

Survey Tips and Tricks: Considerations for Survey Design and Integration of Technology

March 2020

Margaret Gullick, Mandi Breen, Camille Barnes



CENTER FOR HUMAN SERVICES RESEARCH
UNIVERSITY AT ALBANY State University of New York



Presentation Overview

- Basic principles of survey structure and design
- Design choices
- Impact of technology on these general survey principles
 - Online, mobile methods
- Qualtrics considerations



Presentation Overview

- Basic principles of survey structure and design:
 - Common survey issues & solutions
 - Improving responses to open-ends
- Design choices
- Impact of technology on these general survey principles
 - Online, mobile methods
- Qualtrics considerations



Common Survey Issues and Solutions

- Ask yourself:

What information do I need to get out of this item? How will I analyze it?

How could this question be answered in a way I *don't* want? What would that response mean?

How could this item be misinterpreted? How can I make the question clearer to guard against likely misinterpretations?



Common Survey Issues and Solutions

- Sample survey/example framework:
 - Respondents had received legal services from an organization.
 - 6 months later, CHSR needs to determine clients' satisfaction with those services, long-term outcomes, feelings about the legal system in general.



Common Survey Issues and Solutions

- Mismatched questions and response items:
 - Did Organization help you resolve your legal case?
 - Strongly disagree; Disagree; Neither; Agree; Strongly Agree
- Make sure questions and items match
 - Did Organization help you resolve your legal case?
 - Yes, ORG helped resolve; No, ORG did not help resolve; Case is ongoing



Common Survey Issues and Solutions

- Double-barreled questions:
 - Was your lawyer friendly and helpful?
 - Yes; No
- Ask separately!
 - Was your lawyer friendly? Was your lawyer helpful?



Common Survey Issues and Solutions

- Non-exhaustive response options:
 - On average, how often did you talk with your assigned lawyer?
 - Once a month; Once a week; Once a day
- Use ranges, or make sure to include “other, specify”
 - On average, how often did you talk with your assigned lawyer?
 - Once a month *or less*; A few times a month; Once a week; A few times a week; Almost every day *or more*
 - How many times did you talk to your assigned lawyer?
 - 1-2 times; 3-5 times; 6-10 times; Other, please specify:



Common Survey Issues and Solutions

- Asymmetrical scales:
 - How helpful was your assigned lawyer?
 - Super helpful, Very helpful, Somewhat helpful, Not helpful
- Include same number of positive & negative options
 - How helpful was your assigned lawyer?
 - Very helpful, Somewhat helpful, Neither helpful nor unhelpful, Somewhat unhelpful, Very unhelpful



Common Survey Issues and Solutions

- Overlapping scales:
 - What is your age?
 - 20 or younger; 20-30; 30-40; 40-50; 50 or older
- Don't overlap response categories
 - What is your age?
 - Less than 20, 20-29; 30-39; 40-49; 50 or older



Common Survey Issues and Solutions

- Reference Periods:
- Greater accuracy with shorter reference period
 - How often did you communicate with your assigned lawyer in the past **6 months**? [0-5 times, 6-10 times, more than 10 times]
 - How often did you communicate with your assigned lawyer in the past **month**? [1-2 times, 3-5 times, more than 5 times]
- *But:* items with lower base rates may require longer period
 - Have you ever spanked your child(ren)? *If yes:*
 - About how many times have you **ever** spanked your child(ren)?
 - About how many times did you spank your child(ren) **in the past year?/month?**



Common Survey Issues and Solutions

- Other:
 - Avoid technical jargon, abbreviations
 - Avoid double negatives
 - Make items as easy to answer as possible



Common Survey Issues and Solutions

- Question Framing
 - Social desirability
 - We are conducting this survey as part of a program to reduce drinking in excess. Please answer these items according to your drinking habits.
 - Clear valences
 - X program has been implemented to improve services. Please respond according to your experience with services.
 - Links to authority
 - <Relevant authority figure> supports this plan. Please answer the following items on your opinions of this plan.
 - Comments about sensitivity of topic
 - The next questions ask about experiences of domestic violence or abuse. I know this topic might be sensitive. Please just give your best answer, if you can.



Common Survey Issues and Solutions

- Question Framing
- Instead:
 - Keep question intros and transitions to a minimum. **Be brief, balanced, bland:**
 - The following questions ask about your drinking habits. Please answer according to your habits.
 - Or, **use to lower threat level** for sensitive topics.
 - Feeling unsafe at home can happen to anyone. Have you ever felt unsafe at home or with a partner?
 - Even the calmest parents get angry at their children some of the time. How often did you get angry with your children in the past week?



Improving Responses to Open-Ends

- Always tough, but especially tricky on smartphones!
 - Minimize number of open-ends
 - Reserve for end of survey
 - Allow respondents to skip
 - Add motivating text to question: why should I bother answering?
- Make sure open ended data is useable! Avoid invalid answers:
 - Use built-in validation (e.g., expecting numbers?)
 - Provide example, especially on formatting



Improving Responses to Open-Ends

- When did you begin your legal case?
 - Year? Exact date? 2018 vs. 18 vs. June 2018 vs. 6/2018 vs. 6/18?
- Please provide the month and year in which you began your legal case (e.g., 6/2018):
- Please describe how your lawyer was helpful or unhelpful.
- How satisfied were you with the support provided by your assigned lawyer? Very satisfied; Somewhat satisfied; Neither satisfied nor dissatisfied; Somewhat dissatisfied; Very dissatisfied
- You indicated that you were somewhat dissatisfied with the support provided. Can you tell us more about this? *Your answer will help us adjust our services better for future clients.*



Presentation Overview

- Basic principles of survey structure and design
- Design choices
 - Question order
 - Forcing responses
 - Response scale lengths
- Impact of technology on these general survey principles
- Qualtrics considerations



Survey Design Choices: Question Order

- First items should have high relevance, be interesting, easy to answer, applicable to everyone, not open ended!
- Ask content question, then screener?
- Where do you put your demographics??
 - Beginning: not (as obviously) relevant, likely to be a turn-off?
 - End: will miss if someone has already dropped out?
- We recommend end



Survey Design Choices: Question Order

- Group similar items, *items with similar response scales* together
 - Group all your 5-point Likerts; group all your satisfaction questions
- Ask general question first, then specific
 - How satisfied were you on your last call with your assigned lawyer?
 - How satisfied were you with your lawyer overall?
 - How satisfied were you with your lawyer overall?
 - How satisfied were you on your last call with your assigned lawyer?



Survey Design Choices: Forcing Responses

- Requiring responses -> drop out, lower-quality data
- But high amount of skips may invalidate data
- *Consider:*
 - What items do you need for participant **filtering/screening**?
 - What items are critical for your **question/analysis**?
 - When is skipping **reasonable**? What might respondents plausibly not want to answer? Is **Don't Know** a reasonable response?
 - Can you **remind** participants to respond, but not **force/require**? (You can in Qualtrics!)



Survey Design Choices: Response Scales

- Should your Likert scales have 5 or 7 items?
- Should you always have a midpoint/neutral, or never?
- No consensus! Research is too up in the air at this point!
- *But do consider:*
 - Are people likelier to use the extremes only for certain groups/items?
 - Rivera & Tilcsik: Female instructors lower average ratings than male on 10 point scale, no difference on 6 point scale



Presentation Overview

- Basic principles of survey structure and design:
- Design choices
- Impact of technology on these general survey principles
 - Online vs Mobile Surveys, Mobile survey optimization
 - Strategies for participant engagement
 - Use of SMS formats
 - Technological Quirks & Pitfalls
- Qualtrics considerations



Online vs Mobile Surveys

- Assume *all* online surveys are “mobile surveys,” too
 - 81% of Americans own a smartphone
 - 74% have personal computer
 - 52% have tablets, e-readers
 - 17% have smartphone only: *no home broadband internet*
 - Particularly younger, non-white, lower income, lower education
- So assume that your online surveys will be taken on smartphones, and optimize for that, too!



Mobile Survey Optimization

- Is “Mobile Friendly” an option on your platform? Is there a “Mobile Preview”?

☐ **10**

☐ **9**

☐ **8**

☐ **7**

☐ **6**

☐ **5**

☐ **4**

☐ **3**

☐ **2**

☐ **1**

- Scale Length & Orientation

e.g., Please rate how likely you are to recommend our services to a friend, on a scale of 10 (extremely likely) to 1 (extremely unlikely):

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
10 9 8 7 6 5 4 3 2 1



Mobile Survey Optimization

- Minimize scrolling: especially side
- Check images: Are large images scaled correctly?
- Minimize open-ends



CENTER FOR HUMAN
UNIVERSITY AT ALBANY



Strategies for Participant Engagement

First contact: The message itself

- Distribution from recognizable source
 - **Best:** ResearchCenter@albany.edu
 - **OK:** mgullick@albany.edu
 - **Worst:** mgullick@gmail.com
 - *Official Group > Individual Person at Institution > ???*
- Subject line: Credible and appealing enough to open
 - **Best:** Recognizable ORGNAME **Research Study**
 - **Not Best:** Money for completing **Survey!**



Strategies for Participant Engagement

- Body of message:
 - Provides survey's topic, purpose, sponsorship; Gives info needed for informed consent; Elicits participation

Dear NAME, *Personalization*

A few months ago, you received some legal help from ORG. We hope you are doing well.

ORG is working with a team of researchers at SUNY ALBANY to learn more about our client's needs so we can do our work better. The research team would like to follow up with you to ask you some more questions about your experience. *Note affiliations, why study is important*

As a thank you for your time, we will mail you a \$10 Target gift card! *Incentive!*

The survey will take about 10 minutes. Your answers will be confidential: nothing you say will appear in any legal documents or in your ORG file, nor will anything be shared with any of the lawyers who helped you. Only the research team will have access to your data. *Consent*

You can start the survey by clicking here: LINK

If you have questions about this survey, please contact Margaret Gullick at <INFO>.

If you need additional legal help, please call our hotline at <INFO> *Survey questions vs. Further services*



Strategies for Participant Engagement

- Within the survey itself:
- Take advantage of the technology
 - Skip patterns
 - Drag & Drop ranking, instead of numbering

Please rank these colors in order from your favorite to least favorite:

Red	_____
Orange	_____
Yellow	_____
Green	_____
Blue	_____
Purple	_____
Brown	_____
Black	_____
White	_____

Please rank these colors in order from your favorite to least favorite:

1	Green
2	Blue
3	Black
4	Purple
5	Yellow
6	Red
7	White
8	Brown
9	Orange

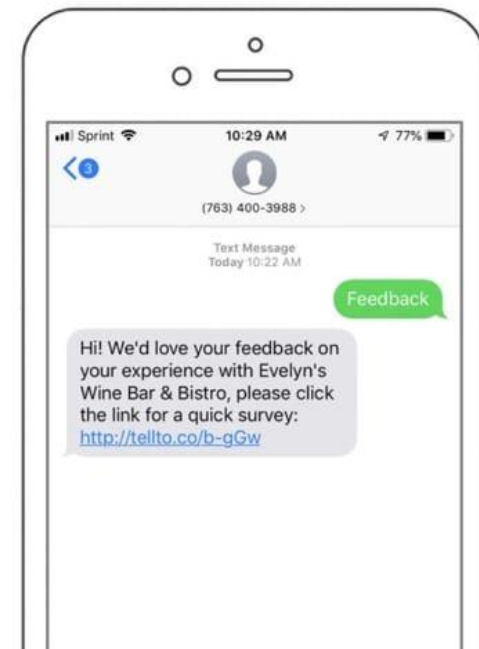


Use of SMS

- SMS = short message service (texting)
- Texting-based question-and-answer surveys
 - Platform dependent, but might be available to you
 - *Note:* SMS does require express consent to contact via this method (according to FCC regulations)

- 2 main ways to use SMS for surveys:

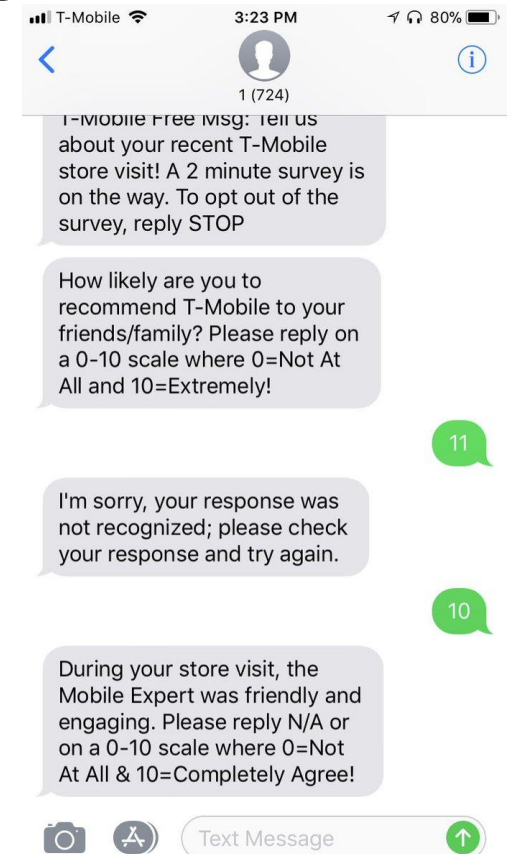
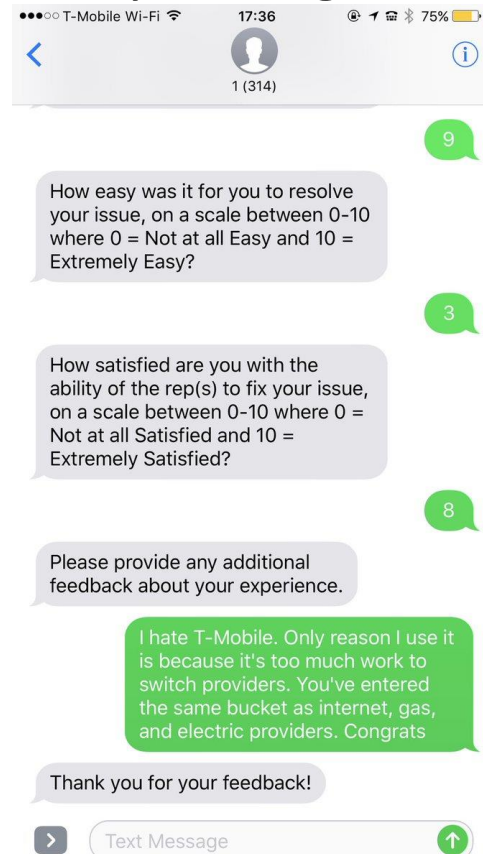
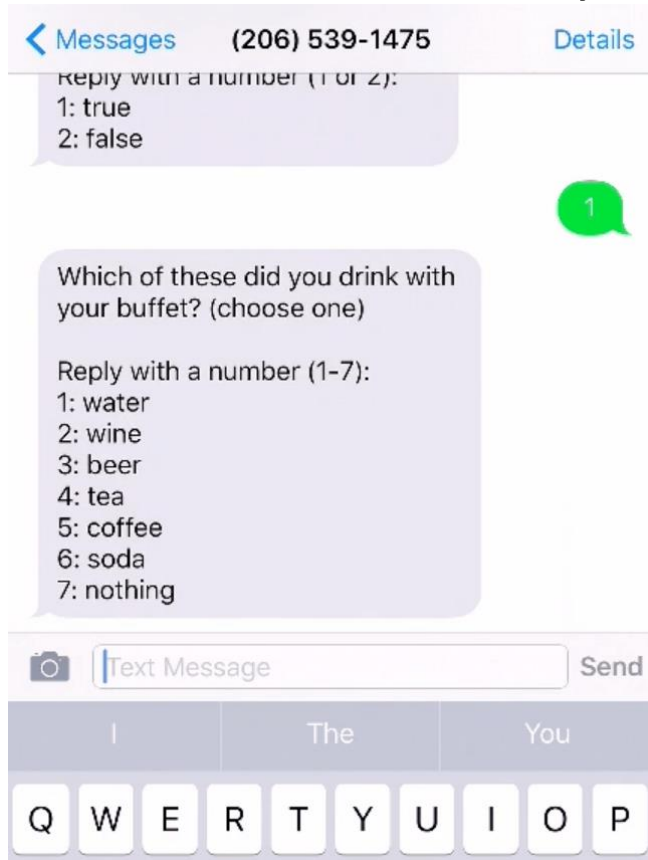
1. Texting a link to a survey





Use of SMS

2. Interactive surveys directly through texting





Use of SMS

- Again, consent required ahead of time
- Typically limited to simple question types (single-answer multiple choice, text entry with limited number of characters)
- But: still could be useful for participant check-ins between full instruments, contact info validation, scheduling full phone survey



Technological Quirks & Pitfalls

- Response rates vary between methods
 - In Person > Mail > Emailed > Phone > SMS?
- Demographics likely to be reached may be skewed
 - SMS may be a good way to reach minority, low-income respondents
- Lack of “interviewer”/proctor may lead to more honest answers on sensitive topics
 - e.g., Have you ever been a victim of domestic abuse or violence?
 - Have you ever spanked your child(ren)?

<https://news.gallup.com/opinion/methodology/221159/using-text-messaging-reach-survey-respondents.aspx> ;

<https://surveyanyplace.com/average-survey-response-rate/> ; Manfreda, et al. (2008) Web surveys versus other survey modes: A meta-analysis comparing response rates. *International Journal of Market Research*, 50, 79-104.

<https://www.pewinternet.org/2011/09/19/americans-and-text-messaging/>



Presentation Overview

- Basic principles of survey structure and design:
- Design choices
- Impact of technology on these general survey principles
- Qualtrics considerations
 - Exclusive answer choices
 - Retake response
 - Built in reporting
 - Exporting data
 - Resources



Exclusive Answer Choices

- If using a multiple-answer question, determine if any answer choices should not be able to be selected with multiple answers
 - i.e., None of the above, All of the above

Which training session(s) did you attend?

☐ Interviewing techniques

☐ Survey design

☐ Data visualization

☐ ☒ None of the above ← Blue X

Which training session(s) did you attend?

☐ Interviewing techniques

☐ Survey design

☐ Data visualization

☐ None of the above

How satisfied were you w

☐ Extremely satisfied

☐ Somewhat satisfied

☐ Neither satisfied nor diss

☐ Somewhat dissatisfied

☐ Extremely dissatisfied

How satisfied were you w

Check →

Allow Text Entry

Text Entry Size

Text Entry Validation

Rich Content Editor

Insert Graphic...

Exclude From Analysis

✓ Make Answer Exclusive


Insert Piped Text

Add Display Logic...



Retake Response

- Two options when retaking response
 - **Retake Response**—retains all answer choices previously selected, allowing the researcher to edit individual question responses, pick up from where left off
 - **Retake as New Response**—deletes all answer choices, allowing respondent to entirely re-take the survey from scratch
- Access this option on “Data & Analysis” page > drop down in “Actions” column on right side of page

at the job you obtained through the program?	Actions
Yes	
<div>View Response</div> <div>Delete Response</div> <div>Retake Response</div> <div>Retake as New Response</div> <div>Export to PDF</div>	




Built-in Reporting

- We recommend using the Reports feature in Qualtrics only when displaying live data
 - Data displays updated as new survey responses are received
 - Easily shared with multiple people using public report feature
 - Can be password protected
 - Allows user to download PDF of the report
 - Can set up multiple reports to share with different stakeholders

Built-in Reporting

- Click table or graph to access the editing pane

 Data Source ✕

EX59 - Which of the following documents do you currently have in your possession?... ▼

Metric

Default (Choice Count) ▼

Decimal Places


Default (2) ▼






Breakout By

Default (None) ▼

Title

☐ Default - Click to edit

 Visualization

Display Options

☐ Sort Bar Values

Descending ▼

☒ Show X Axis

Horizontal ▼

☒ Show Y Axis

☐ Truncate Labels


☐ Show Bar Labels

☐ Show Legend

Auto ▼

☒ Horizontal Bars

Color Palette

 ▼

☐ Reverse Colors

Axis Values

☒ Social Security card

☒ Birth certificate

☒ Proof of citizenship or residen

☒ Proof of immunization


☒ Driver's license

☒ Other state identification

☒ None of the above

☒ Declined

Legend Values

☒  Count



Built-in Reporting

- If you have a figure for a Multiple Answer item:
- Important to correctly select **Respondent Count** (denominator is number of *respondents*) or **Choice Count** (denominator is *number of selections*), depending on how you want to summarize your data

Graph

Metric

Default (Choice Count) ▼

- ✓ Default (Choice Count)
- Response Count
- Choice Count
- Percentage of Choices
- Percentage of Responses

Dev

Br

Title

Table

Visualization

Use Column Totals ▼

Use Choice Totals ▼

Use Respondent Totals

✓ Use Choice Totals

☒ Show Percentages



Exporting Data

- We recommend exporting final data set to an outside program to do full data analysis
 - SPSS—only statistical analysis package supported for direct export; by default, reports multi-value fields in separate columns; export includes both variable labels and variable values
 - Excel—by default, reports multi-value fields in a single column (but can be changed in “More Options” section); export only includes variable labels OR variable values, not both
 - CSV—better than Excel for large datasets; by default, reports multi-value fields in a single column (but can be changed in “More Options” section); export only includes variable labels OR variable values, not both
 - Also available: TSV, XML, Google Drive



Exporting Data

- Qualtrics automatically excludes “Don’t know” and “None of the above” responses from exported data files
- This default can be turned off! And you should do so!

Have you received any SOC training or technical assistance in the past year?

☐ Yes

☐ No

☒ Don't know ← Red X

Have you received any SOC training or technical assistance in the past year?

☐ Yes

☐ No

☒ Don't know

I have a firm understanding of the following:

☐ Yes

☐ No

☐ Don't Know

Is your county currently a designated disaster area?

☐ Yes

☐ No

☐ Don't Know

Uncheck →

Allow Text Entry

Text Entry Size

Text Entry Validation

Rich Content Editor

Insert Graphic...

Exclude From Analysis

Insert Piped Text

Add Display Logic...

Assign To Group

Move Up

Move Down

Remove Choice



Resources: Qualtrics

- <https://www.qualtrics.com/support/survey-platform/>
 - Self-help walk through of most features and tasks for setting up a survey
- <https://basecamp.qualtrics.com/>
 - Short videos on topics such as: how to use Qualtrics; applying best practices in questionnaire design; minimizing survey fatigue and bias; driving response rates
- <https://www.qualtrics.com/support-center/>
 - Submit a ticket to a support representative and receive a personalized response



Resources: Survey Research Center, University at Albany

- Provides assistance with:
 - Data Collection
 - IT Solutions
 - Study Design
 - Data Analysis and Reporting
- Schedule a free consultation to get introductory advice and a price quote for our full services
 - Contact chsr@albany.edu
- Visit us online at albany.edu/SurveyResearchCenter



CENTER FOR HUMAN SERVICES RESEARCH
UNIVERSITY AT ALBANY State University of New York

Questions?

Thank you!

mgullick@albany.edu

mlbreen@albany.edu

About the Center for Human Services Research

The Center for Human Services Research (CHSR) is a multidisciplinary research center at the University at Albany. CHSR has over 25 years of experience conducting evaluation research, designing information systems, and informing program and policy development for a broad range of agencies serving vulnerable populations. Rigorous research and evaluation methods; strong relationships with project partners; and timely, accurate, and objective information are hallmarks of CHSR's work. For more information, please visit www.albany.edu/chsr



CENTER FOR HUMAN SERVICES RESEARCH
UNIVERSITY AT ALBANY State University of New York

Center for Human Services Research

University at Albany
Richardson Hall
135 Western Avenue
Albany, NY 12222

(518) 442.5762

chsr@albany.edu

www.albany.edu/chsr