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Using Social Science to Create a Better Survey

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Using Social Science to Create a Better Survey



Kelley Rowan, Digital Archives Librarian

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The Basics of Creating a Survey

- ✓ Voluntary participation
- ✓ State how long it will be
- ✓ User friendly*
- ✓ Look official/important**
- ✓ DO NOT overuse text***
- ✓ Number the questions
- ✓ Keep it short!



Respondent Behaviour

Satisficing*

- giving an answer that satisfies without necessarily being honest or accurate

Acquiescing

- giving an answer the respondent believes to be appropriate rather than factual



Preventing Behaviours

Satisficing

- ✓ Respondent encounters comprehension problems
- ✓ The survey is too long*
- ✓ There is no clue as to how long the survey is

Acquiescing

- ✓ Sensitive questions
- ✓ Comprehension problems

Wording: minimizing ambiguity & bias

Ambiguity (variance) example:

- Last week, how many times did you use the library?

Bias example

- Libraries are often considered boring and unnecessary. Are you in favor of removing libraries from university campuses?



Question Types

Question Type	Example
Simple questions	Yes/no
Running prompt	“How many times have you visited the library?” 1 = rarely, 5 = everyday
*Closed question	Choosing an answer along a scale; mark all = multiple response closed question
**Filter question	Receiving a different next question depending on your answer
Open ended question	“Please tell us how we can improve your experience”

The Agree/Disagree Scale

Pros	Cons
Easy to administer	Respondents may adopt acquiescing strategy
Fewer “don’t know” answers	Respondents may adopt the satisficing strategy
Respondents prefer these	In some cases the answer is too ambiguous

Avoid:

Computer hubs are an essential element of an academic library: *strongly disagree* - - - *strongly agree*

Use:

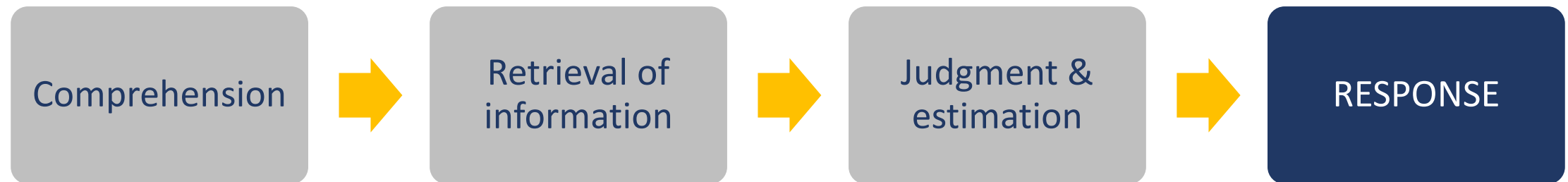
Some people believe computer hubs are an essential part of the library experience but others do not believe they are necessary. Which is closest to your opinion? *strongly disagree* - - - *strongly agree*

Some social scientists recommend NEVER using agree---disagree scales

Krosnick, JA. Survey Research. Annual Review of Psychology Vol. 50:537-567 (Volume publication date February 1999) <https://doi.org/10.1146/annurev.psych.50.1.537>



The Response Process





Comprehension

1. Lexical

- Use terms that most people interpret the same way
 - Ex. “counselor”

2. Semantic

- Provide definitions or offer them verbally

3. Pragmatic

- try to block respondents’ unintended inferences



Context Issues

Question Context

- a second question can be biased by the first*
 - Ex. Do you feel your library generally adheres to ALA salary guidelines?
 - Ex. Do you feel your salary is competitive?

Visual Context

- providing an image can influence the answer



Clarification & Pre-testing

- ✓ Use common terms
- ✓ Provide definitions
- ✓ Watch for unintended inferences
- ✓ Remove unrelated material*
- ✓ Pre-test to find terms people understand in the same way**

Factors that Influence Context

- ✓ Subject matter
- ✓ Interviewer
- ✓ Setting
- ✓ Instructions
- ✓ Images
- ✓ Wording
- ✓ Response options
- ✓ Order



Context Effects: Thinking about Wording and Order

Assimilation effect

- including prior question into interpretation of current one

Subtraction effect

- excluding specific aspects of a prior question

Contrast Effect

- excluding prior question when interpreting current one

Judgment

- respondent makes judgment about question based on others*
- assimilation and subtraction may take part during this process

Alleviating Context Issues

Do pre-testing!

Analyze specifically for context effects

Build in variables to mediate impact of context effects

Context Variables:

Lighten the cognitive capacity and load

Provide motivation

Ease the difficulty of question

Limit context distractions and interruptions



Sensitive Questions

Social stigmas

Illegal behavior

Private information

Consequences of adding sensitive questions:

- ✓ Higher (25%) non-response rate
- ✓ Less accurate data
- ✓ Misreporting*

Making Sensitive Questions Work

Do not be present during sensitive questions

Make the question easy

Use familiar words

Embed the question among non-sensitive ones

Use only 1 sensitive question or recall question per survey

Consider using open-ended question format

Assure respondent of confidentiality

Consider your security plan



Judgment & Estimation in the Response Process

Incomplete memory = estimation and judgment

Comes to mind easily = a frequent occurrence

Can't recall = rare*

Frequency estimation

Recall and count = underestimation

Rate based estimation = overestimation

Impression based estimation = overestimation



Mapping

Things we don't think of can often influence the response!

- Ex. Line Spacing

- Even spacing = 58% more answers chosen from right side
- Uneven spacing = 64% of answers chosen from right side

1	2	3	4	5	6	7	8
not good	only okay	pretty good	good	better than expected	very good	totally amazing	best experience ever

Primacy, Recency, and Rounding

Primacy Effect

Items towards the tops of lists will get more attention

- randomize your lists

Recency Effect

When people remember more recent events

Most recent heard response options tend to be picked

Delayed processing questions are the most prone to recency effects

- randomize your lists
- open ended questions are the least prone to recency effects

Rounding

People will round off for numerical answers



Attitudinal Questions

Attitude = a feeling and/or opinion that is stable*

Attitudinal questions have an evaluative component, such as whether you agree or disagree

- this reduces acquiescence bias

Ask general questions before specific ones

OR

Ask specific questions **ONLY****

Managing “Don’t know” Answers

Respondents often choose “don’t know” when:

1. They are not motivated to think about the issue
2. Too much cognitive pressure is being asked of them

Respondent evaluation of the question

1. Interpretation: is the meaning clear?
2. Recall: is this information encoded?
3. Integration: is there enough information to justify an opinion?
4. Translation of judgment: yes or no

Employing Filters

Quasi Filter = include “don’t know” option

- Ex. Do you agree, disagree, or not have an opinion on that?

Full Filter = Ask if respondent has an opinion, then ask question

Blunt Filter = ask question including whether they have an opinion

- Ex. Do you have an opinion or not?

Justified Full Filter = explores thought process

- Ex. Have you been interested enough to favor one side or the other?
- Ex. Have you given this issue much thought?

Constructing the Survey

- ✓ State the purpose
- ✓ Say who is conducting it
- ✓ Ensure confidentiality
- ✓ Put demographics last*
- ✓ Group question in modules where appropriate
- ✓ The 1st question should be easy
- ✓ Sensitive questions should be at the end
- ✓ Be consistent with scales (1=strongly agree)
- ✓ Leave an option for comments
- ✓ Be sure to thank respondent
- ✓ Leave contact information

Voluntary participation
State how long it will be
User friendly
Look official/important
DO NOT overuse text
Number the questions
Keep it short!

Course Information

Questionnaire Design for Social Surveys – Coursera

<https://www.coursera.org/learn/questionnaire-design>

Taught by:

Frederick Conrad & Frauke Kreuter, University of Michigan

Class 3 in the *Survey Data Collection and Analytics* Specialization

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