

Good Questions, Better Survey Data: An Introduction to Effective Questionnaire Design
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Teaching Script

Duration: 6h + breaks

Participants: 10-20 pax

Format: Lecture style with exercises; online or in person

TIME	CONTENT	LEARNING GOAL	TRAINING METHOD	MATERIAL/ TECHNOLOGY
20'	Introduction			
5'	<ul style="list-style-type: none"> Welcome Workshop agenda Rules/questions 	Participants will become familiar with the workshop structure, objectives, and ground rules for participation.	Input trainer	PPT slides
10'	<ul style="list-style-type: none"> Introduction trainer Introduction participants 	Participants will get to know the trainer and fellow participants.	Input trainer, round of participant introductions	PPT slides
5'	<i>Activity: Introductory survey</i> Live poll on previous knowledge and expectations for the workshop.	Participants will reflect on their prior knowledge and expectations for the workshop.	Live poll	PPT slides Live polling tool (e.g. Mentimeter)
20'	Importance of a Good Questionnaire			
20'	<i>Exercise: Why is a well-designed questionnaire important?</i> Importance of a well-designed questionnaire for <ul style="list-style-type: none"> Data quality Project requirements Organization of research 	Participants will be able to reflect on the role of questionnaire design in supporting data quality, project goals, and overall research organization.	Small group work on collaborative boards, presentations in plenary.	PPT slides Collaborative boards (e.g. Conceptboard, Padlet) and break-out rooms (online) OR flipchart paper (in person)

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20'	Characteristics of a Good Questionnaire			
20'	<ul style="list-style-type: none"> Collecting accurate information <ul style="list-style-type: none"> Concepts of Validity and reliability Importance: clarity, relevance, appropriateness Minimizing response burden Complying with ethical and legal requirements Data publication and reuse 	Participants will be able to describe the key quality criteria for effective questionnaire design and explain their relevance for research practice.	Input trainer	PPT slides
20'	Measurement Theory			
15'	<ul style="list-style-type: none"> Levels of Measurement <ul style="list-style-type: none"> Nominal Ordinal Interval Ratio Constructs <ul style="list-style-type: none"> Manifest vs latent Operationalization Total Survey Error 	Participants will be able to explain key theoretical concepts relevant to questionnaire-based research, and apply this knowledge to make informed decisions in questionnaire design and data interpretation.	Input trainer	PPT slides
5'	<i>Exercise: Identifying levels of measurement and construct types</i>	Participants practice identifying levels of measurement and construct types.	Trainer-led exercise	Exercises prepared on PPT slides or board
10'	Break			
30'	Types of Questions and Response Scales			
20'	Types of questions, when to use it, pros and cons <ul style="list-style-type: none"> Closed-ended questions <ul style="list-style-type: none"> Single-answer Multiple-answer Open-ended questions Half-open questions 	Participants will be able to distinguish between common survey question types and select appropriate formats based on research objectives.	Input trainer	PPT slides

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	<ul style="list-style-type: none"> • Rating scales • Ranking questions • Semantic Differential 			
10'	<i>Exercise: Matching research objectives with question types</i>	Participants practice choosing suitable question types for different research objectives.	Plenary activity with whiteboards (in person) OR annotation tools (online)	Exercise prepared on whiteboards and stamps, stickers of different coloured pens (in person) OR Exercise prepared on PPT slides and annotation tools enabled (online)
30'	Questionnaire Structure and Layout			
25'	<ul style="list-style-type: none"> • Content structure of the questionnaire <ul style="list-style-type: none"> ○ Overall structure in thematic blocks ○ Logical flow of questions ○ Filtering • Consistency in scale and response options • Visual design and layout 	Participants learn key principles of questionnaire structure and layout to enhance clarity, consistency, and respondent guidance.	Input trainer	PPT slides
5'	<i>Exercise: Identifying problems in real survey questionnaires</i>		Plenary discussion, input trainer	Real-world questionnaire examples prepared on PPT slides
60'	Lunch break			
40'	Challenges and Questionnaire Pretesting			
15'	Challenges in questionnaire design: Types of errors and strategies for prevention <ul style="list-style-type: none"> • Individual tendencies and social effects <ul style="list-style-type: none"> ○ Social desirability bias ○ Acquiescence 	Participants will be able to recognize common sources of bias and error in questionnaire design and identify strategies to prevent or minimize their impact.	Input trainer	PPT slides

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	<ul style="list-style-type: none"> ○ Extreme response bias ○ Central tendency ○ Non-attributes ○ Recall Bias ○ Item-nonresponse ● Situational effects <ul style="list-style-type: none"> ○ Interviewer effect ○ Presence effects ○ Sponsor effects ● Construction effects <ul style="list-style-type: none"> ○ Leading bias ○ Question wording bias ○ Double barrelled questions ○ Assumptive bias ○ Negative bias ○ Response option effects ○ Visual design effects ○ Order effects 			
5'	<i>Exercise: Construction effects</i>	Participants will practice identifying common construction-related sources of error in survey questions and propose improvements to enhance question quality.	Plenary discussion, input trainer	Bad examples in question construction and examples on how to correct them prepared on PPT slides
5'	Pretesting techniques: methods, use cases and examples. Example: <ul style="list-style-type: none"> ● Expert review ● Cognitive Interviewing 	Participants will become familiar with key pretesting techniques and understand when and how to apply them to improve questionnaire quality.	Input trainer	PPT slides

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10'	<i>Exercise: Cognitive pretesting in pairs</i>	Participants will experience the value of cognitive pretesting by discovering how even seemingly clear questions can lead to misunderstandings.	Small group work in pairs	One pretesting question per person; break-out rooms (online)
5'	Pretesting techniques: methods, use cases and examples. Example (continued): <ul style="list-style-type: none"> Using LLMs for cognitive interviewing Field test/pilot study 	Participants will become familiar with key pretesting techniques and understand when and how to apply them to improve questionnaire quality.	Input trainer	PPT slides
20'	Using Existing Instruments			
20'	<ul style="list-style-type: none"> Advantages and limitations Sources <ul style="list-style-type: none"> Databases for survey measuring instruments Instrument development paper Subject matter paper Questionnaires of other surveys 	Participants will be able to evaluate the pros and cons of using existing survey instruments and identify suitable sources for finding and selecting them.	Input trainer	PPT slides
10'	Coffee break			
30'	Ethics and Data Protection			
20'	<ul style="list-style-type: none"> EU's General Data Protection Regulation (GDPR) <ul style="list-style-type: none"> Processing data Personal data and special category data GDPR principles in data processing Implications for questionnaire design Informed consent Templates and further (local) resources 	Participants will understand key GDPR principles relevant to questionnaire-based research and know how to address data protection and implement informed consent in their survey design.	Input trainer	PPT slide
10'	Ethical considerations <ul style="list-style-type: none"> Deception in research Avoidance of harm Non-discrimination 	Participants will be able to reflect on key ethical principles in survey research and know when and how to seek ethics committee approval.	Input trainer	PPT slide

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	<ul style="list-style-type: none"> (Local) Ethics committee and contact information 			
30'	Documentation			
30'	<p>Documents needed: Overview, examples and templates</p> <ul style="list-style-type: none"> Measurement instrument documentations Translation Pretesting <ul style="list-style-type: none"> Interview guidelines Transcripts Results (reports, analysis scripts and outcomes) Variable questionnaire, layout version (e.g. screen-shots) Flowchart Codebook Informed consent, checklist data protection Invitation letters, reminders Mode-specific documents (e.g. interviewer instructions, survey platform used) 	Participants will understand the importance of documenting questionnaire design and become familiar with key documents, examples, and templates used in research practice.	Input trainer	PPT slides
10'	Getting Started			
10'	<i>Exercise: Putting questionnaire design steps in order</i>	Participants will be able to organize the key steps of questionnaire development in a meaningful sequence and reflect on the rationale behind each stage.	Interactive organizing task; group discussion	Steps of questionnaire design provided on slips of paper (in person) OR as draggable cards (online)
10'	Outro			
10'	<ul style="list-style-type: none"> Literature and useful links External resources 	Participants learn where they can get further support.	Input trainer	PPT slides

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	<ul style="list-style-type: none">• DSC trainings and consultation services• Course evaluation• Farewell			
	End			