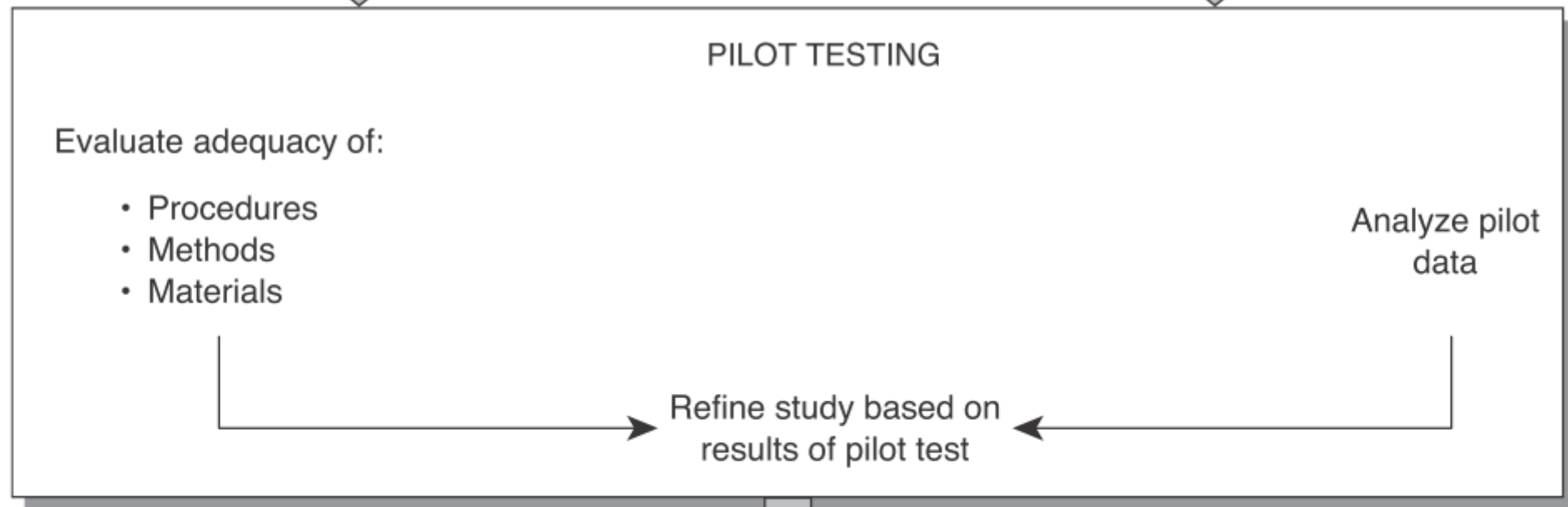
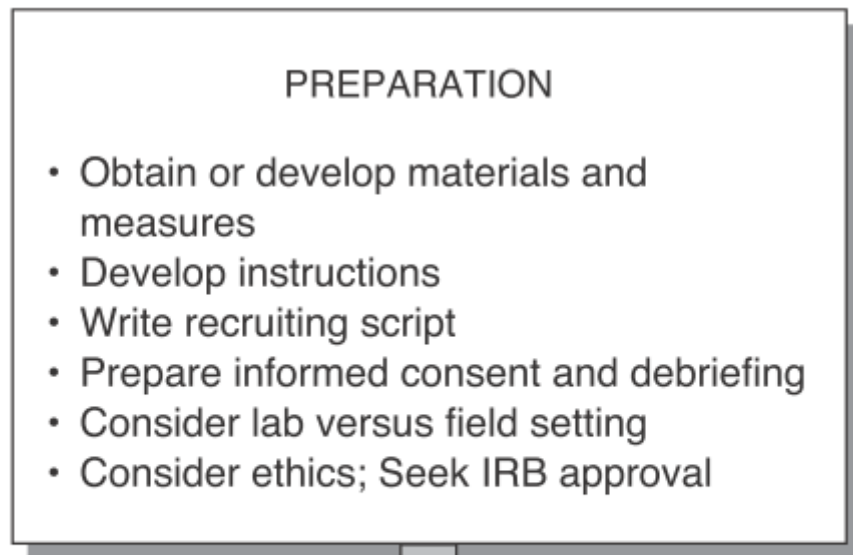
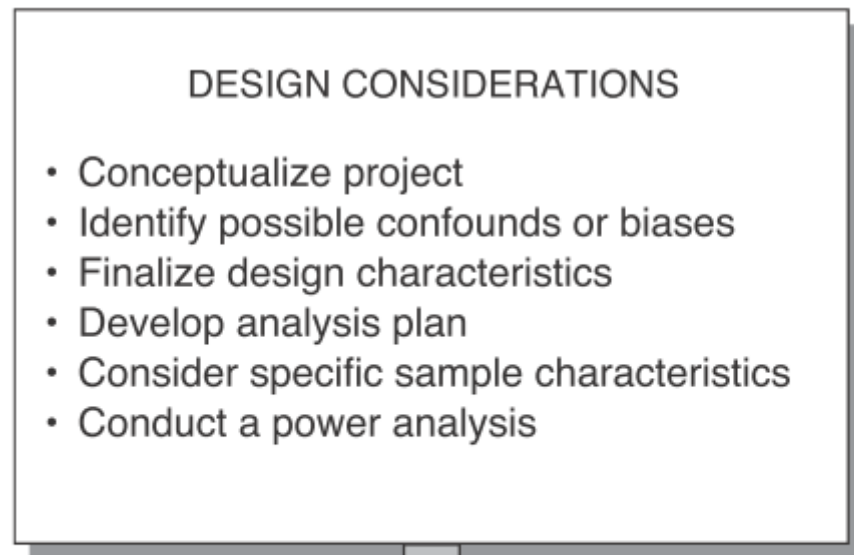
Focus of DHX_MET2

- Projects with people as the primary objects or sources of data

Purpose for a Pilot study

- test feasibility of plan
 - methods work
 - participants go through the whole procedure without issues
 - data look as expected
 - analysis feasibility
- do people (participants) function as I imagine them?
- identify weak spots - tune the plan

- Murphy's laws apply



Choose a RQ/H you want to pilot

- in groups of 2 or 3

Take stock

DESIGN CONSIDERATIONS

- Conceptualize project
- Identify possible confounds or biases
- Finalize design characteristics
- Develop analysis plan
- Consider specific sample characteristics
- Conduct a power analysis

PREPARATION

- Obtain or develop materials and measures
- Develop instructions
- Write recruiting script
- Prepare informed consent and debriefing
- Consider lab versus field setting
- Consider ethics; Seek IRB approval

Measures, materials

- Full version of your measures + what it measures
- If some stimuli materials are used, what exactly are they going to be

Instructions, administration

- How exactly are you going to administer the measure to a participant

Gather what you have and show it to a colleague

- „I'm going to measure the participants' CHARACTERISTIC(S) i the following way:....“
- As a colleague look at it from the perspective of
 - a participant – how do you react to the measure, the intention to measure..
 - a colleague – do you believe it will work as expected?
 - Be sceptical, be critical ... of the materials

Possible sources of problems in asking questions. Respondents....

- May not understand, may misunderstand
- May not know the answer or how to get to answer
- May not be motivated to invest energy in getting the best (truest) possible answer
- May have trouble fitting their answer to the response scale you offer
- May not want to tell you the (known) answer (even though they agreed to participate)
 - May not even want to know the answer
- May have their own agenda with respect to your study
- May just wanna have fun

Possible sources of problems in observing behavior (e.g. games)

- Opportunities for observation error – vague definitions of categories, high cognitive demands on observer
 - Missing important situational factors, determinants
 - Fundamental attribution error
 - Missing unobservable personal variables
 - Not optimal scale of behavior – too micro, too macro
-
- unless the observed behavior does not represent something else

Homework

- Finalize measures, materials, instructions for individual measures

- Next, we will combine it with design plans into a protocol for the pilot