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DOES VARYING THE ORDER OF SEXUAL ORIENTATION RESPONSE CATEGORIES CHANGE POPULATION ESTIMATES? FINDINGS FROM A NATIONALLY REPRESENTATIVE STUDY OF U.S. ADULTS

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Conventional wisdom for general population research suggests that nominal response categories be ordered by population prevalence. Current best practice in sexual orientation measurement represents an exception, with *lesbian or gay* recommended as the first response category, followed by the second, but most selected category, *straight, that is, not lesbian or gay*. Although prior research has shown that there can be differences in response distributions by response ordering, there has been a dearth of empirical work to investigate the potential of such context effects in sexual orientation measurement. To address this gap, we surveyed U.S. adults aged 18+ in 2022 using a nationally representative, probability-based household panel ($n = 2{,}099$) where panelists were asked "Which of the following best represents how you think of yourself?" with response categories *lesbian or gay*; *straight, that is, not lesbian or gay*; *bisexual*; *something else*; and *I don't know the answer*. Panelists were randomly assigned to one of two groups. The control group was asked the standard ordering *lesbian or gay* followed by *straight, that is, not lesbian or gay*. The treatment group was asked

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straight, that is, not lesbian or gay followed by *lesbian or gay*. The order of the remaining responses was the same for both groups. Results do not show a significant relationship between response order and sexual orientation but suggest additional research with a larger sample would be useful. Compared to the lesbian/gay first group, the straight first group showed a significant decrease in proportion for *don't know* responses. Differences in proportions for the remaining responses were not significant. Young adulthood was predictive of *don't know* responses in both groups, indicating that *don't know* responses may capture sexual fluidity, change, or uncertainty in addition to potential satisficing. Findings demonstrate that reordering response categories by population prevalence may improve data quality by decreasing item nonresponse.

KEYWORDS: Context effects; Response-ordering effects; Sexual orientation.

Statement of significance

This study poses a classic survey design question about how the order of response categories affects measurement. We assess this in a nationally representative study of U.S. adults who were asked about sexual orientation. The current recommended order of response categories, *lesbian or gay* listed first followed by *straight, that is, not lesbian or gay* is based on cognitive testing from the early 2000s, which found that being straight (heterosexual) was not a salient part of sexual majority peoples' identities, suggesting "lesbian or gay" be listed first in order for straight respondents to disidentify from what they perceived as a stigmatized group. By accommodating social stigma, the current recommended response order may fall short of inclusive survey measurement. Rapidly changing attitudes toward sexuality and sexual minority groups in recent years warrants investigation to revisit some of the assumptions behind response category ordering. Our study addresses gaps in the sexual orientation measurement literature, including those identified by the 2022 National Academies consensus report, by finding that data quality may be improved by presenting the response category *straight, that is, not lesbian or gay* first. Analysis by demographic characteristics provides new insight into the interpretation of *don't know* responses.

1. INTRODUCTION

When designing survey questionnaires, nominal questions with categories that are not naturally ordered in some way are often ordered by population prevalence, starting with the most common response in the population. Current best practice in sexual orientation measurement represents an exception, with *lesbian or gay* recommended as the first response category, followed by the second, but most commonly selected category, *straight, that is, not lesbian or gay* (National Academies of Sciences, Engineering, and Medicine (NASEM) 2022). Notably, recommended response orders can vary by country context. For example, the U.K. Census orders response categories by national population prevalence (Roskams 2023), asking *straight/heterosexual* first followed by *gay or lesbian*, *bisexual*, and *other sexual orientation (write in)* (Duke-Williams 2021). Prior studies have shown differences in response distributions caused by response category ordering, referred to as "context effects," in a variety of survey settings (Smyth et al. 2012). However, there has been a dearth of empirical work to investigate the potential of response order effects in sexual orientation measurement.

The measurement of sexual orientation is an evolving area of survey science, with sexual minority groups in the United States representing an ever-growing number of people identifying in ways not historically measured (Jones 2022). Two recent reports, including a 2022 consensus report from NASEM and a 2023 report from the U.S. Office of Management and Budget (OMB), have offered new guidelines that seek to standardize the way sexual orientation is measured in the context of general population survey studies. The NASEM consensus report identified ordering of response categories as a priority for future research: "The panel considered whether response options could be reordered based on population prevalence, with the most commonly selected category ('straight, that is, not gay or lesbian') presented to respondents first; however, the panel decided against this approach given insufficient evidence to support it" (NASEM 2022). Our study aims to help address this gap in knowledge.

Improvements in the survey measurement of sexual orientation have broad applications in social science research. Sexual orientation refers to the dimension of sexuality involving self-identification (Gagnon and Simon 1973) and can shape a variety of social, health, and economic outcomes (Herek 2008; Bostwick et al. 2010; Puckett et al. 2016; Badgett et al. 2021; Drydakis 2022). Better measures of sexual orientation can improve estimates of sexual minority populations (i.e., those who are lesbian, gay, bisexual, etc.); help to produce more rigorous analysis on the disparities impacting sexual minority communities; and supply data to aid in the advancement of evidence-based interventions supporting sexual minority communities. Importantly, advancing best practices in sexual orientation measurement improves capabilities not only in minority population research but also in general population studies, as

measures must be valid and reliable for both sexual minorities and sexual majorities (i.e., people who are straight). That national organizations like NASEM and federal bodies like OMB have published recent guidance on sexual orientation measurement speaks to its importance as a general population concern (NASEM 2022; OMB 2023).

Our study presents results of a split-ballot experiment that varied response category ordering in a question about sexual orientation asked of a large, nationally representative sample of U.S. adults. The control group was asked the standard ordering *lesbian or gay* followed by *straight, that is, not lesbian or gay* ("lesbian/gay first group"). The treatment group was asked *straight, that is, not lesbian or gay* followed by *lesbian or gay* ("straight first group"). Order of the remaining responses (i.e., *bisexual*, *something else*, and *I don't know the answer*) was the same for both groups. Our research questions include:

(1) Does the order of response categories affect population estimates of sexual majority and sexual minority groups?
(2) Does the order of response categories affect data quality in terms of the rate of item nonresponse (i.e., skips, refusals, don't know)?
(3) Are any observed differences between experimental groups associated with respondent demographic characteristics or survey mode?

2. BACKGROUND

2.1 Theorizing Context Effects in Sexual Orientation Measurement

Investigating context effects in sexual orientation measurement has potential implications for data quality and inclusive survey design more broadly. Context effects are widely studied in survey research and refer to how design attributes like survey mode, placement of an item within a questionnaire, choice of response scales, and ordering of close-ended response categories can influence how respondents answer that item (Smyth et al. 2012; Tanur 2015). Two common forms of response order effects studied are primacy and recency effects. Primacy effects may be more common in self-administered modes when respondents "satisfice" by selecting an early but less than optimal response category (Krosnick 1999). Recency effects, more common in interviewer-administered modes, refer to respondents satisficing by selecting the last, most recently read response category (Krosnick and Alwin 1987). Thus, order effects may be evidenced by changes in distribution in the first or last response categories provided.

In sexual orientation measurement, the currently recommended response ordering (i.e., *lesbian or gay* followed by *straight, i.e., not lesbian or gay*) draws support from cognitive testing conducted in the early 2000s that found a lack of construct comparability between sexual majority and sexual minority

groups (Miller and Ryan 2011; Ridolfo et al. 2012). Compared to sexual minority groups, sexual orientation was typically not a salient aspect of identity of respondents from the sexual majority group. From a socially privileged position, sexual majority respondents generally did not describe themselves as "straight" or "heterosexual," often misunderstanding these terms, and were more easily able to "disidentify" themselves from what they perceived as stigmatized groups (e.g., "not lesbian or gay") (McCall 2003; Miller and Ryan 2011). Although "not lesbian or gay" is recognized as a reductive definition of "straight" (e.g., "straight" could also be "not bisexual") (NASEM 2022), it is still considered recommended practice for the second listed "straight" response category to accommodate the potential continued practice of disidentification.

By acquiescing to social stigma toward sexual minority groups, the currently recommended response ordering of "lesbian or gay" first as a presumed foil for "straight" second may fall short of inclusive survey measurement. Recent years have seen rapid change in public opinion toward sexual minority communities and laws and policies related to sexual minority rights—and by many indications increasing social acceptance (Flores et al. 2020; Benz et al. 2024). Such cultural shifts suggest that revisiting some of these assumptions behind response category ordering may be warranted.

2.2 Sexual Orientation Measurement and Item Nonresponse

Item nonresponse in survey research is recognized as an important indicator of data quality (Groves 1989; de Leeuw et al. 2003). In addition to the proportion of substantive responses (straight, bisexual, lesbian or gay, something else), data quality for sexual orientation measurement can be measured by the amount of nonsubstantive responses—skips, refusals, and *I don't know the answer* responses—with item nonresponse below 5.5 percent considered to be "low" (NASEM 2022). Sexual orientation item nonresponse, including refusals and *don't knows*, in large general population studies was 3.4 percent in the 2020 Behavioral Risk Factor Surveillance System, 3.4 percent in the 2020 National Health Interview Survey, and 2.7 percent in the 2022 Census Pulse (week 51).

Importantly, a response of *I don't know the answer* in this study could have multiple interpretations, including "I don't know what this question is asking;" "I understand the question, but I'm questioning how I identify;" "I don't want to provide an answer;" or an indication of response satisficing. Cognitive testing in this area suggests that meanings of "don't know" responses may differ by respondents' sexual minority status. "Don't know" responses among sexual majority respondents have been shown to indicate a lack of understanding of terminology, whereas "don't know" responses among sexual minority respondents can indicate a shifting sense of sexual orientation (Miller and Ryan 2011). Thus, in this study "don't know" could represent a substantive

response for some and a nonsubstantive or satisficing response for others. In general, "don't know" responses are investigated more in attitude and opinion questions than with identity questions (Dillman et al. 2014).

Extant research suggests that sexual orientation responses, including nonresponse, may be associated with demographic characteristics like age, race/ethnicity, sex assigned at birth, and education as well as by survey mode. One study on the longitudinal measurement of sexual orientation among adults found that change in sexual orientation self-reports was most likely to occur among young adults aged 18–34 (Hansen et al. 2024). Other studies have found that sexual minority identities are more common among people assigned female at birth compared to those assigned male at birth (Gower et al. 2022). Qualitative research in this area suggests that nonresponse may also be higher among Hispanic respondents and those with lower levels of educational attainment (Michaels et al. 2017). In terms of survey mode, sexual orientation can be considered a sensitive topic due to stigma facing sexual minority groups and may be affected by social desirability bias, particularly in interviewer-administered modes, with a respondent who may be reluctant to disclose a minority identity to an interviewer (Badgett et al. 2009) or an interviewer who may be uncomfortable with the topic (Timbrook et al. 2020).

3. METHODS

3.1 Data

This study was conducted and funded by NORC at the University of Chicago. Data were collected using the AmeriSpeak® Panel Omnibus, a biweekly multi-client survey of a nationally representative sample of U.S. adults aged 18 and older, including all 50 states and the District of Columbia. The survey included questions about other topics not included in this manuscript. At panel recruitment, randomly selected U.S. households are sampled using area probability and address-based sampling, with a known, non-zero probability of selection from the NORC National Sample Frame, providing sample coverage of approximately 97 percent of the U.S. household population (AmeriSpeak 2022).

Interviews for this survey were conducted in English by self-administered web and interviewer-administered phone between October 20 and November 21, 2022, with a survey completion rate of 17.9 percent and response rate of 2.9 percent when accounting for panel recruitment, retention, and survey completion rates (AAPOR Response Rate 3). Most interviews were completed by web, except for panelists who expressed preference for phone surveys and provided phone numbers at empanelment. Omnibus data were weighted to 2022 Current Population Survey benchmarks developed by the US Census Bureau and are balanced by sex, age, education, race/ethnicity, and region. See

Lesbian/gay first group (control) (current recommended order)	Straight first group (treatment) (experimental order)
1. Lesbian or gay/Gay*	1. Straight, that is, not lesbian or gay/Straight, that is, not gay†
2. Straight, that is, not lesbian or gay/Straight, that is, not gay†	2. Lesbian or gay/Gay*
3. Bisexual	3. Bisexual
4. Something else	4. Something else
5. I don't know the answer/You don't know the answer‡	5. I don't know the answer/You don't know the answer‡

*Response option is customized by respondent gender (e.g., cisgender and transgender women see *lesbian or gay*; cisgender and transgender men see *gay*)

†Response option is customized by respondent gender (e.g., cisgender and transgender women see *straight, that is not lesbian or gay*; cisgender and transgender men see *straight, that is, not gay*)

‡ Response option is customized by survey mode (e.g., respondents answering by web see *I don't know the answer*; respondents answering by telephone are asked *You don't know the answer*).

Figure 1. Sexual Orientation Response Option Order by Experimental Group—AmeriSpeak Omnibus Survey, United Status, October 20–November 21, 2022.

Appendix A in the supplementary data online for Preferred Reporting Items for Complex Sample Survey Analysis (PRICSSA).

3.2 Measures and Experimental Design

Sexual orientation was gathered using an item that asked "The next question is about sexual orientation. Which of the following best represents how you think of yourself?" Responses were *lesbian or gay*; *straight, that is, not lesbian or gay*; *bisexual*; *something else*; and *I don't know the answer*. The item could be skipped and did not include an open-ended response option. In a split-ballot experimental design, respondents were randomly assigned to one of two groups. The lesbian/gay first group was asked the standard ordering of *lesbian or gay* followed by *straight, that is not lesbian or gay*. The straight first group was asked *straight, that is, not lesbian or gay* followed by *lesbian or gay*. The order of the remaining response categories was the same for both groups. See figure 1 for a comparison of the lesbian/gay first and straight first groups.

If response options were listed by population prevalence, the response category *bisexual* should have been listed second as the largest sexual minority group (Copen et al. 2016). However, for the purposes of the experimental measure, we placed *lesbian or gay* second because of the use of *not lesbian or gay* in the definition of straight (the first response option) and since presenting *lesbian or gay* and *straight* before *bisexual* can provide context to help understand what is meant by bisexual. Question wording for other key items used in the analysis is provided in Appendix B in the supplementary data online.

3.3 Analytic Approach

To answer research questions 1 and 2, we used χ^2 test of independence to determine whether there was an overall relationship between response category ordering and sexual orientation estimates. We used test of proportions to identify potential differences in proportions within response categories by experimental group. To answer research question 3, we used multinomial logistic regression to examine the relationship between sexual orientation and demographic and survey characteristics, allowing for the comparison of probabilities across multiple outcomes simultaneously. In multinomial regression, the probability $p\ (Y = k \mid \mathrm{X})$ of the categorical outcome variable Y taking on category k given the predictor variables $X = (X_1, X_2, \ldots, X_p)$ is modeled as:

$$p\ (Y = k \mid X) = \frac{\exp\left(\beta_{0k} + \beta_{1k}X_1 + \cdots + \beta_{pk}X_p\right)}{1 + \sum_{l=1}^{K-1} \exp\left(\beta_{0l} + \beta_{1l}X_1 + \cdots + \beta_{pl}X_p\right)}$$

where K is the number of categories in Y, $\beta_{0\mathrm{k}}$ are the intercept parameters for category k, and β_{jk} are the coefficients associated with predictor $\mathrm{X_j}$ for category k (Agresti 2007).

Analyses were conducted in SPSS 29.0 using the Complex Samples software to account for AmeriSpeak's complex sample design. Percentages presented are based on weighted data, whereas counts are based on unweighted data. Results were considered significant if $p < .05$.

4. RESULTS

4.1 Sample Characteristics

The sample for this analysis included 2,099 responses. Sample demographic characteristics and survey mode are summarized by experimental group in table 1. There were no significant differences between experimental groups by age, race/ethnicity, sex, education or survey mode, as expected from the split-ballot randomization.

4.2 Differences in Sexual Orientation Responses by Experimental Group

Results show a significant relationship between response order and sexual orientation estimates, $\chi^2\ (4, n = 2{,}099) = 13.700$, $p = .018$. Differences in proportions by experimental group are presented in table 2 to analyze whether there were significant differences for each response. Compared to the lesbian/gay first, the straight first group showed a significant decrease in proportion

Table 1. Sample Characteristics by Experimental Group (n = 2,099)

Demographic characteristics	Total sample, % (n)	Lesbian or gay listed first (control), % (n)	Straight listed first (treatment), % (n)
Age			
18–34	28.7% (535)	29.2% (256)	28.3% (279)
35–54	31.2% (633)	30.8% (314)	31.5% (319)
55+	40.1% (931)	40.0% (461)	40.3% (470)
Race/ethnicity			
White, non-Hispanic	62.0% (1,370)	61.2% (658)	62.7% (712)
Black, non-Hispanic	12.1% (245)	12.7% (127)	11.5% (118)
Hispanic	17.2% (322)	16.3% (152)	18.0% (170)
Another race/ethnicity	8.8% (162)	9.8% (94)	7.8% (68)
Sex			
Male	48.6% (1,013)	48.7% (504)	48.6% (509)
Female	51.4% (1,086)	51.3% (527)	51.4% (559)
Education			
High school equivalent or less	38.6% (479)	36.6% (225)	40.4% (254)
Some college/associate degree	26.3% (839)	27.0% (421)	25.7% (418)
Bachelor's degree	19.8% (438)	20.8% (214)	18.8% (224)
Postgrad study/professional degree	15.4% (343)	15.7% (171)	15.1% (172)
Survey mode			
Phone	8.6% (171)	7.7% (79)	9.4% (92)
Web	91.5% (1,928)	92.4% (952)	90.6% (976)

NOTE.—AmeriSpeak Omnibus Survey, United States, October 20–November 21, 2022 (weighted percentages, unweighted ns).

for *I don't know the answer* from 2.5 percent to 0.9 percent ($p = .005$). Differences in proportions were not significant for the remaining responses.

4.3 Relationship between Sample Characteristics and Sexual Orientation Responses

To better understand associations between sample characteristics and sexual orientation responses, we estimated a series of multivariate multinomial logistic regression models with age, race/ethnicity, sex, education, survey mode, and experimental group as predictors. Sex rather than gender identity was used due to small cell size considerations for gender minority respondents. Results are presented in table 3. Young adulthood (age 18–34) was predictive of all sexual minority and *don't know* responses (*lesbian or gay* OR: 2.4, 95 percent CI: 1.2–4.6; *bisexual* OR 19.9, 95 percent CI: 8.9–44.2; *something else* OR: 9.4, 95 percent CI: 2.5–35.7; *I don't know the answer* OR 8.8, 95 percent CI:

Table 2. Sexual Orientation Response Distributions by Experimental Group

	Lesbian or gay listed first (control; $n = 1{,}031$)	Straight listed first (treatment; $n = 1{,}068$)	Total ($n = 2{,}099$)	Δ	*p*-value
Lesbian or gay/gay	4.0% (41)	3.0% (35)	3.5% (76)	–0.010	.213
Straight, that is, not lesbian or gay/ straight, that is, not gay	86.8% (905)	88.2% (948)	87.2% (1,853)	0.016	.274
Bisexual	4.8% (46)	6.3% (61)	5.6% (107)	0.016	.110
Something else	1.4% (14)	1.4% (12)	1.4% (26)	–0.002	.657
I/you don't know the answer	2.5% (18)	0.9% (8)	1.7% (26)	–0.016	.005
Skips/refusals	0.6% (7)	0.2% (4)	0.4% (11)	–0.004	.156

NOTE.—AmeriSpeak Omnibus Survey, United States, October 20–November 21, 2022 (weighted percentages, unweighted ns).

3.3–23.8). Middle adulthood (age 35–54) was also predictive of bisexual responses (OR 5.6, 95 percent CI: 2.2–14.5) in addition to being male (OR 0.5, 95 percent CI: 0.3–1.0) and having a high school degree or less (OR 2.8, 95 percent CI: 1.2–6.5). Race/ethnicity, survey mode, and experimental group were not predictive of sexual orientation responses. Experimental group was marginally significant ($p = .067$) relative to *don't know* responses when tested separately, but was not significant in the final model when controlling for demographic characteristics and survey mode. Furthermore, models with interactions between experimental group and demographic characteristics did not show any significant interaction effects so are not shown.

5. DISCUSSION

Our study contributes to the research on sexual orientation measurement by testing whether ordering response categories by population prevalence can make survey practice more inclusive and also improve data quality. Overall, our results indicate that there was a lower proportion selecting *don't know* when ordering by population prevalence (0.9 percent versus 2.5 percent) and lower overall item nonresponse when compared with other national survey data that listed lesbian or gay as the first response option (1.1 percent versus 2.7–3.4 percent). The lower proportion of *don't know* responses in the lesbian/gay first group could be an indication of sexual majority respondents reading

Table 3. Multinomial Logistic Regression Predicting Sexual Orientation Responses, With *Straight* as the Reference Outcome (n = 2,088)

Demographic and survey characteristics	*Lesbian or gay* OR (CI)	*Bisexual* OR (CI)	*Something else* OR (CI)	*I don't know the answer* OR (CI)
Age				
18–34	2.4** (1.2, 4.6)	19.9*** (8.9, 44.2)	9.4*** (2.5, 35.7)	8.8*** (3.3, 23.8)
35–54	0.8 (0.4, 1.6)	5.6*** (2.2, 14.5)	2.5 (0.8, 8.4)	1.2 (0.4, 4.0)
55+	*Ref*	*Ref*	*Ref*	*Ref*
Race/ethnicity				
White, non-Hispanic	1.7 (0.6, 5.0)	0.9 (0.4, 2.4)	0.4 (0.1, 2.2)	1.5 (0.3, 6.4)
Black, non-Hispanic	0.6 (0.1, 2.5)	0.6 (0.2, 1.7)	0.3 (0.0, 3.2)	0.4 (0.1, 3.0)
Hispanic	1.5 (0.4, 6.0)	1.1 (0.4, 3.1)	0.7 (0.1, 3.6)	3.0 (0.6, 15.1)
Another race/ethnicity	*Ref*	*Ref*	*Ref*	*Ref*
Sex				
Male	1.7 (0.8, 3.4)	0.5** (0.3, 1.0)	0.9 (0.4, 2.4)	0.7 (0.2, 2.0)
Female	*Ref*	*Ref*	*Ref*	*Ref*
Education				
High school equivalent or less	0.7 (0.3, 1.7)	2.8** (1.2, 6.5)	2.7 (0.6, 12.8)	1.2 (0.3, 4.4)
Some college/associate degree	0.9 (0.4, 1.9)	2.0 (0.9, 4.5)	2.5 (0.5, 12.0)	0.9 (0.2, 3.2)

Continued

Table 3. Multinomial Logistic Regression Predicting Sexual Orientation Responses, With *Straight* as the Reference Outcome (*n* = 2,088) (*continued*)

Demographic and survey characteristics	*Lesbian or gay* OR (CI)	*Bisexual* OR (CI)	*Something else* OR (CI)	*I don't know the answer* OR (CI)
Bachelor's degree	0.8 (0.4, 1.8)	1.8 (0.8, 4.2)	0.8 (0.1, 4.9)	0.9 (0.2, 4.1)
Postgrad study/professional degree	*Ref*	*Ref*	*Ref*	*Ref*
Survey mode				
Phone	0.8 (0.2, 2.9)	0.4 (0.1, 3.2)	2.3 (0.4, 14.2)	3.8 (1.0, 15.2)
Web	*Ref*	*Ref*	*Ref*	*Ref*
Experimental group				
Lesbian/gay first	1.3 (0.7, 2.3)	0.7 (0.4, 1.2)	1.1 (0.4, 3.0)	2.6 (0.9, 7.6)
Straight first	*Ref*	*Ref*	*Ref*	*Ref*

NOTE.—AmeriSpeak Omnibus Survey, United States, October 20–November 21, 2022 (weighted) (skips/refusals were excluded from multinomial logistic regression due to small cell counts).
Nagelkerke R^2=0.168.
**Significance at $p < .05$.
***Significance at $p < .01$.

lesbian or gay and assuming the question does not apply to them, consistent with qualitative research in this area (McCall 2003; Miller and Ryan 2011).

However, this difference in *don't know* responses was not significant after controlling for key demographics and survey mode in the multinomial models, where age was the strongest predictor of sexual orientation response. Young adults had higher odds of reporting *don't know* responses in both experimental groups, indicating that some *don't knows* may capture fluidity or a change in sexual orientation, as opposed to respondents who were uncertain or who were satisficing, based on quantitative research in this area (Hansen et al. 2024). That young adulthood was predictive of all sexual minority responses emphasizes the continued importance of age cohort considerations in sexual orientation measurement. This research also suggests that the order of categories may be especially important for younger age groups who are more likely to select *don't know* and sexual minority groups.

Advancements in the measurement of sexual orientation, such as those outlined here, have urgent implications for improving our understanding of sexual orientation in the population and intervening on the disparities that impact sexual minority groups. This research was conducted using an omnibus survey of 2,000 respondents in a probability panel with only English-speaking respondents, where the cumulative survey response rate was 2.9 percent. Additional studies should test these order differences with larger samples, in surveys with higher response rates, and in other survey modes and languages. Additional work could also explore expanded multinomial models to explore whether other predictors should be considered. Future research into context effects in sexual orientation measurement may test listing *bisexual* second based on population prevalence and presenting *straight* with and without the phrase *that is, not lesbian or gay*. A limitation of this study is that we did not consider other dimensions of sexuality (e.g., attraction, behavior) or other potential components of context effects, such as placement of sexual orientation items within the questionnaire. We also note that the current study predates some of the most recent guidance on sexual orientation measurement, including the recommended use of a *I use a different term [free-text]* response category (OMB 2023). It is an open empirical question as to how the addition of an open-text category may impact response order effects.

SUPPLEMENTARY MATERIALS

Supplementary materials are available online at academic.oup.com/jssam.

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