Online surveys in qualtrics.**

SP Fe4455 P rghuq Uhvhdufk Whfkqrajhv lq VrfldoVflhqfh

Michal Tóth

Fall 2024



Why online survey?





PROS

- **Cost** (but depends on parameters e.g. repre-sample requirement, collection through an agency who will program the questionnaire?)
- **Speed of data collection** (distribution of questionnaires and collection of responses)
- Easy implementation (does not require knowledge of programming languages)
- Easier survey management (respondents, invitations, data...)
- Flexibility and advanced options display logic, randomization, ...
- Acquisition of specific data (time and exact time of answering, location, stimulus viewing time, ...)
- Interactivity, multimedia content
- More "freedom" for the respondent (time, place, device, ...)
- It mitigates the problem of "social desirability" (racism, alcohol consumption, child raising, ...)
- Greater (sense of) anonymity
- Possibility to use pre-made templates

Why online survey?





CONS

- requires a certain level of "computer literacy"
- more problematic accessibility for some segments of the population (elderly, marginalised areas, ...)
- cost (license, collection via agency)
- less control over respondents (early termination, who is really responding?)
- we have no control over the context in which the respondent is (questions about current feelings cold/stress/sadness, ...)

Before you start creating a online survey ...

First steps:

- be clear about what you want to find out, and how you want to find it out:
 - what **concept** you are going to measure, and what **dimensions** it may have (e.g. "job satisfaction" dimensions satisfaction with salary, satisfaction with supervisor, satisfaction with working conditions, ...)
 - think about what a question should look like (wording) to find out exactly what you want
 - what type of data do you want to get? (be clear in advance how you will analyse it)
 - who will be your respondents?



Survey design: order of the questions

- inappropriately chosen → confusion of respondent, early dropout, impact on other responses...
- grouping into logical subgroups (Q: "Blocks")

recommendation

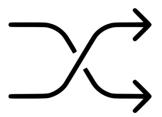
- start with the simplest or most interesting questions
- do not start with sensitive (possibly private) questions → in the middle of the questionnaire (higher motivation to answer them) or towards the end
- demographic questions (age, gender, income, ...) at the end (exception! quota setting, filtering)

• note that:

- the order of the questions can influence the answers
- E.g.: if we first ask about satisfaction in some specific area of life (work), then this may affect the answers to general questions about satisfaction (life as such)
- Priming influencing a response by inducing an unrelated thoughts:
 - How much do you like French food?
 - What are your three favorite holiday destinations?

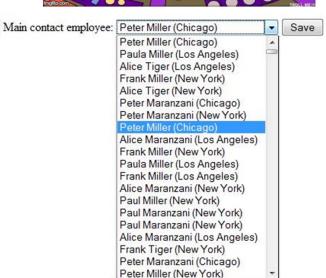
Survey design: order/number of the answers

- a tendency to choose the answers that are "closest" (vizuálne)
- unclear/challenging questions
- a number of similar answer choices
- e.g. finding out what makes people anxious:
 - fear of death,
 - disease,
 - fear of job loss,
 - nasty weather,
 - debts,...



 other solution options: multiple-choice answers, open-ended answers, ..





Question construction I.

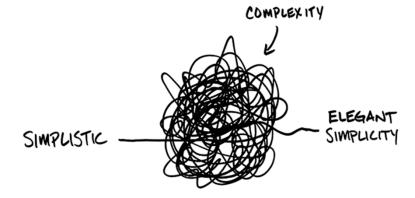
As simple as possible

- Concise, simple language, **BUT (!)** without unclear and abstract terms
 - "Do you support or oppose a systematic reform of immigration policy that would allow government agencies to administer the visa permitting process more efficiently and strengthen current legislative settings?"

(is it clear after the first reading?)

• "How important are family values to you?"

(",values" are too abstract)



Question construction II.

As specific as possible

- All respondents should understand the question in the same way
 - "When did you move to Brno?"

 (unclear type of answer after high school/when I was 20 years old/ 2024, ...)
 - "Are you an early bird?"

 ("If you look back over the last seven days, what time do you used to get up in the morning?")

Beware of "double-barreled" questions

- two questions in one, respondent can't/won't answer one part of the question
 - "Are family reunions important to you <u>and</u> your family?" (two questions)
 - "Do you consider the death penalty to be a historical relic, <u>and</u> do you think it should be banned worldwide?"

(two questions, expecting the same answer)



Question construction III.

Avoid:

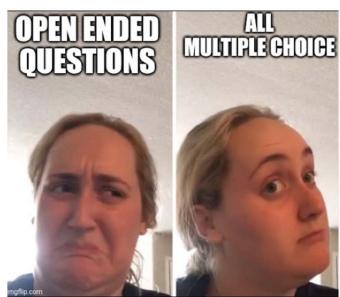
- shortcuts/abbrevations (less known)
 - "What is your opinion on the effectiveness of policies implemented by the **ECHR** within the framework of the **SGP**?" (ECHR = European Court of Human Rights, SGP = Stability and Growth Pact)
- o jargon
 - "Do you think the new health policy will reduce **red tape** in hospitals?" (red tape = excessive bureaucracy or complicated regulations)
- leading questions:
 - "How short was Napoleon?"
 - "How would you describe Napoleon's height?"
- double negatives
 - "Do you **disagree** that the government's policy is not **ineffective** in reducing unemployment? "
 - "Do you agree that the government's policy is effective in reducing unemployment?"
- o expecting unrealistic answers
 - •"How many cigarettes have you smoked in your entire life?"



"Before I begin, one of the acronyms I'm going to use is completely made up. See if you can figure out

What type of answers do we expect?

- It depends on what we want to find out = what our research question and hypotheses are, and how we want to analyze the data
- Closed questions the respondent chooses from predefined options
 - easily quantifiable (strongly agree = 1, agree = 2, neither agree nor disagree = 3, disagree = 4, ...)
 - ready for statistical analysis
 - faster data collection
 - results can be easily summarised and presented graphically
 - higher reliability across respondents
 - higher level of anonymity
- Open-ended questions the respondent answers in his/her own words
 - the respondent is not limited in his/her response
 - easier to create
 - unlike some types of closed questions, they are easier for the respondent to understand
 - extend the completion time
 - require more effort from the respondent



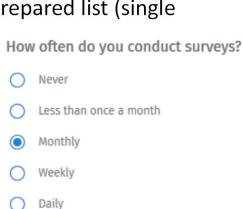
Closed questions I.

Multiple choice

 respondent chooses one or more answers from a prepared list (single answer/multiple answer)

- Single answer (select)
 - the categories offered must be clear and mutually exclusive (non-overlapping)

• Multiple answer (select)





Which of the following movies released in 2019 have you watched?

- Once Upon a Time... in Hollywood
- Ash Is Purest White
- John Wick: Chapter 3 Parabellum
- Ad Astra
- Pain and Glory
- None of the above

Closed questions II.

Scales

the set of responses representing each position on the continuous axis

Rating scales

- form of multiple-choice questions
- the respondent selects one option from continuously sorted categories
- "How often are you late for work?" 1) Very often (almost daily) 2) Often (twice a week) 3) Sometimes (once a week) 4) Rarely (once a month) 5) Never

Rank order scales

• the respondent ranks the offered categories according to the selected criterion

Please rank belo	ow features of a fitne	ss tracker i	n order of mo	st important to least i	mportant.
Measuring steps		2	~		
Calories burned		3	~		
Measuring heartbeat		1	~		
Tracking excercise		4	~		
Measuring distance		5	~		

Closed questions III.

Likert scale

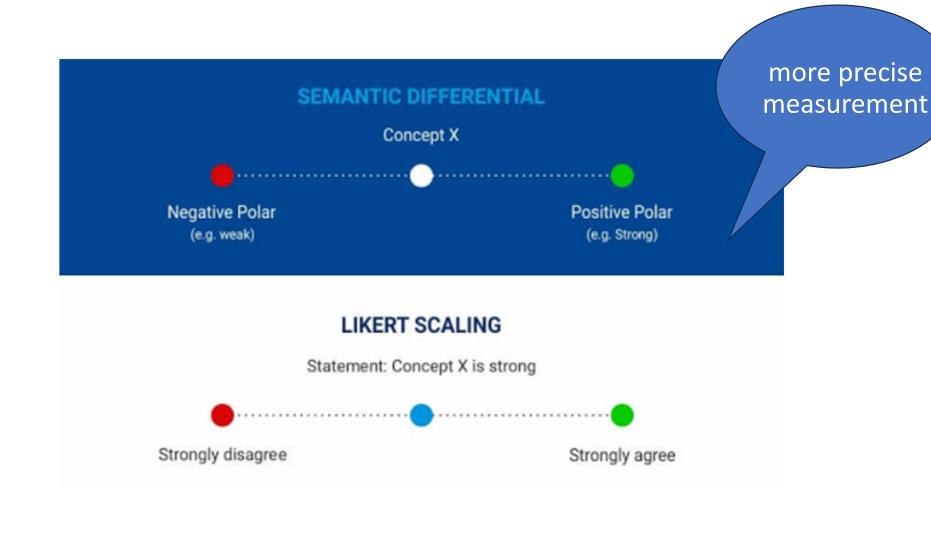
- When exploring attitudes and opinions on topics, objects, ...
- Expressing agreement/disagreement with statements by selecting from a range of responses
- range of answers from one extrem attitude to another ("strongly disagree", through neutral point to "strongly agree,")
- Each answer on the scale represents a numerical score
- Question of scale length 5/7/9?

Semantic differential

- measure attitudes or feelings toward specific concepts, objects, products, or events
- rating on a scale between two opposite adjectives
- helps determine how positively or negatively the concept is perceived

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Blue is a great colour	0	0	0	•	0
Green is a great colour	0	0	0	0	•
Purple is a great colour	0	•	0	0	0
Yellow is a great colour	0	0	•	0	0





Design/structure of the online survey

- "scrolling" vs. "page" design:
 - scrolling design(similar to a paper questionnaire):
 - all questions on one screen the respondent has to scroll
 - it does not save the answers continuously! (only after all questions have been answered)
 - more suitable for short questionnaires
 - only if display logic is not used (no filter queries)
 - can be confusing for the respondent
 - omission of the answer is more common

• page design

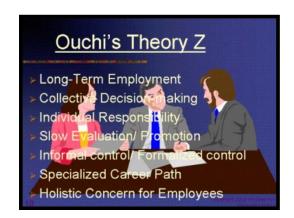
- just one or a few questions on the screen (no scrolling required)
- responses are saved on an ongoing basis (the questionnaire can be completed later)
- more interactive and dynamic (randomization, skipping questions, filtering, ...)
- the respondent does not know the length of the questionnaire or the questions that will follow

Response rate of the online survey

- **key aspect:** low response rate compromise representativeness (and the research itself)
- factors influencing response rate:
 - appearance (design)
 - readable colours/images/backgrounds/fonts
 - comatible design (different platforms/devices computers, tablets, smartphones)
 - the wording, structure and order of the questions

length

- the longer, the less willing to answer (inform at the beginning, truthfully!)
- be careful not to make the respondent tired
- break up the survey into sections (questions organised in distinct categories)
- use various question types (e.g., mix of multiple-choice, sliders, open-ended)
 keep the survey dynamic
- use engaging visuals visually appearing
- progess indicator yes/no? motivating/demotivating?
- back button yes/no?





Online surveys and ethics

TRANSPARENCY

- clearly and shortly communicate the purpose of the survey (but do not reveal everything! i.e. experiment)
- truthful (even if lying should increase the willingness to answer)
- welcome screen
 - the majority of respondents who do not complete the survey stop answering it right here!
 - what should be on it?
 - who you are
 - what the survey is about (do not disclose the main purpose!)
 - estimated completion time
 - (informed consent)

ANONYMITY and CONFIDENTIALITY

- guarantee that responses cannot be traced back to individual participants (possible fear of obtaining an IP address)
- ensure that the respondents' personal data and responses are kept confidential and stored securely

VOLUNTARY PARTICIPATION and RIGHT TO WITHDRAW

- can stop participating in the survey at any time
- be mindful of features like forced responses (possibility to leave uncomfortable questions?)



Google Forms

Qualtrics



- creation of advanced online questionnaires/surveys
- user-friendly interface
- many functionalities and customization (display and survey logic, branching, quotas, distribution and collection, ...)
- security and compliance (high-level security and data protection, compliance with GDPR)
- unlimited licence available
- remote access

Let's try it practically!