

DOES MENTIONING “SOME PEOPLE” AND “OTHER PEOPLE” IN AN OPINION QUESTION IMPROVE MEASUREMENT QUALITY?

DAVID SCOTT YEAGER*
JON A. KROSNICK

Abstract Researchers often measure attitudes and beliefs using “some/other” questions (“*Some people* think that . . . but *other people* think that . . .”) instead of asking simpler “direct” questions. This article reports studies testing the hypothesis that the some/other question form yields improved response validity. Eight experiments embedded in national surveys provided no evidence in support of this hypothesis. Instead, validity was found to be greatest when employing the direct question format presenting response options in an order that did not violate conversational conventions. Furthermore, some/other questions take longer to ask and answer and, because they involve more words, require greater cognitive effort from respondents. Therefore, the some/other format seems best avoided; direct questions that avoid unconventional response option ordering are preferable to maximize data quality.

Researchers often measure attitudes and beliefs by stating both sides of an issue before asking for the respondent’s opinion. This type of question, which we call a “some/other” question, first says what “some” people believe, then says what

DAVID YEAGER is an Assistant Professor in the Department of Psychology, University of Texas at Austin, Austin, TX, USA. At the time this work was conducted, he was a Ph.D. candidate at Stanford University, Stanford, CA, USA. JON KROSNICK is Frederic O. Glover Professor in Humanities and Social Sciences, Professor of Communication, Political Science, and Psychology (by courtesy) at Stanford University, and is University Fellow at Resources for the Future. The authors thank Edward Haertel, Gary Langer, Neil Malhotra, and the Political Psychology Research Group at Stanford University for their advice; the General Social Survey, Lightspeed Research, and Luth Research for including the experiments described here in their data collections; and Kinesis Survey Technologies for the use of their Internet questionnaire administration platform. Some data were collected by Time-Sharing Experiments for the Social Sciences, funded by the National Science Foundation [0818839 to Jeremy Freese and Penny Visser, Principal Investigators]. Other data were collected via the Face-to-Face Recruited Internet Survey Platform (the FFRISP), funded by the National Science Foundation [0619956 to J. A. K., Principal Investigator]. *Address correspondence to David Yeager, Department of Psychology, University of Texas at Austin, 1 University Station A8000, Austin, TX, 78712; e-mail: yeager@psy.utexas.edu.

“other” people believe, and then asks what the respondent believes. For example:

“Some people say the American role in Vietnam was a noble cause. Other people say it was wrong and immoral. Do you think it was a noble cause, or wrong and immoral?” (CBS News 2000)

This format has been used often in major surveys, including every American National Election Study (Krosnick, Lupia, and ANES 1948–2008) survey and every General Social Survey (GSS; Davis, Smith, and Marsden 1972–2008). Such questions have been included in many visible news media surveys as well. A search for questions containing both “some people” and “other people” in the survey archives maintained by the Inter-University Consortium for Political and Social Research (ICPSR) indicated that since 1950, 352 some/other questions have been asked in hundreds of national surveys.¹

Of course, all some/other questions could be asked more succinctly in what could be called the “direct form,” such as

“Do you think the American role in Vietnam was a noble cause, or wrong and immoral?”

Some researchers have argued that the some/other form increases the accuracy of self-reports (Harter 1982; Schuman and Presser 1981). According to this view, respondents who hold socially undesirable opinions or who are simply in the minority on an issue may feel uncomfortable honestly reporting their attitudes (see Noelle-Neumann 1993). These researchers proposed that the some/other format might increase validity because it communicates to respondents that about half of the people in the population hold one view while the other half hold the opposite view. By implying that unpopular views are more normative, these researchers argued, the some/other form might legitimize the unpopular choice and thereby help respondents who hold these unpopular opinions to feel more comfortable answering honestly. Hence, measurements might be more valid.

As appealing as the some/other format might seem from this point of view, it might also cause unintended distortions of opinion reports. First, some/other questions involve about twice as many words as direct questions, and longer questions can increase respondent burden and questionnaire administration time. On practical grounds, therefore, a direct question might seem preferable.

1. Some/other questions have been asked in a variety of different subforms. The ICPSR database reveals that the subform of some/other questions examined in the present study was among the most frequently used. This form ends with a request for a choice between two explicitly stated options, as in the examples above.

Furthermore, by explicitly referring to the distribution of others' attitudes, such questions might induce a cognitive focus on that distribution that might not have occurred otherwise. Inducing this might increase respondent burden by causing people to think about something they would not have otherwise thought about, rather than simply focusing on their own opinions when generating a self-report.

Mentioning the opinions of others might be especially problematic for respondents who, prior to hearing the question, believed that a large majority of the population held a particular opinion on the issue. By suggesting that the population is about equally split on an issue, the some/other question format might change these respondents' perceptions of social norms and lead these people to change their answers due to a process of informational social influence or conformity (Cialdini and Goldstein 2004; Deutsch and Gerard 1955), thus compromising the validity of those reports.

Schuman and Presser (1981) reported four experiments comparing some/other questions with direct questions. They found that these two question formats yielded equivalent distributions of answers, which led them to conclude that the some/other form might not alter the response process. However, these investigators did not assess the impact of the some/other form on response validity, and they did not test the assumption that some/other questions alter respondents' perceptions of the distributions of opinions in the population.

Therefore, in conducting the present research, we set out to test whether, compared to the direct form, the some/other form (1) does in fact lead respondents to infer that a greater proportion of other people endorse the unpopular view on an issue; (2) increases reporting of unpopular attitudes; and (3) alters the validity of self-reports.

In doing this research, we explored whether the some/other question format might have different effects depending upon the order in which the response options are offered to respondents. Linguists have noted many conversational conventions in communication, which can be defined as arbitrary customs that are followed by most speakers and communicate no added information beyond the words spoken (e.g., Cooper and Ross 1975). One such set of conventions is that when presenting a pair of mutually exclusive positive and negative objects or concepts, people tend to mention the positive or favorable one before the negative or unfavorable one, as in "agree or disagree," "like or dislike," or "support or oppose" (Cooper and Ross 1975). Holbrook et al. (2000) reported some evidence suggesting that offering response options in an unconventional order in survey questions may distract respondents and compromise the validity of the answers they provide. We therefore tested whether the order of answer choices impacted validity when questions were asked in the direct form and when they were asked in the some/other form, and whether the effect of response order was different across the two question forms.

Method

DATA SOURCES

Eight experiments were embedded in four surveys of national samples of American adults. One experiment was included in an area-probability sample interviewed face-to-face (the 2006 GSS). Three experiments were completed by a nationally representative sample interviewed via the Internet (the Face-to-Face Recruited Internet Survey Platform [FFRISP]). Two experiments were completed by an Internet survey panel recruited by random-digit-dialing (the Knowledge Panel, administered by Knowledge Networks), and two experiments were completed by a non-probability sample of American adults who answered questions via the Internet (by Lightspeed Research). Additional details on the samples, measures, and results can be found in the online supplement to this article.

MEASURES

Target items: Some respondents were randomly assigned to be asked each target question in the direct form. For example, one item used in our experiments was

“Do you think the U.S. President should or should not meet with leaders of countries that are hostile toward the United States?”

Other respondents were asked the question in the some/other form. For example:

“Some people think the U.S. President should meet with leaders of countries that are hostile toward the United States. Other people think the President should not meet with these leaders. How about you? Do you think the President should or should not meet with these leaders?”

In three of the experiments, the response options were presented in the same order to all respondents. Because these orders did not violate conversational conventions (Cooper and Ross 1975), we refer to them as “natural” orders. In another experiment, respondents were randomly assigned to receive the response options in one order or the reverse order, and neither order violated conversational conventions, so both are considered “natural.”

In the four remaining experiments, respondents were randomly assigned to receive the response options in a natural order or in the reverse order, which violated conversational conventions (Cooper and Ross 1975; Holbrook et al. 2000). For example, some respondents were asked: “Do you think the U.S. President **should not meet** or **should meet** with leaders of countries that

are hostile toward the United States?” (emphasis added). We refer to such orders as “unnatural.”

Perceived distribution of opinions: We assessed whether the some/other form leads people to perceive a flatter distribution of the proportions of people holding various views on each issue. In all experiments except two, after respondents answered the target question, they reported the percent of other people whom they thought held each opinion on each target question’s issue (responses ranged from 0 percent to 100 percent). For example, some respondents were asked, “What percent of American adults would you guess think that the U.S. President should meet with leaders of countries that are hostile toward the United States?” and they also reported the percent of people whom they thought believed the U.S. President “should NOT meet” with these leaders.²

Concurrent validity criteria: To assess response validity, we used a method that has been used in a series of past publications (e.g., Chang and Krosnick 2003; Schaeffer et al. 2005; see also American Educational Research Association, American Psychological Association, and National Council of Measurement in Education 1999). To implement this method, we asked identically worded questions that tapped constructs that were expected, on theoretical grounds, to be correlated with the target items and that were, in fact, sensibly correlated with the target items. For instance, as a criterion item to correlate with the “meet with hostile foreign leaders” target question, all respondents were asked whether military spending should be increased or decreased, because the belief that military spending should be increased was significantly negatively related to a desire for the U.S. President to talk with hostile foreign leaders. In nearly all of our experiments, multiple criteria were identified to evaluate the validity of each target item. We determined which question form was more strongly correlated with the criteria for each target item.

ANALYSES

Three analyses were conducted with the data from each experiment. We first examined whether the some/other format led respondents to perceive that the distribution of opinions in the population was closer to evenly divided on each issue. To do so, we computed *t*-tests assessing whether the percent of people perceived to hold the majority opinion was smaller among respondents who answered the some/other question format than among respondents who answered the direct format.³

2. In some experiments, respondents were constrained to give answers that summed to 100 percent, and in other experiments, this constraint was not imposed. These two types of experiments yielded comparable results.

3. In all of these analyses, respondents who did not answer a question or, in the face-to-face survey, the GSS, those who said they had no opinion, were treated as having missing data for that question.

Next, we explored whether the some/other question form led more people to offer what would have been the minority opinion in response to the direct question. We did so by estimating the parameters of logistic regression equations predicting answers to the target item using a dummy variable representing question form.

Finally, we compared the concurrent validities of the target questions. To do so, we estimated the strength of the relations between target question responses and answers to criterion questions that were asked identically of all respondents during the same interviews. If the direct form yielded weaker associations than did the some/other form, then that would suggest that the former produced less valid measurements than the latter. If the direct form yielded stronger associations than did the some/other form, then that would suggest that the former produced more valid measurements than the latter. This analysis was done by estimating the parameters of this logistic regression equation:

$$\begin{aligned} \text{Target Item} = & \beta_0 + \beta_1 (\text{Criterion Item}) + \beta_2 (\text{Question Form}) \\ & + \beta_3 ((\text{Criterion Item}) \times (\text{Question Form})) \\ & + \beta_4 (\text{Age}) + \beta_5 (\text{Education}) + \beta_6 (\text{Race}) \\ & + \beta_7 (\text{Sex}). \end{aligned} \quad (1)$$

The β_3 coefficient gauges whether concurrent validity differed between the two question forms. We also conducted this sort of analysis for comparing the validities of answers to questions employing natural response option orders to the validities of questions employing unnatural response option orders.

To efficiently summarize the findings of these experiments and to conduct statistical tests with maximum power, we followed the approach of some previous investigations of questionnaire design issues (e.g., Narayan and Krosnick 1996) by conducting meta-analyses combining across experiments (using the Comprehensive Meta-Analysis software; Borenstein et al. 2005). For each of the three types of analyses we conducted, the key statistic was converted to a standardized effect size for each experiment (e.g., Cohen's d or odds ratios). We then calculated the average of those effect sizes across experiments to gauge the practical significance of the impact of question format. Then, the statistical significance of the meta-analytic average effect size for each analysis was tested via a Z -statistic. To facilitate interpretability of the validity results, we also calculated meta-analytic average odds ratios for each question form.⁴

4. To take into account non-independence due to multiple tests of validity with multiple criteria for some target items, the average d was calculated across all of the validity criteria associations for each target question, and this average was used in the meta-analysis.

Results

PERCEIVED DISTRIBUTIONS OF OTHERS' OPINIONS

Consistent with Harter's (1982) and Schuman and Presser's (1981) presumptions, respondents thought that slightly fewer other people held the most popular opinion after being asked the some/other form than after being asked the direct form (some/other = 53.21 percent; direct = 55.14 percent; $d = -.08, Z = -3.59, p < .05$; see online supplementary data for tables presenting these and all other results separately for each target question). This effect was statistically significant for questions offering response options in a natural order ($d = -.08, Z = -3.01, p < .05$) and for questions offering response options in an unnatural order ($d = -.08, Z = -1.97, p < .05$). The difference between the direct and some/other forms did not vary significantly depending on response choice order, $Q(1) = .017, n.s.$

DISTRIBUTIONS OF RESPONSES TO THE TARGET ITEMS

However, the direct and some/other forms yielded the same proportions of people giving the most popular response when reporting their own opinions: 74.00 percent and 72.98 percent, respectively (odds ratio = .99, $Z = -.11, n.s.$), replicating similar findings reported by Schuman and Presser (1981). The same result appeared when separately analyzing the questions offering response options in a natural order (odds ratio = 1.04, $Z = .70, n.s.$) and the questions offering response options in an unnatural order (odds ratio = .86, $Z = -1.51, n.s.$). Thus, as compared to the direct form, the some/other form did not increase the proportion of people selecting the least popular answer to describe themselves.⁵

CONCURRENT VALIDITY

The most valid question format was the direct format offering response choices in a natural order. Across the set of items that rotated response order, validity was significantly higher for direct questions offering response choices in a natural order (average odds ratio from logistic regressions assessing criterion validity = 5.33) than for direct questions offering response choices in an unnatural order (average odds ratio = 2.42; difference: odds ratio = .43, $Z = 2.24, p < .05$), replicating the findings reported by Holbrook et al. (2000). Across the set of questions that offered response choices in a natural order, validity was higher for the direct format (average odds ratio: 6.11) than for the some/other

5. The direct and some/other forms did not differ in their susceptibility to response order effects. In fact, neither form manifested a significant response order effect on the distribution of responses; direct form: odds ratio = .88, $Z = -1.44, n.s.$; some/other form: odds ratio = .98, $Z = -.24, n.s.$ The difference between forms in terms of the response order effect was also not significant, $Q(1) = .97, n.s.$

format (average odds ratio: 4.05; difference: odds ratio = 0.64, $Z = -2.20$, $p < .05$). Thus, employing the some/other form compromised report validity.⁶

Interestingly, when examining only the some/other questions that rotated response order, violating conversational conventions about response choice orders did not significantly compromise response validity (average odds ratio for natural response order questions = 3.58; average odds ratio for unnatural response order = 4.05; odds ratio = .89, $Z = -.40$, n.s.). This non-effect of response option order on validity for some/other questions was significantly different from the significant effect of response option order on validity among questions asked in the direct format, $Q(1) = 4.32$, $p < .05$. This finding therefore identifies a limitation in Holbrook et al.'s (2000) finding, which appears to apply only to direct questions.

Discussion

A meta-analysis of eight experiments showed that the some/other form did, in fact, communicate to respondents that fewer other Americans held the most popular opinion. However, conveying this message did not encourage respondents to more frequently report holding unpopular opinions. More importantly, response validity was compromised by employing the some/other format instead of the direct format and by offering response options in an unnatural order instead of in a natural order. These results held across multiple modes (face-to-face vs. Internet) and types of samples (probability samples vs. non-probability samples). Therefore, these results encourage employing the direct format with response option orders that do not violate conversational conventions.

Our findings are reinforced by a set of practical considerations. Some/other questions averaged 44 words each, as compared to just 23 words for the direct forms of the same questions.⁷ Moreover, Holbrook et al. (2000) reported evidence that people answer questions offering response options in unnatural orders more slowly than they do questions employing natural response option orders. This means that more survey time is spent on such questions—time that could be spent asking other questions. Therefore, on practical grounds as well, the direct format with conventional response option orders seems preferable.

The items we administered did not necessarily have substantial social desirability implications, so we are best off reaching conclusions only about

6. In separate tests of moderation, we found that the meta-analytic effect of the some/other question form on response validity was no different for different survey modes (face-to-face vs. Internet) or for type of sample used (probability sample vs. non-probability sample). See the online supplement for details on these statistical tests.

7. Not surprisingly, then, a Web-administered pilot study we conducted suggests that people answer direct format questions more quickly (an average of 13.17 seconds) than they answer some/other format questions (an average of 15.70 seconds), $t(293) = 2.21$, $p < .05$.

questions without such implications. Interestingly, few if any of the some/other questions in the ICPSR archive appeared to be notably different from the ones employed in this article in terms of social desirability implications. So, it seems reasonable to apply the findings reported here to the types of questions for which the some/other format has usually been employed in past national surveys. Nevertheless, the present study's findings regarding the some/other form closely parallel those obtained from a similar investigation of questions tinged with social desirability. Yeager and Krosnick (2011) found that the some/other form decreased response validity relative to objective criteria when adolescents were asked about undesirable attributes such as making low grades, getting into trouble, or not liking themselves. Hence, the findings reported here may generalize to cases when adults answer questions laden with social desirability implications.

Two different psychological mechanisms might have produced the some/other question form's effect on validity, and each merits future study. First, some/other questions induce respondents to think about others' attitudes rather than focusing only on their own attitudes. This may be distracting and add to cognitive burden, thus interfering with the response process and decreasing validity. Second, the some/other format was advocated on the assumption that it allows people with unpopular attributes to feel comfortable reporting them (Harter 1982; Schuman and Presser 1981). While this may be true for some respondents, this logic ignores the fact that the some/other format may also tell respondents that socially desirable attributes are less common than they thought. Distorting respondents' perceptions of others' attributes might have discouraged those who held popular views from reporting them accurately. The distortion among those who hold popular views may have outweighed the potential increase in accuracy found among those who felt comfortable reporting unpopular views. We hope that future research investigates these possibilities more directly.

Our findings do not challenge the use of the some/other format in studies of issue framing, in which the format is used to offer reasons supporting each competing viewpoint on an issue. For example, Nelson and Kinder (1996) asked half of their survey respondents this question: "Our next question deals with government programs to assist the poor. Some people say that government spending on such programs for the poor needs to be increased, to help those who, through no fault of their own, simply cannot earn enough to take care of themselves and their children. Others say that government spending on such programs for the poor should be decreased, because they give away money to people who don't really need the help. If you had a say in making up the federal budget this year, would you like to see spending on programs that assist the poor increased, decreased, or stay the same?" Other respondents were asked the same question, but the third sentence was replaced with "Others say that government spending on such programs for the poor should be decreased because, given the huge budget deficit, we simply can't afford it." This allowed

the researchers to explore how the focus of loud voices during public debate shapes the distribution of public opinion on the issue and/or influences the way people formulate their opinions about a policy. Thus, mentioning the rationales offered by “some people” and “other people” has an explicit purpose: to simulate a world in which different groups of people are pushing particular arguments. Many past studies have shown that the arguments chosen to include in such a question influence people’s answers to it, so offering different arguments will produce different answers from respondents (Kinder and Sanders 1996; Nelson and Kinder 1996; Schuman and Presser 1981).

Offering reasons in the some/other format has also been advocated when a policy addressed by a direct question “is highly unfamiliar and/or has built-in positive or negative attribute bias with a nuanced or non-obvious counterpoint.”⁸ That is, offering reasons can (1) give respondents a basis for forming an opinion when they might otherwise have none; or (2) lead respondents to view a seemingly simple issue as in fact more complex, with legitimate countervailing considerations pushing in opposite directions. In such situations, obtained results are likely to be specific to the particular reasons offered, because hearing or reading different reasons has often led respondents to offer different opinions on an issue (e.g., Kinder and Sanders 1996; Nelson and Kinder 1996; Schuman and Presser 1981). Thus, obtained results should not be viewed as revealing thoughtful opinions in response to a balanced question but should instead be viewed as reports of opinions in response to the particular arguments offered by the question. If those arguments mirror those being articulated most loudly during current public debate, a survey’s results might be viewed as revealing what the public would think if everyone had been attentive to this debate.

Supplementary Data

Supplementary data are freely available online at <http://poq.oxfordjournals.org/>.

References

- American Educational Research Association, American Psychological Association, and National Council of Measurement in Education. 1999. *Standards for Educational and Psychological Testing*. Washington, D.C.: AERA.
- Borenstein, Michael, Larry Hedges, Julian Higgins, and Hannah Rothstein. 2005. *Comprehensive Meta-Analysis Version 2*. Englewood, NJ: Biostat.
- CBS News. 2000. CBS News Poll: Littleton/OK City/Waco/2000 Census [USCBS2000-04B]. Retrieved from <http://www.ropercenter.uconn.edu/>.

8. Personal communication with Gary Langer, November 8, 2008.

- Chang, LinChiat, and Jon A. Krosnick. 2003. "Measuring the Frequency of Regular Behaviors: Comparing the 'Typical Week' to the 'Past Week.'" *Sociological Methodology* 33:55–80.
- Cialdini, Robert B., and Noah J. Goldstein. 2004. "Social Influence: Compliance and Conformity." *Annual Review of Psychology* 55:591–622.
- Cooper, William E., and John R. Ross. 1975. "World Order." In: *Papers from the Parasession on Functionalism*, ed. Robin E. Grossman, et al. Chicago: Chicago Linguistic Society, University of Chicago, 63–111.
- Davis, James Allan, Tom W. Smith, and Peter V. Marsden. 1972–2008. General Social Surveys, 1972–2008 [machine-readable data file]. Principal Investigator, James A. Davis; Director and Co-Principal Investigator, Tom W. Smith; Co-Principal Investigator, Peter V. Marsden. Sponsored by National Science Foundation. NORC ed. Chicago: National Opinion Research Center [producer]; Storrs, CT: Roper Center for Public Opinion Research, University of Connecticut [distributor], 2010.
- Deutsch, Morton, and Harold B. Gerard. 1955. "A Study of Normative and Informational Social Influences upon Individual Judgment." *Journal of Abnormal and Social Psychology* 51:629–36.
- Harter, Susan. 1982. "The Perceived Competence Scale for Children." *Child Development* 53:87–97.
- Holbrook, Allyson, Jon A. Krosnick, Richard T. Carson, and Cameron Mitchell. 2000. "Violating Conversational Conventions Disrupts Cognitive Processing of Attitude Questions." *Journal of Experimental Social Psychology* 36:465–94.
- Kinder, Donald R., and Lynn M. Sanders. 1996. *Divided by Color: Racial Politics and Democratic Ideals*. Chicago: University of Chicago Press.
- Krosnick, Jon A., Arthur Lupia, and the National Election Studies. 1948–2008. American National Election Studies Cumulative Data File, 1948–2008 [computer file]. Ann Arbor: University of Michigan, Center for Political Studies [producer]. Ann Arbor: Inter-University Consortium for Political and Social Research [distributor].
- Narayan, Sowmya, and Jon A. Krosnick. 1996. "Education Moderates Some Response Effects in Attitude Measurement." *Public Opinion Quarterly* 60:58–88.
- Nelson, Thomas E., and Donald R. Kinder. 1996. "Issue Frames and Group-Centrism in American Public Opinion." *Journal of Politics* 58:1055–1078.
- Noelle-Neumann, Elizabeth. 1993. *The Spiral of Silence: Public Opinion—Our Social Skin*. Chicago: University of Chicago Press.
- Schaeffer, Eric M., Jon A. Krosnick, Gary E. Langer, and Daniel M. Merkle. 2005. "Comparing the Quality of Data Obtained by Minimally Balanced and Fully Balanced Attitude Questions." *Public Opinion Quarterly* 69:417–28.
- Schuman, Howard, and Stanley Presser. 1981. *Questions and Answers in Attitude Surveys: Experiments on Question Form, Wording, and Context*. New York: Academic Press.
- Yeager, David Scott, and Jon Krosnick. 2011. "Does Mentioning 'Some People' and 'Other People' in a Survey Question Increase the Accuracy of Adolescents' Self-Reports?" *Developmental Psychology* 47:1090–1107.