Surveys 101
How do we know what people think?

NC Performance Management Academy
November 2, 2021

David Yokum
bio | podcast
learning objectives

• How do you ask a good question?
• How do you know who, and how many, folk to ask?
• What are the relative merits of interviews, focus groups, and surveys?
warm up
• Design the *exact* form question, to be used on DMV registry paperwork, for eliciting choice of whether or not to register as a potential organ donor.
choice architecture

• The context in which people make decisions.
  – Structure of the choice task
  – Descriptions of the choice options
The context in which people make decisions.

- **Structure of the choice task**
- Descriptions of the choice options

○ Agree  ○ Decline  ○ Decline
○ Decline  ○ Agree  ○ Agree
○ No preference
choice architecture

• The context in which people make decisions.
  – Structure of the choice task
  – Descriptions of the choice options

- Accept
- Donate
- Save life
- Decline
- Refuse
- Allow death
Choice Architect

- Someone with the responsibility for organizing the context in which people make judgments or decisions.

preference construction
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investment portfolio

1 10%
2 10%
3 10%
... ...
9 10%
10 10%

easy to divide equally

investment portfolio

1 6%
2 36%
3 13%
... ...
9 5%

not
Figure 1

Note. Estimates are derived from sample surveys of noninstitutionalized population of the continental United States, aged 18 and over. Error bars demark ±1 standard error around sample estimate. NORC = National Opinion Research Center; SRC = Survey Research Center. Questions were “Taken all together, how would you say things are these days—would you say that you are very happy, pretty happy, or not too happy?” (NORC); and “Taking all things together, how would you say things are these days—would you say you’re very happy, pretty happy, or not too happy these days?” (SRC). From “Why Do Surveys Disagree? Some Preliminary Hypotheses and Some Disagreeable Examples” (p. 166) by C. F. Turner. 1984, in C. F. Turner and E. Martin, Surveying Subjective Phenomena, New York: Russell Sage Foundation. Copyright 1984 by the Russell Sage Foundation. Reprinted by permission.

family context
work context
constraints of memory
• In a typical example of text in the English language, is it more likely that a word starts with the letter R or that R is its third letter?

70% R _ _ _ _ _ _ _
Rain
Robot
Rectangle
Rigid
Rotund

<

30% _ _ R _ _ _
Sorry
Hornet
Berry

• From a group of 10 people, can you make more “committees of two” or more “committees of eight”?
how to write a good question?
tips for writing a question

1. Make sure you need the question at all.
2. Use plain language.
3. Avoid ambiguity.
4. Avoid double-barrels.
5. Allow all possible answers.
6. Use scales with enough range.
7. Provide reference frames.
8. Mind order effects.
9. Avoid leading questions.
10. Do user testing.
make sure you need the question at all

1. When is your birthdate?
2. How old are you?
use plain language

How often do you ride the bus?
How often do children suffer ill effects from watching programs with violence in them?
☐ never
☐ not too often
☐ pretty often
☐ very often

avoid ambiguity

What was your total household income before taxes in 2019?
How reliable and loving is your spouse?

How reliable is your spouse?
How loving is your spouse?

Avoid double barrels.
allow all possible answers
<table>
<thead>
<tr>
<th>Not Sure (0)</th>
<th>Strongly Disagree (1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>Strongly Agree (9)</th>
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</table>

allow all possible answers
use scales with enough range

7-pt Likert usually best.

provide reference frames

How often do you utilize RIPTA?

How often do you ride the bus?

How many times did you ride the bus in the last week?
mind order effects

family context

work context

Figure 1

Note. Estimates are derived from sample surveys of noninstitutionalized population of the continental United States, aged 18 and over. Error bars demark ±1 standard error around sample estimate. NORC = National Opinion Research Center; SRC = Survey Research Center. Questions were “Taken all together, how would you say things are these days—would you say that you are very happy, pretty happy, or not too happy?” (NORC), and “Taking all things together, how would you say things are these days—would you say you're very happy, pretty happy, or not too happy these days?” (SRC). From “Why Do Surveys Disagree? Some Preliminary Hypotheses and Some Disagreeable Examples” (p. 166) by C. F. Turner, 1984, in C. F. Turner and E. Martin, Surveying Subjective Phenomena, New York: Russell Sage Foundation. Copyright 1984 by the Russell Sage Foundation. Reprinted by permission.
avoid leading questions

How short was Napoleon?

How would you describe Napoleon’s height?
do user testing

WE WANT YOU TO TELL US WHAT YOU THINK.
tips for writing a question

1. Make sure you need the question at all.
2. Use plain language.
3. Avoid ambiguity.
4. Avoid double-barrels.
5. Allow all possible answers.
6. Use scales with enough range.
7. Provide reference frames.
8. Mind order effects.
9. Avoid leading questions.
10. Do user testing.
be humble with results
### TABLE 8.2 Reported Daily Television Viewed, by Response Options

<table>
<thead>
<tr>
<th>Low Options</th>
<th>% Reporting</th>
<th>High Options</th>
<th>% Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response Options</td>
<td></td>
<td>Response Options</td>
<td></td>
</tr>
<tr>
<td>Up to ½ hour</td>
<td>7.4</td>
<td>Up to 2½ hour</td>
<td>62.5</td>
</tr>
<tr>
<td>½ to 1 hour</td>
<td>17.7</td>
<td>2½ to 3 hour</td>
<td>23.4</td>
</tr>
<tr>
<td>1 to 1½ hours</td>
<td>26.5</td>
<td>3 to 3½ hours</td>
<td>7.8</td>
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<tr>
<td>1½ to 2 hours</td>
<td>14.7</td>
<td>3½ to 4 hours</td>
<td>4.7</td>
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<tr>
<td>2 to 2½ hours</td>
<td>17.7</td>
<td>4 to 4½ hours</td>
<td>1.6</td>
</tr>
<tr>
<td>More than 2½ hours</td>
<td>16.2</td>
<td>More than 4½ hours</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Fewer People Mention Economy in Open-Ended Version

What one issue mattered most to you in deciding how you voted for president?

<table>
<thead>
<tr>
<th></th>
<th>Open-ended¹</th>
<th>Closed-ended²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The economy</strong></td>
<td>35%</td>
<td>58%</td>
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<tr>
<td>The war in Iraq</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Health care</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Terrorism</td>
<td>6</td>
<td>8</td>
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<tr>
<td>Energy policy</td>
<td>*</td>
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<td><strong>Other</strong></td>
<td>43</td>
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<td>Candidate mentions</td>
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<td>-</td>
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<tr>
<td>Moral values/social issues</td>
<td>7</td>
<td>-</td>
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<tr>
<td>Taxes/dist. of income</td>
<td>7</td>
<td>-</td>
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<td>Other issues</td>
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<tr>
<td>Other political mentions</td>
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<td>-</td>
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<tr>
<td>Change</td>
<td>3</td>
<td>-</td>
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<tr>
<td>Other</td>
<td>9</td>
<td>-</td>
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<tr>
<td><strong>Don't know</strong></td>
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<td>2</td>
</tr>
</tbody>
</table>

100 100

Data from Pew Research November 2008 Post-election survey

¹ Unprompted first response to open-ended question.

² First choice from five options read to respondents.
survey tips
1. Ask people from the relevant population (representative sample).

2. Boost the response rate.
   a. Shorter the better.
   b. Good questions.
   c. Incentivize.

3. Ask enough people (sample size).
   a. Online calculator:
      https://www.qualtrics.com/blog/calculating-sample-size/
Q&A and Discussion
relative merits the methods?
Which method?

1. Interviews
2. Focus Groups
3. Surveys

Other Lectures:
1. Data analytics
2. Experiments

it depends...
1. People cannot report unconscious causes of behavior.
2. Group discussions can be a polarizing echo chamber.
3. Focus groups involve hopelessly small sample sizes.
the history of focus groups
interview tips
interview tips

1. Provide comfort (confidentiality as needed).
2. Use a script.
3. Also be a human.
4. Record, and/or have a transcriber.
5. Give people time to respond.
focus group tips
focus group tips

1. Provide comfort (confidentiality as needed).
2. Use a script.
3. Also be a human.
4. Record, and/or have a transcriber.
5. Give people time to respond.
6. Manage folk to empower equal voice.
Q&A and Discussion