Surveys 101

How do we know what people think?

NC Performance Management Academy
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bio | podcast

- 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.

- 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

- 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.

See Thaler & Sunstein, Nudge (2009).

preference construction

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Choice shares

	Group 1	Group 2
	40%	20%
	----	0%
	60%	80%

11

investment portfolio

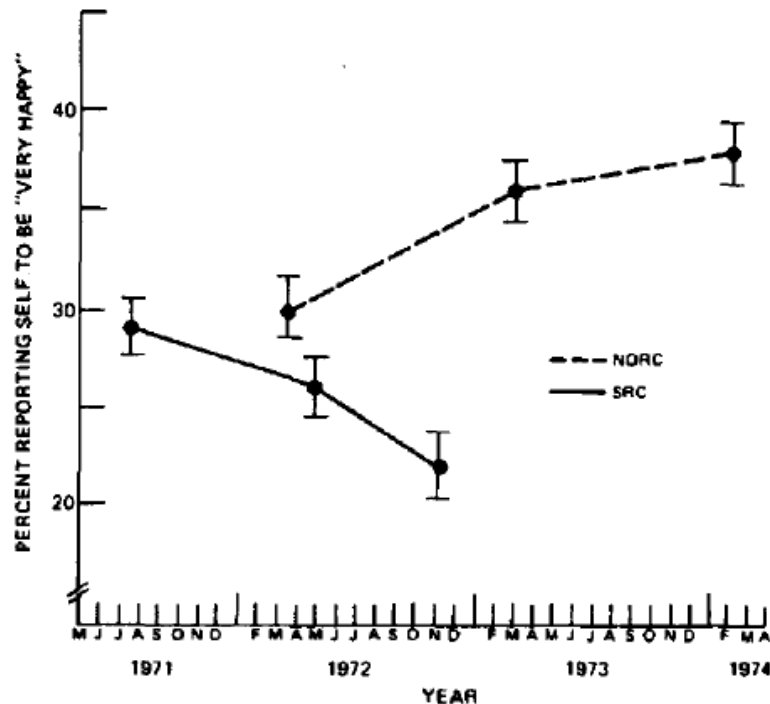|	
1	10%
2	10%
3	10%
....	...
9	10%
10	10%

easy to divide equally

investment portfolio

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

~~not~~

Figure 1
Trends in Self-Reported Happiness, 1971–1973

family context

work context

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.

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

Tversky & Kahneman (1983). *Availability: A heuristic for judging frequency and probability.* Cog. Psych., 5, 207-232.

- 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 utilize RIPTA?~~

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

Belson, W.A. (1981). *The design and understanding of survey questions*. Aldershot, U.K.: Glower.

What is your income?

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?

allow all possible answers

Strongly Disagree (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Strongly Agree (9)
○	○	○	○	○	○	○	○	○

allow all possible answers

Not Sure (0)	Strongly Disagree (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Strongly Agree (9)
○	○	○	○	○	○	○	○	○	○

use scales with enough range

Not Sure (0)	Strongly Disagree (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Strongly Agree (9)
○	○	○	○	○	○	○	○	○	○

7-pt Likert usually best.

P.S. A handy reference of Likert scales:
https://www.peru.edu/oira/wp-content/uploads/sites/65/2016/09/Likert-Scale-Examples.pdf.
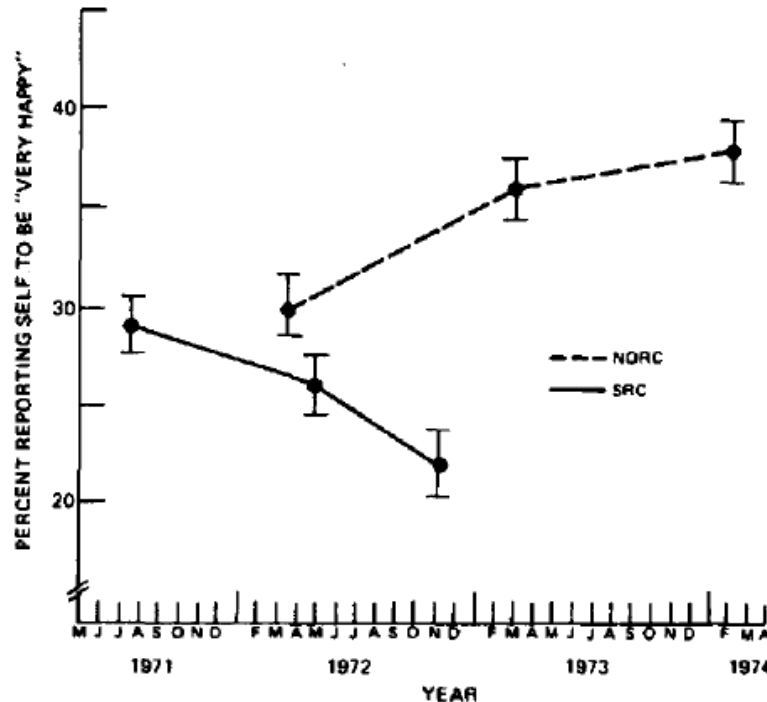
provide reference frames

~~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

Figure 1
Trends in Self-Reported Happiness, 1971–1973

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

Fischhoff (1991). Value elicitation: Is there anything in there? *Ame. Psych.*, *46*(8): 835-847.

How short was Napoleon?

How would you describe Napoleon's height?

do user testing

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be humble with results

TABLE 8.2 Reported Daily Television Viewed, by Response Options

Low Options		High Options	
Response Options	% Reporting	Response Options	% Reporting
Up to ½ hour	7.4	Up to 2½ hour	62.5
½ to 1 hour	17.7	2½ to 3 hour	23.4
1 to 1½ hours	26.5	3 to 3½ hours	7.8
1½ to 2 hours	14.7	3½ to 4 hours	4.7
2 to 2½ hours	17.7	4 to 4½ hours	1.6
More than 2½ hours	16.2	More than 4½ hours	0.0

Source: Data from Schwarz, Hippler, Deutsch, and Strack (1985). Copyright © 1985. Reprinted with permission from the University of Chicago Press.

Fewer People Mention Economy in Open-Ended Version

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

	Open-ended[1]	Closed-ended[2]
The economy	**35%**	**58%**
The war in Iraq	5	10
Health care	4	8
Terrorism	6	8
Energy policy	*	6
Other	43	8
Candidate mentions	9	-
Moral values/social issues	7	-
Taxes/dist. of income	7	-
Other issues	5	-
Other political mentions	3	-
Change	3	-
Other	9	-
Don't know	7	2
	100	100

Data from Pew Research November 2008
Post-election survey

[1] Unprompted first responce 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

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

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

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