

Sample Survey Methods

Stat 475

Questionnaire Design

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Some Tips for Designing Survey Questions

SURVEY DESIGN ESSENTIALS

Seven tips for good survey questions

KENNETH FERNANDEZ | Elon University

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https://www.youtube.com/watch?v=lq_fhTuY1hw

Some General (Classic) Advice

Keep questions as simple as possible.

- Use as simple language as possible.
- Don't use jargon or abbreviations that some people might not understand. Be sure that all key terms are clearly defined so that everyone is answering the same question.
- Ask about one thing at a time.
- Provide a context that motivates people to answer the question.

Make it easy for the respondent to answer

- Ask people questions they can answer.
- Break long or complicated questions into smaller, more specific ones.
- Give response categories to choose from.
- You should generally provide a neutral and “no opinion” or “prefer not to answer” option.
- In telephone surveys, give an estimate of how long the survey will take before you start asking questions.





Make sure you get good data

- Phrase the question as unbiasedly as possible.
- Be aware of questions with sensitive answers.
- Be aware that the choice of response categories offered to respondents can influence their answers.
- Pre-test your questionnaire.

Questionnaire Design

- Make the questionnaire easy to read.
- Keep it short.
- Put boring questions last.
- Be aware that the order in which you ask questions may matter.
- Always include a cover letter that
 - explains the purpose of the survey
 - assures that responses will be kept confidential
 - provide a contact number for people to call for more info, or verify legitimacy
 - explains how you got the persons name, if possible
 - explains that they were randomly selected.

Keep in Mind Different Types of Data

Facts

vs

Opinions



Nutrition Facts
Serving Size – 28g (One Scoop)

Amount Per Serving	
Calories	110
Total Fat	2g
Saturated Fat	1g
Cholesterol	55mg
Sodium	55mg
Potassium	85mg
Total Carbohydrate	1g
Dietary Fiber	0g
Sugars	1g
Protein	22g
Vitamin A	2%
	15%

Values are based on a diet of facts.



General Review of Survey Design

SURVEY DESIGN ESSENTIALS

A survey in 10 steps

JASON HUSSER | Elon University

▶ ▶▶ 🔊 0:01 / 4:22

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<https://www.youtube.com/watch?v=U1MYM35qUr8>



**Designing a
survey that
will have high
response rate**

“Total Survey Design” by Dillman

Dillman proposes a method something like this (this example is a survey of doctoral students at a university):

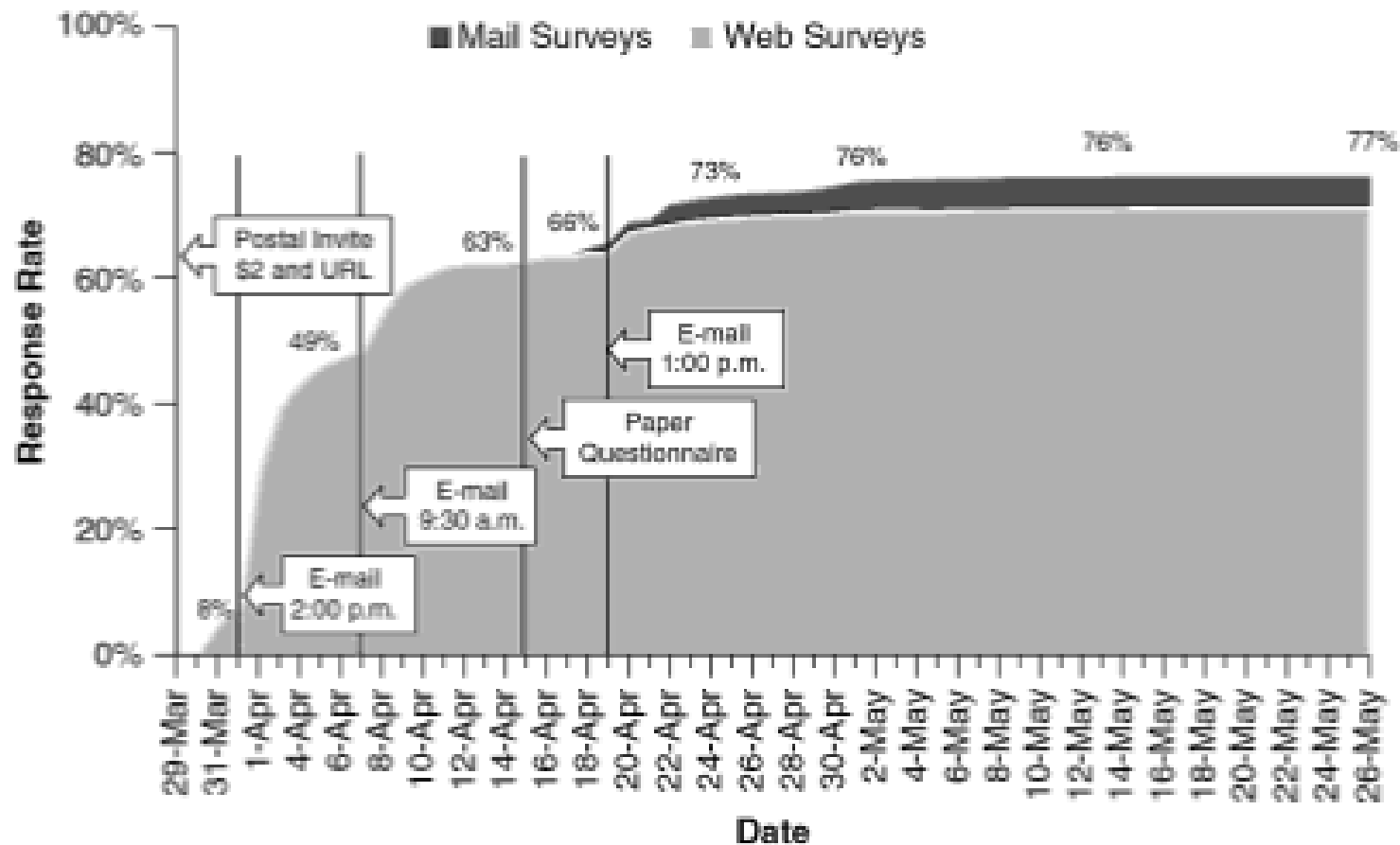
- Day 1: Send a postal letter asking students to respond over the web. Enclose a \$2 incentive with this request.
- Day 4: Send an email that builds upon the information contained in the invitation letter, while emphasizing that the sender is following up by email to provide an electronic link to the survey with the hope that this will make responding easier.
- Day 10: Send a second email request
- Day 18: Send a postal letter offering the option of responding via mail. Include a paper questionnaire and an addressed and stamped return envelope
- Day 22: Send a final email followup.

See another case study here:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2328022/pdf/canfamphys00201-0076.pdf>



FIGURE 2.2 Cumulative response rate by day and mode for the 2013 WSU Doctoral Student Experience Survey, showing contribution of each contact to final response rate.



Source: Adapted from *Determining Whether Research Is Interdisciplinary: An Analysis of New Indicators* (Technical Report 13-049), by M. M. Millar, 2013, Pullman: Washington State University, Social and Economic Sciences Research Center.

Other strategies to encourage response:

Specify how the survey results will be useful.

- Will it influence a community decision?
- Will it aid to research for some health issue?
- Will it inform the need for more services? Daycare? Preschool? etc

Ask interesting questions

- don't ask boring, repetitive questions
- make responding fun (gamification)

Emphasize sponsorship by a legitimate organization

- People are more willing to help philanthropic or nonprofit research organizations
- Being affiliated with a professional organization or university gives survey more credibility

Stress that opportunities to respond are limited

- Telling sample members that only a small number of people have an opportunity to participate can be motivational (your answers are important!)

Use cash or material incentives to encourage response

- Debate about whether to send with survey request or upon completion



Decrease the burden of responding

Don't make the survey too long

Don't make the survey questions too complex

Use visual design principals to make questionnaires easier to read and complete

Avoid requiring respondents to provide answers in a survey mode that is uncomfortable to them

- Provide multiple modes if possible (mail, web, phone)
- But choice of response mode can reduce response rates also

Provide ways for sample members to assess the authenticity of a survey request and ask questions about it

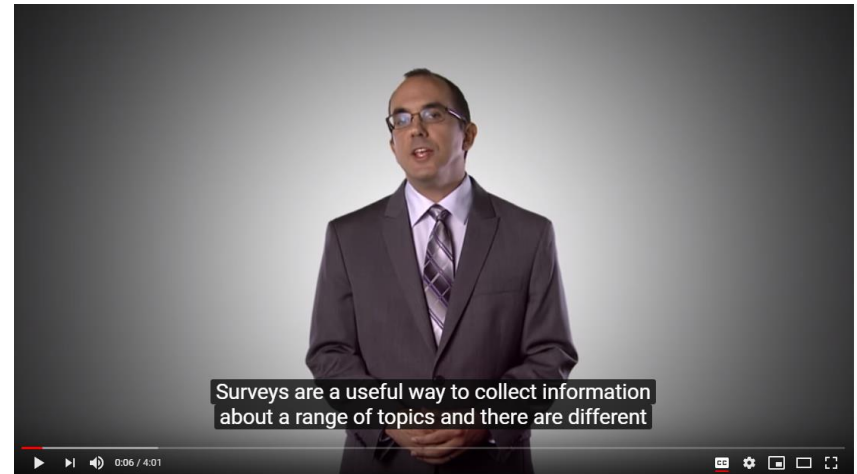
Assure confidentiality and protection of data



Decide which survey mode to use

- Mailout questionnaire
- Telephone interview
- In-person interview
- web survey
- Text survey

Or a combination



<https://www.youtube.com/watch?v=9cuOyAR-Y9I>

<http://www.pewresearch.org/fact-tank/2019/02/07/phone-vs-online-surveys-why-do-respondents-answers-sometimes-differ-by-mode/>

Advice on Writing Survey Questions



Methods 101: Question Wording

<https://www.youtube.com/watch?v=eFzGdQrr2K8>



Specific Survey Question Advice

Question Types

Good summary here:

<https://www.questionpro.com/article/survey-question-answer-type.html>

Survey Questions: Survey Examples and Sample Survey Questions

Complete guide to survey questions and question types with survey examples and sample survey questions.

CREATE A FREE ACCOUNT



Home > View All Resources > Articles

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Types of Questions

Other examples here:

SERVICE | 16 MIN READ

19 Questionnaire Examples, Questions, & Tips to Help You Create Your Own [Templates]



Written by Swetha Amaresan

@swethamaresan

Download 5 free survey templates for customer feedback.



<https://blog.hubspot.com/service/questionnaire>

Specific Examples of Question Wording Advice

Use simple sentences

Instead of: What would you do when you had only a few things to buy and there were a lot of people in the checkout line?

Try: Suppose you have only a few things to buy. There are a lot of people in the checkout line. What would you do?

Instead of: How do you work it out when you want one thing and your spouse wants another and you both feel very strongly about it?

Try: How do you settle disagreements with your spouse when you both have strong feelings about it?

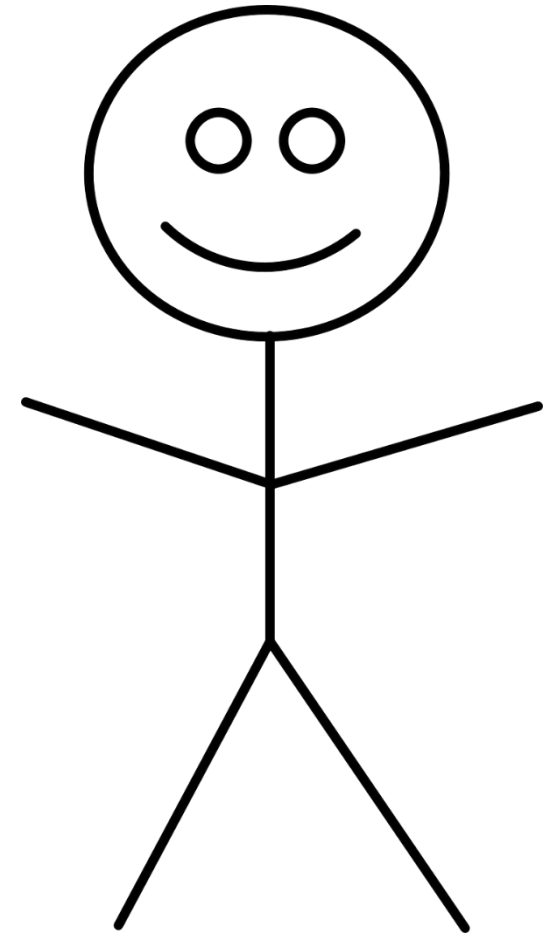
Replace complex words with simple words:

exhaustedtired
candidhonest
top priority most important
leisure free time
employment work
courageous brave
rectify correct
utilize use

occupants of this household people who live here
your responsesyour answers
postschool extracurricular activities.....what you do after school

due to the fact thatbecause
at this point in timenow
take into considerationconsider
a considerable number ofmany

Dillman p 118 & 121



Be specific

Instead of: Which brand do you like the best?

Try: Which of these brands are you most likely to buy?

Instead of: When do you usually go to work?

Try: What time do you ordinarily go to work?

Instead of: In the past week, how many days did you eat butter?

Try: In the past seven days, not counting any margarine you may have eaten, how many days did you eat any butter?

Other problem question: What is your income?

Be brief

Instead of: If you own one or more automobiles, please list the year and the make of each one, starting with the newest one.

Try: Please list the year and make of each car you own.

Instead of: Can you tell me how many children you have, whether they're girls or boys, and how old they are?

Try: What's the age and sex of each of your children?

Shorter questions are less subject to error on the part of both interviewers and respondents.

When questions are too long, interviewees are likely to forget the first part of the question by the time they read the last part.

Be careful with examples

Instead of: What small appliances, such as countertop appliances, have you purchased in the past month?

Try: Aside from major appliances, what other smaller appliances have you bought in the past month?

Examples can interject biases. In the above question, many respondents would identify toasters, blenders, coffeemakers, but would omit hair dryers, vacuum cleaners, and power tools.



Be realistic about what people can remember

Instead of: How many times did you go out on a date with your spouse before you were married?

Try: How many months were you dating your spouse before you were married?

Beware of overreporting....it is very difficult to remember not doing something....would you remember not voting?

Don't be too specific

Instead of: When you visited the museum, how many times did you read the plaques that explain what the exhibit contained?

Try: When you visited the museum, how often did you read the plaques that explain what the exhibit contained? Would you say always, often, sometimes, rarely, or never?

Don't overgeneralize

Instead of: When you buy “fast food” what percentage of the time do you order each of the following type of food?

Try: Of the last 10 times you bought “fast food” how many times did you eat each type of food?

Don't overemphasize

Instead of: Would you favor increasing taxes to cope with the current fiscal crisis?

Try: Would you favor increasing taxes?

Avoid ambiguous words:

Instead of: About what time to you ordinarily eat dinner?

Try: About what time do you ordinarily dine in the evening?

Other problem questions:

- Have you taken a vacation in the last few years?
- Do you exercise or play sports regularly?

Avoid double-barreled questions

Instead of: Do you regularly take vitamins to avoid getting sick?

Try: Do you regularly take vitamins? Why or why not?

Instead of: Do you use the internet to gather information or purchase goods? (never, occasionally, regularly).

Try: Do you use the internet to gather information? Do you use the internet to purchase goods?

Don't use leading questions

Instead of: Don't you see some danger in the new policy?

Try: Do you see any danger in the new policy?

Don't use loaded questions

Instead of: Do you advocate a lower speed limit to save human lives?

Try: Does traffic safety require a lower speed limit?



Official State of the Union Approval Poll

1. How would you rate President Trump's State of the Union Address?

- ☐ Historic
- ☐ Great
- ☐ Good

2. Do you believe President Trump properly addressed the CRISIS at our Southern Border?

- ☐ Yes
- ☐ No
- ☐ No Opinion

3. Do you believe President Trump delivered a visionary speech of always choosing American Greatness?

- ☐ Yes
- ☐ No
- ☐ No Opinion



<https://www.donaldjtrump.com/landing/official-sotu-approval-poll>

Don't use double negatives

Instead of: Does it seem possible or does it seem impossible to you that the Nazi extermination of the Jews never happened?

- 1992 Roper poll conducted for the American Jewish Committee on the Holocaust. 22% of respondents said that it seemed possible that the Holocaust never occurred and another 12% said they didn't know.

Revision: Does it seem possible to you that the Nazi extermination of the Jews never happened, or do you feel certain that it happened?

- 1% said it seemed possible that the Holocaust had never occurred.

Instead of: Do you favor or oppose not allowing the state to raise taxes without approval of 60% of the votes? Favor, Oppose.

Try: Do you favor or oppose requiring 60% approval by voters in order to raise state taxes? Favor, Oppose.

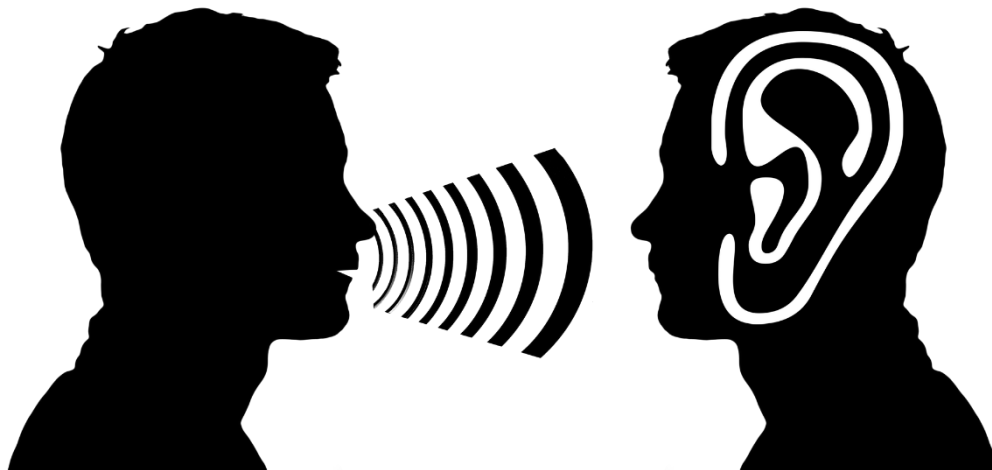
Avoid Potential Confusion

Be careful, especially with telephone surveys where respondents rely on listening to the question.

The whole meaning of a sentence may change if a respondent hears something slightly different than you intended:

- Do you favor or oppose a law *outlawing* guns in the state of Maryland?
- Do you favor or oppose a law *allowing* guns in the state of Maryland?

When I first moved to Philadelphia, someone asked me how I liked my new *department*....I thought they asked me about my new *apartment*...I went on to say how I thought it was too small, and I hoped to be moving again soon (oooops) !



Be careful with vague quantifiers

Instead of: How often did you attend religious services during the past year?

- Never
- rarely
- Occasionally
- often

Try

- not at all
- a few times
- about once a month
- two to three times a month
- about once a week
- more than once a week



Be careful with question wording

Americans are much more likely to support spending for the “poor” than spending for “welfare”.

One poll in 1981 found that nearly half of respondents would support “not allowing” Communists to speak in public but only 20% would “forbid” it.



A Recent Question Wording Example

<https://www.vox.com/identities/2017/10/27/16526392/trump-voters-abortion-pro-choice-pro-life>

Quoting directly from this article:

When it comes to people's opinions on abortion, the way you ask the question matters

Many of the men in the group were supportive of certain aspects of abortion rights, even though they opposed abortion in general. This may seem surprising, but as the 2015 Vox/PerryUndem poll (link below) found, what people say about their views on abortion depends a lot on what questions they're asked.

When half of a polling panel was asked if "abortion should be legal in almost all cases," 28 percent said yes.

But when the other half was asked if "women should have a legal right to safe and accessible abortion in almost all cases," 37 percent said yes.

As Kliff wrote in 2015, "That's a jump of 9 percentage points in who thinks abortion ought to be generally legal, just by highlighting the fact that a woman is involved in the situation."

<https://www.vox.com/a/abortion-decision-statistics-opinions>

Some links to articles about question wording and abortion

<https://www.vox.com/a/abortion-decision-statistics-opinions>

<https://www.vox.com/a/abortion-decision-statistics-opinions/abortion-polling-mistakes>



Another Question Example

2005 Pew Research Study

<http://www.pewresearch.org/methodology/u-s-survey-research/questionnaire-design/>

51% of respondents said they favored

“making it legal for doctors to give terminally ill patients the means to end their lives,”

but only

44% said they favored

“making it legal for doctors to assist terminally ill patients in committing suicide.”

Several experiments have shown that there is much greater public support for expanding “assistance to the poor” than for expanding “welfare.”

Another Question Example

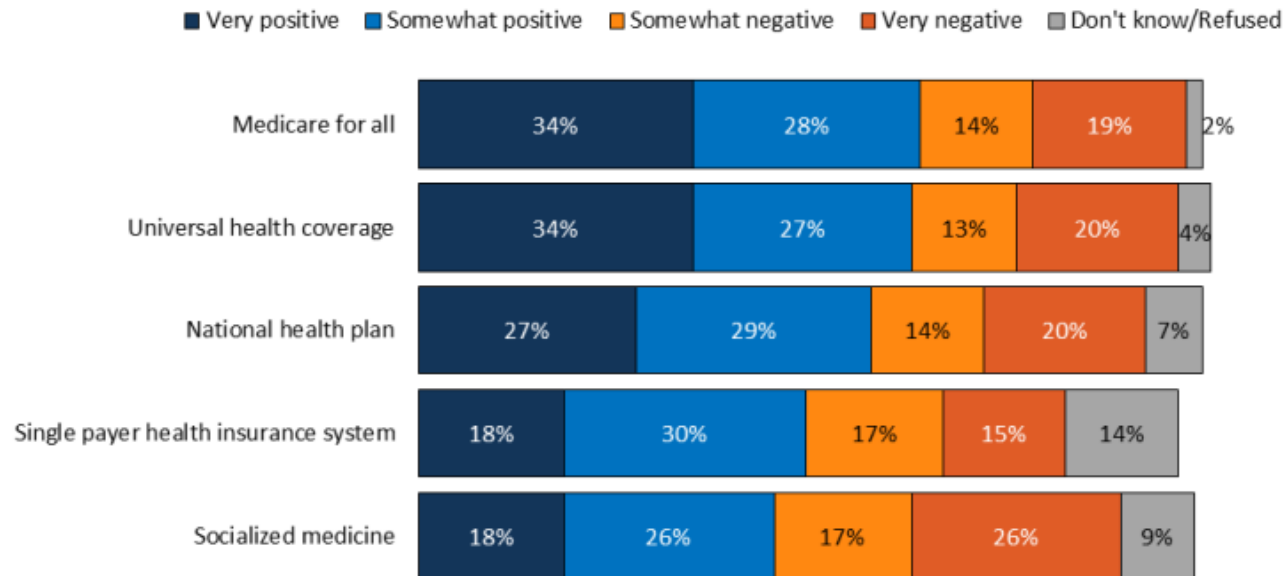
<https://www.kff.org/health-reform/poll-finding/kaiser-health-tracking-poll-november-2017-the-politics-of-health-insurance-coverage-aca-open-enrollment/>

Kaiser Health Tracking Poll Nov 2017

Figure 13

Majority of the Public Have Positive Reactions to “Medicare-for-all,” “Universal Health Coverage,” and “National Health Plan”

Do you have a positive or negative reaction to the following terms?



NOTE: Question wording modified. Items asked of separate half samples. Neutral/neither positive nor negative (vol.) response option not shown.

SOURCE: Kaiser Family Foundation Health Tracking Poll (conducted November 8-13, 2017)



Figure 13: Majority of the Public Have Positive Reactions to “Medicare-for-all,” “Universal Health Coverage,” and “National Health Plan”

Response Options can affect responses

Example

On days when you drink alcohol, how many drinks do you usually have---would you say one, two, or three or more?

On days when you drink alcohol, how many drinks do you usually have---would you say one or two, three or four, five or six, or seven or more.

Responses will be higher for question #2.

Possibly better option: don't provide response options----just let people give a number.

Be careful with check-all-that-apply options.....people generally check “some” but not necessarily “all”, and check more items towards the beginning of the list

Response Options can affect responses: Example

How many hours per day do you typically study?

Figure 2.1 Low and high sets of categories used to ask students how many hours they 1) studied and 2) watched television each day, and the results (Rockwood, Sangster, and Dillman, 1997).

<u>Version A (low) Categories</u>		<u>Version B (high) Categories</u>	
Less than .5 hour per day			
.5–1 hour			
1–1.5 hours			
1–2 hours			
2–2.5 hours per day		Less than 2.5 hours	
More than 2.5 hours		2.5–3 hours	
		3–3.5 hours	
		3.5–4 hours	
		4–4.5 hours	
		More than 4.5 hours	

Reported Hours/Day	<u>Version A (low)</u>		<u>Version B (high)</u>	
	Mail	Telephone	Mail	Telephone
<u>Studying:</u>				
2.5 hours or more	23%	42%	69%	70%
Less than 2.5 hours	77%	58%	31%	30%
<u>Watching Television:</u>				
2.5 hours or more	17%	17%	32%	31%
Less than 2.5 hours	83%	83%	68%	69%

Rockwood, T. H., Sangster, R. L., & Dillman, D. A. (1997). The effect of response categories on questionnaire answers: Context and mode effects. *Sociological Methods and Research*, 26(1), 118-140. <https://doi.org/10.1177/0049124197026001004>

How many Categories to use as response options?

To obtain more detailed information more categories is better (e.g. you'd like to spread your sample across many categories).

No real benefit to using more than 10 categories.

5-7 categories seem to be as many as respondents can use meaningfully.

For telephone surveys, you may want to use fewer categories (so that respondents don't forget the options).

A scale of 0 to 10 will not achieve the same results as a scale of -5 to 5 (you'll get higher results on the -5 to 5 scale).

Using numerical scales (e.g. on a scale of 1 to 10 where 1 is strongly disagree and 10 is strongly agree how would you rate your feelings about the following statements) is easy to remember (e.g. for telephone surveys).

Scales with adjectives (very satisfied, somewhat satisfied, satisfied, not satisfied) are harder to remember (and may not directly translate into other languages)



Closed-ended Questions vs Open-ended Questions

Closed-ended questions (e.g. questions that give respondents a fixed set of responses to choose from) can be easier to analyze.

However,

- a closed-ended question may fail to provide an appropriate set of alternatives for some respondents (e.g. if you didn't think of all possible answers).
- Also, respondents are apt to be influenced by the specific set of closed alternatives given....So some may argue that a more valid picture of respondent choice is obtained if they must produce an answer themselves.

Compromise solution:

- Conduct an open-ended trial (or pretest) on a random sample of people in order to get a (hopefully) complete list of potential responses, then construct a close-ended question with these options for the “real” survey.

Open-Ended vs Closed-Ended Questions Case Study

Open-ended: respondents provide an answer in their own words

Closed-ended: respondents choose from a list of answers

Example: poll after 2008 presidential election:

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

Group 1 got an open-ended response options, and

Group 2 got a closed-ended response option

with 5 responses (plus an option to volunteer
something not on the list).

In group 2, 58% chose economy but only 35% in group 1.

Only 8% of people in group 2 (closed-ended) volunteered
a response a response not on the list, but 43% in group
1 (open-ended) gave a response not on the list for the
closed-ended group.

It can be worthwhile to conduct a pilot survey to see what
answers are likely to be most common and to derive
closed-ended categories from that. Also consider randomizing the
order of the response options.

<http://www.pewresearch.org/methodology/u-s-survey-research/questionnaire-design/>

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 response to open-ended
question.

² First choice from five options read to
respondents.



No

Yes

Maybe

Provide a neutral category (e.g. Don't Know)

Provide a middle (neutral) category.

Give respondents a “Don't Know” option.

- You can include a screening question.
 - The next question is about the Agricultural Trade Act of 1978. Do you feel familiar enough with that act to have an opinion about it or not?
 - The next question is going to ask you about your opinions about the schools here in your town. Do you feel you have enough information about the schools to have an opinion about them? (disadvantage: don't know what questions will be asked)
- You can provide a “no opinion” option.
 - Thinking back to the terms of the Agricultural Trade Act of 1978, would you say that in general you were in favor of that act, opposed to that act, or are you not familiar enough with the act to have an opinion on that?

Disadvantage of “Don’t Know” option:

You may be too hasty in accepting a Don’t Know answer. Some respondents use Don’t Know as an easy out....but if the interviewer probed or simply waited longer the respondent would give an opinion.

Advantage of “Don’t Know” options:

You don’t want to force an answer from someone who really doesn’t know.

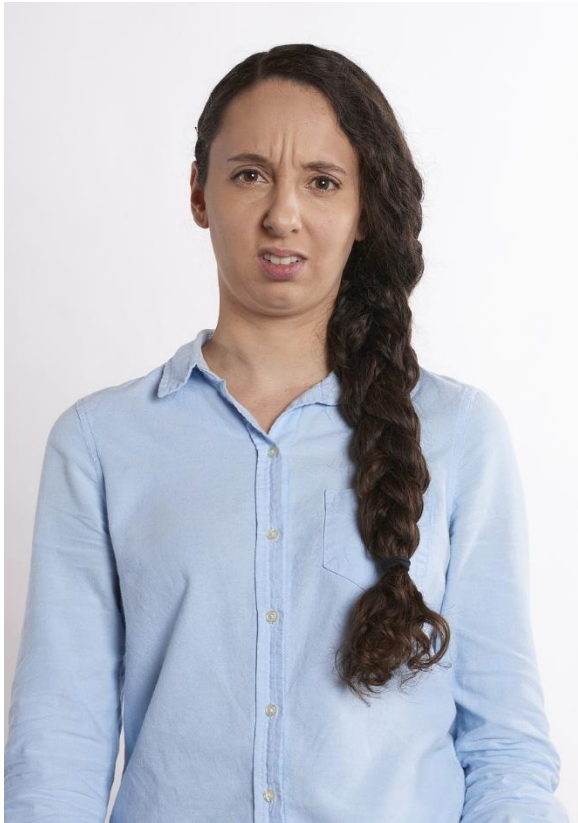
Forcing people to give an opinion when they don’t have one can be really annoying and can lead to higher nonresponse rate (e.g. people quitting the survey early)



Provide a neutral category: Example

TABLE 4.1
Filter Experiments on Foreign Affairs Items (SRC-74 Fall)*

Standard form		Filtered form	
1. Russia			
<i>Here are some questions about other countries. Do you agree or disagree with this statement? The Russian leaders are basically trying to get along with America.</i>		<i>Here are some questions about other countries. Not everyone has opinions on these questions. If you do not have an opinion, just say so. The Russian leaders are basically trying to get along with America. Do you have an opinion on that?</i>	
		<i>(If yes) Do you agree or disagree?</i>	
		<i>(Repeat original statement if necessary)</i>	
Agree	49.9%	Agree	39.2%
Disagree	34.9	Disagree	23.1
DK (volunteered)	15.2	No opinion	37.6
	100		100
	(499)		(510)
		(continued)	



Questions and Answers in Attitude Surveys: Experiments on Question Form, Wording, and Context.
By Howard Schuman and Stanley Presser. (New York: Academic Press, 1981)

Provide a neutral category: Example

Questions and Answers in
Attitude Surveys:
Experiments on Question
Form, Wording, and
Context. By Howard
Schuman and Stanley
Presser. (New York:
Academic Press, 1981

TABLE 4.1—Continued

Standard form		Filtered form	
2. Arabs			
<i>The Arab nations are trying to work for a real peace with Israel. Do you agree or disagree?</i>		<i>The Arab nations are trying to work for a real peace with Israel. Do you have an opinion on that?</i> <i>(If yes) Do you agree or disagree?</i>	
Agree	16.7%	Agree	10.1%
Disagree	60.0	Disagree	44.8
DK (volunteered)	23.4	No opinion	45.0
	100		100
	(492)		(513)



Encourage thoughtful answers.

Instead of

Did you wear or not wear your seatbelt the last time you were a passenger in an automobile?

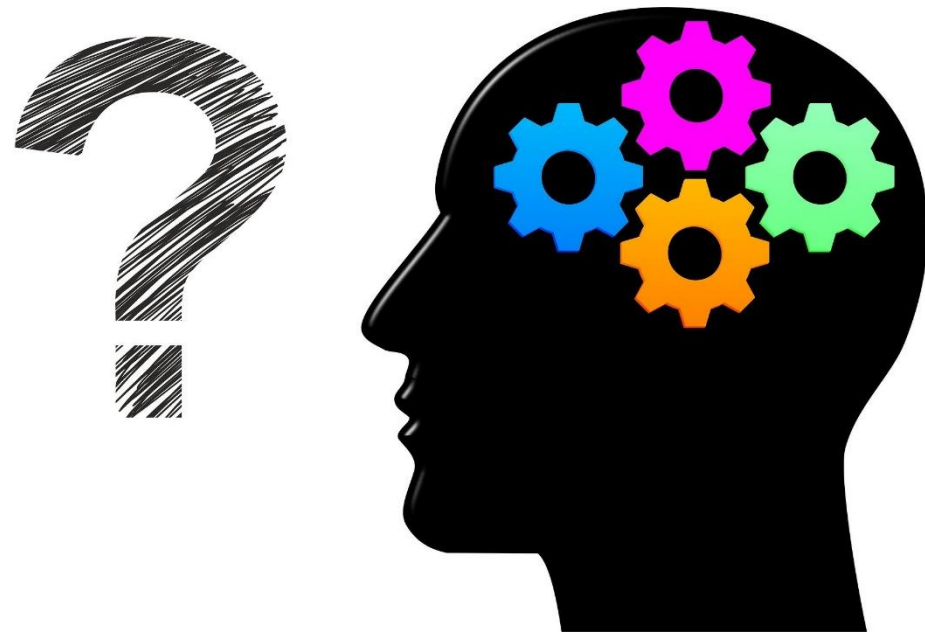
Try

When was the last time you rode in a car as a passenger rather than a driver?
(today, yesterday, before yesterday)

How long was the trip? (less than a mile, 1-2 miles, more than 2 miles)

Did you wear your seatbelt? (the entire time the car was moving, part of the time the car was moving, not at all)

This is called “cognitive design”.
It can make a survey very long, but
may be effective for particularly
important questions.



Asking Sensitive Questions

Try to put the question in context.

Instead of: In the past 7 days, how many days have you had at least one glass of wine, can of beer, or drink that contained liquor?

Try: Studies have shown that certain steps are associated with lower risks of heart attacks. We are interested in what people do that might affect their risks. For example, in the past 7 days, how many days have you:

- Taken any aspirin?
- Exercises for at least 20 minutes?
- Had at least one glass of wine, can of beer, or drink that contained liquor?

Try to assure the respondent that a question is appropriate and necessary.

The questions which follow are being asked to help us understand things that have happened to people over the years, and how their lives have been affected. We really appreciate your help and that of the thousands of others who have been asked to complete this national survey.

Have you ever hit someone with your fist?



Asking Sensitive Questions: Use Balance

Alternative Types of Formal Balance

1. Marijuana (NORC-78)

Do you think the use of marijuana should be made legal, or not?

Should	28.9%
Should not	71.1
	<hr/>
	100
	(738)

Some people think the use of marijuana should be made legal. Other people think marijuana use should not be made legal. Which do you favor?

Make use legal	32.6
Don't make use legal	67.4
	<hr/>
	100
	(743)

$\chi^2 = 2.39, df = 1, n.s.$



Asking Sensitive Questions: Try to reduce the extent to which respondents feel that answers will be used to put them in a negative light.

Instead of: Did you vote in the presidential election last November?

Try: Sometimes we know that people are not able to vote, because they are not interested in the election, because they can't get time off from work, because they have family pressures, because they are ill, or for many other reasons. Thinking about the presidential election last November, did you actually vote in that election or not?

Instead of: Do you own a library card?

Try: Many people get books from libraries. Other buy their books, subscribe to magazines, or get their reading material in some other way. Do you have a library card now, or not?

Careful question design for sensitive questions can avoid **social desirability bias** where respondents tell you what they think you want to hear (or something socially acceptable).



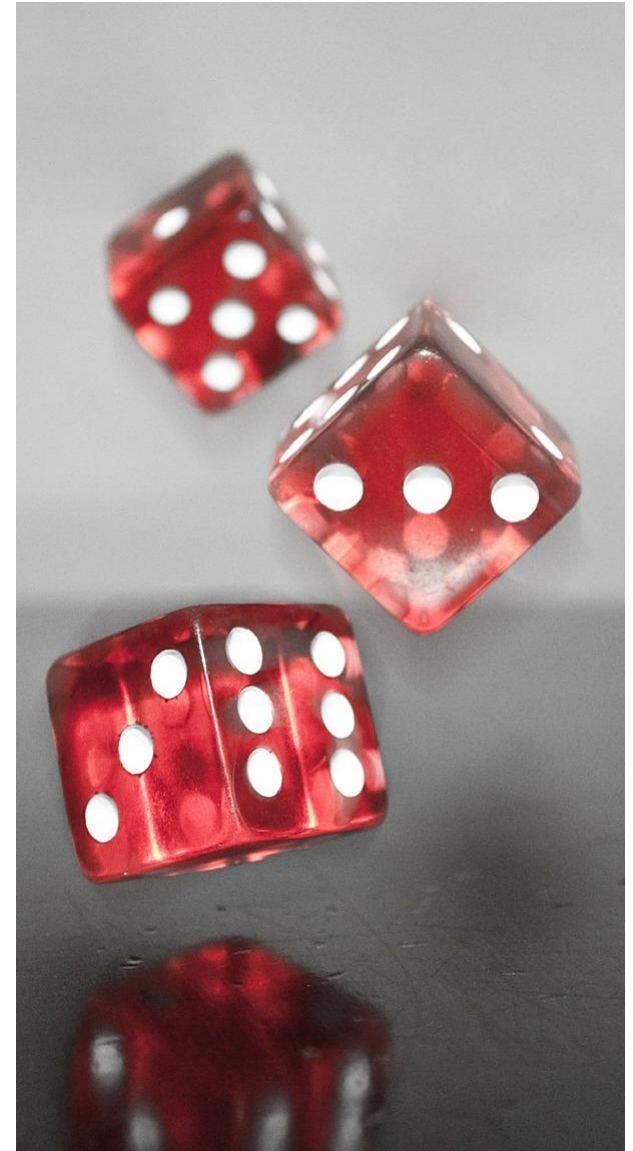
Asking Sensitive Questions: Use Randomized Response

One Randomized Response Method:

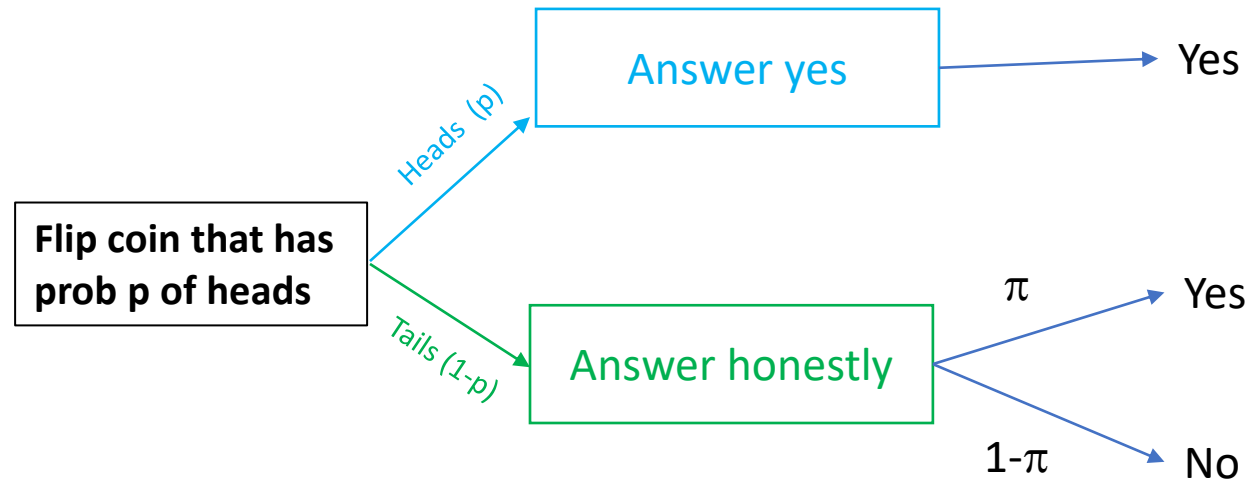
1. Flip a coin. (Don't tell the interviewer what you flipped.)
2. If heads, answer "yes".
3. If tails, answer "Have you ever shoplifted?"

Because you know the probability of "heads", you can mathematically calculate the estimate of percent who have ever shoplifted.

This is designed to make the respondent feel more comfortable answering a sensitive question....In this case because the interviewer doesn't know what question the person is answering!



Randomize Response Structure



$$\% \text{yes answers} = p + (1 - p)\pi$$

p and $\% \text{ yes answers}$ are known, solve for π

$$\pi = \frac{\% \text{yes} - p}{1 - p}$$

Example: Pitsch and Emrich (2011) "The frequency of doping in elite sport: Results of a replication study", International Review for the Sociology of Sport, 47(5): 559-580.

"Have you ever used illicit drugs or methods in order to enhance your performance?"

The myth of the Indian vegetarian nation



Soutik Biswas
India correspondent

🕒 4 April 2018

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What are the most common myths and stereotypes about what Indians eat?

The biggest myth, of course, is that India is a largely vegetarian country.

<https://www.bbc.com/news/world-asia-india-43581122>

This article reports:

What are the most common myths and stereotypes about what Indians eat?

If you go by three large-scale government surveys, 23%-37% of Indians are estimated to be vegetarian. By itself this is nothing remarkably revelatory.

But new research by US-based anthropologist Balmurli Natrajan and India-based economist Suraj Jacob, points to a heap of evidence that even these are inflated estimations because of "cultural and political pressures". **So people underreport eating meat - particularly beef - and overreport eating vegetarian food.**

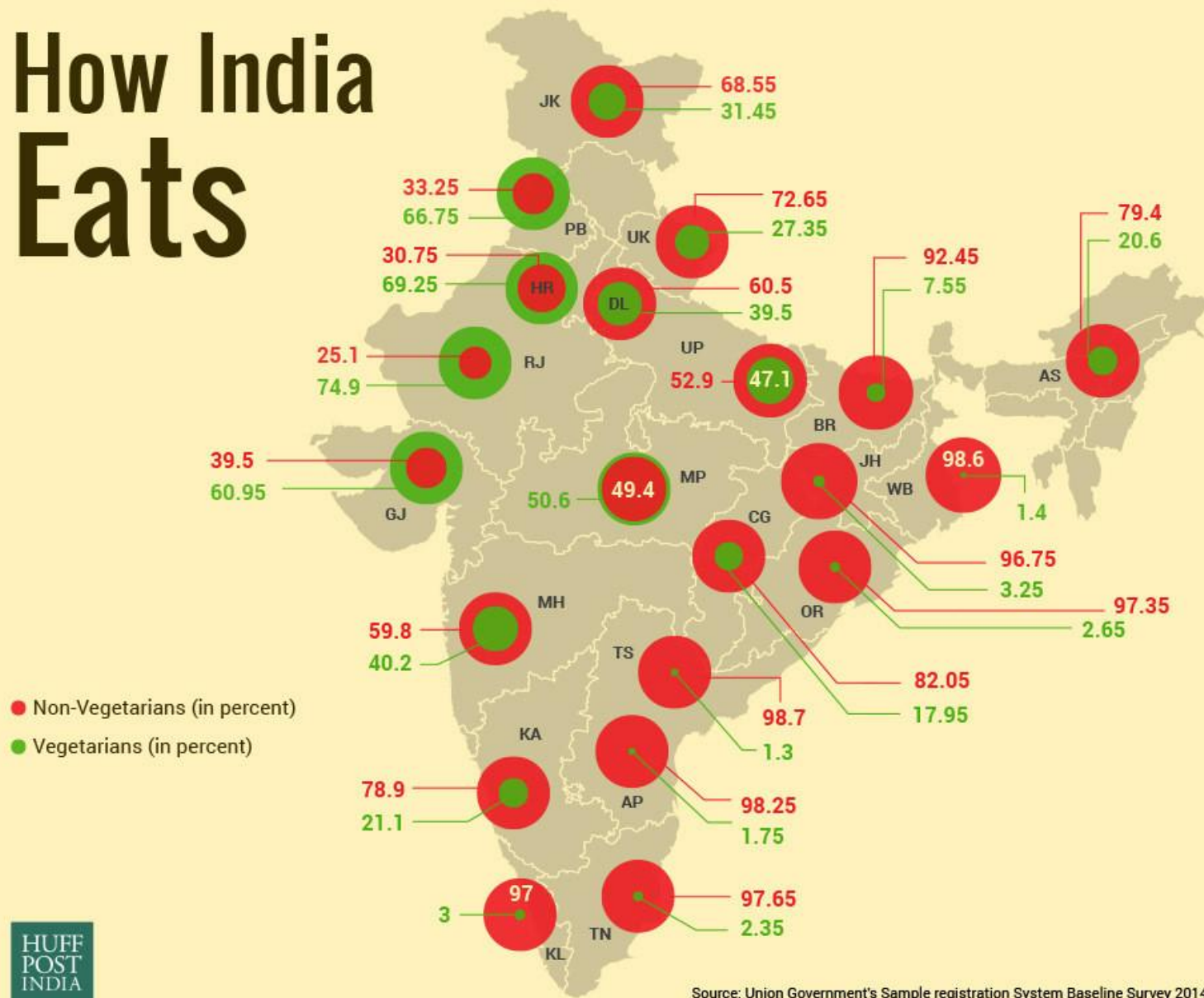
Taking all this into account, say the researchers, only about 20% of Indians are actually vegetarian - much lower than common claims and stereotypes suggest.

There is also evidence of underreporting specifically of beef eating.


"There is evidence to show that some of the official data is "considerably" under-reported because beef is caught in cultural political and group identity struggles in India".



How India Eats



'I have never seen him eat a vegetable': With steak off the menu, officials scramble to feed fussy eater Trump in India

 INDEPENDENT Andrew Naughtie, The Independent • February 24, 2020



Donald Trump has embarked on his first presidential visit to India, the world's largest democracy – and home to the world's largest population of vegetarians. Since Mr Trump is a noted beef-eater, in particular a lover of [steak](#) and burgers, [gastronomically speaking](#), the visit will prove one of his most challenging.

It's not all bad news for Mr Trump. India's reputation for overwhelming [vegetarianism](#) is [overstated](#), and it's thought that more families eat beef at home than generally admit it.

6873



Nonetheless, Indian president [Narendra Modi](#) has [reportedly planned](#) to serve Mr

Other Types of Response Bias:

Some good examples here:

http://www.aapor.org/AAPOR_Main/media/AnnualMeetingProceedings/2015/B1-6-Sedley.pdf

Another web page

<https://www.nextiva.com/blog/response-bias.html>