Division of Research and Methodology Research Memo

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Title: Findings from a series of National Survey of Family Growth (NSFG)-related experiments on the

National Center for Health Statistic's Research and Development Survey, Round 6.

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Abstract:

Objective. The purpose of this memo is to describe and discuss the National Survey of Family Growth (NSFG)-related question evaluation findings from the National Center for Health Statistics' (NCHS) Research and Development Survey 6 (RANDS 6). A series of split sample experiments and embedded cognitive probes were used to evaluate four research questions across three content areas of NSFG: religion, contraceptive methods, and sex education.

Methods. RANDS 6 was conducted in August 2022 by NORC at the University of Chicago (NORC) using AmeriSpeak, their statistically sampled survey panel of civilian non-institutionalized American adults. A total of 3,135 panelists were sampled, leading to 2,312 complete responses for a completion rate of 73.8% and a weighted cumulative response rate of 12.9%.

Results. Only limited differences were found between questions asking about the religion in which a respondent was raised and their current religion across two approaches to formatting the questions' answer categories. Few significant differences in response emerged between respondents who received optional or embedded definitions of "religious services" and "religion." Statistically significant differences were found in the estimates of lifetime contraceptive methods use obtained from a series of Yes/No questions as compared to a single, large select-all-that-apply question. Only a small number of statistically significant differences were found in the response patterns between respondents who received the sex education questions in an interleafed format and those respondents who received the same questions in a grouped format.

Conclusions. RANDS 6 was used to examine potential changes to NSFG questions and questionnaire formatting. The findings of the experiments embedded in the survey indicate that changing how the NSFG collects religion information could be simplified using a shorter set of response categories and that including definitions of terms such as "religious services" and "religion" in the question text may not be necessary to ensure data quality. Furthermore, the current approach of asking a series of Yes/No questions about contraceptive methods appears to be a better method than asking a single select-all-that-apply question. Lastly, using an interleafed format to ask questions about sex education appears to produce the same quality of data as using a grouped format to ask the same questions, and as such the findings from RANDS 6 do not support the use of one over the other.

<u>Background.</u> The National Center for Health Statistics' Research and Development Survey (RANDS) is an ongoing series of web-based commercial panel surveys developed and used for methodological research (https://www.cdc.gov/nchs/rands) by NCHS' Division of Research and Methodology (DRM) [1]. This report focuses on one specific round of RANDS, RANDS 6, which was fielded in 2022. In addition to content designed for DRM's own research purposes, the RANDS 6 questionnaire included content from the National Survey of Family Growth (NSFG, https://www.cdc.gov/nchs/nsfg/index.htm), currently run by NCHS' Division of Health Interview Statistics (DHIS). DRM and DVS staff collaborated to develop the RANDS 6 questionnaire to explore a series of methodological questions related to questionnaire design.

Previous Question Evaluation Research.

DVS has previously collaborated with NCHS' Collaborating Center for Questionnaire Design and Evaluation Research (CCQDER) to evaluate various NSFG content, including the life history calendar, sexual activity, pregnancy, contraceptive use, marriage and cohabitation, living away from home before age 18, religion, male use of health services, cervical cancer screening, and sex education [2][3]. Following these qualitative evaluations, DRM and DVS collaborated to develop a questionnaire for RANDS 6 that focused on five of these areas: religion, female contraceptive use, sex education, cervical cancer screening, and male use of health services. Of these five conceptual sections, the first three were evaluated for measurement properties using experimental designs and/or embedded probing and are discussed in this report. The latter two sections, cervical cancer screening, and male use of health services, were included on the questionnaire but did not include any question evaluation experiments or probe items; they were included to judge overall feasibility of administering these sections in a self-report web mode. Tables presenting both national and sub-group estimates from these sections are included in the Appendix (Tables 1 through XXXVII), but these data and findings are not discussed further in this report.

Research Questions.

A series of research questions guided the methodologies used when designing the evaluations of the three questionnaire sections. Most of these research questions relate to changes in how questions and their answer categories could be formatted and presented in a web-based self-administered mode. Through 2019, NSFG was an in-person, interviewer-administered survey (with a separate component of computer-assisted self-administration for the more sensitive items). As of 2022, NSFG has transitioned to a multimode survey with both in-person, interviewer administered and online self-administered modes available to respondents. RANDS 6 was conducted with a goal of understanding the impacts of this change in data collection methodology on the measurement properties of questions.

<u>Religion</u>. Two separate methodological research questions stemmed from the religion section of the RANDS 6 questionnaire:

- Research Question 1: How does the organization of the list of religious affiliations potentially affect response to the questions about what religion a respondent was raised in and what religion a respondent is currently affiliated with?
- Research Question 2: Does including a definition of "religious services" to question text affect response?

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For the first question, the previous CCQDER cognitive interviewing work examined whether and how to best group Protestant denominations together in the answer categories of the survey items asking about what religion respondents were raised in and what their current religious affiliation is. The NSFG's approach to collecting these data up to 2019 was to ask an initial question with a series of answer categories that included nine of the most common religions as well as a "None" and an "Other" category. Respondents who answered "Other" were then asked a follow-up question with an additional 18 categories. Six of the 11 categories in the initial question, as well as ten of the 18 categories in the follow-up question are Protestant denominations. The cognitive interviewing findings indicated that an overall "Protestant" category could work well to capture and categorize these respondents, and RANDS 6 was designed in part to understand whether this is the case on the scale of a national sample instead of a purposive, qualitative one.

Research Question 2 relates to whether including the definition of either "religious services" or "religion" in the primary question text impacted the response to survey items asking about the frequency of attending religious services both when the respondent was 14 years old and currently, and the importance of religion in their life. As surveys such as the NSFG change their data collection mode from an interviewer-only to either self-response web-only or a mixed mode approach (such as what the NSFG began in 2022), how question text and designs can be modified to take advantage of the features afforded by web surveys needs to be explored. One potential benefit of web surveys is the ability to reduce on-screen text by including optional help text either through a clickable link or a hovering text bubble accessible when a respondent moves their cursor over an icon (typically a "?") on the screen. However, the risk of relegating definitions from the base question text to optional text is that not all respondents will see the information and question interpretation (and thus the resulting estimates) may change.

<u>Contraceptive Methods.</u> The contraceptive methods section of RANDS 6, which was administered only to female respondents, included one methodological research question:

• **Research Question 3:** Does collecting data regarding the use of contractive methods via a select-all-that apply approach instead of a set of individual Yes/No questions affect response?

NSFG collects a variety of information about contraceptive use including information on whether female respondents have ever used any of a series of contraceptive methods. Currently, NSFG collects this information using a series of 14 single-choice Yes/No questions (with a multiple-choice question at the end of the series for an additional set of less-frequently used methods). An alternative approach would be to ask respondents a select-all-that apply choice question instead, which would reduce the total number of questions a respondent receives but potentially increase cognitive burden and satisficing (that is, answering survey items as quickly as possible without taking the time to fully think through a response) as respondents are being asked to recall more information [4].

<u>Sex Education.</u> The sex education section of the questionnaire was used to answer one final methodological research question:

• **Research Question 4:** Does collecting sex education data using an interleafed approach versus a grouped approach affect response?

In interleafed formatting, follow-up questions are administered directly following filter questions; in grouped formatting, follow-up questions follow a series (or "group") of filter questions. Given that a switch to a self-administered web mode from an interviewer-administered mode allows surveys such as NSFG the potential to decrease burden by using grouped formatting, the goal of this research question is to understand some of the implications of making this formatting change.

Methods.

Data.

RANDS 6 was conducted by NORC at the University of Chicago (https://www.norc.org/) for NCHS using their AmeriSpeak Panel. AmeriSpeak is a probability-based panel of survey respondents that NORC recruits using an address-based sample from their proprietary national address frame. The AmeriSpeak Panel includes adults aged 18 and over (in comparison to the universe for the NSFG itself which is designed to be representative of Americans between age 15 and 49). For RANDS 6, 3,135 panelists were sampled, with 2,312 respondents providing complete, valid responses, resulting in a 73.8% completion rate and an overall weighted cumulative response rate of 12.9%. Responses were collected during the field period of August 10, 2022 to August 29, 2022. The survey was administered either via a web instrument or by a telephone interviewer, depending on the mode preference of the panelist. Of the complete cases, 2,085 were collected via the web and 227 were collected over the phone. RANDS 6 public-use data and documentation are available online (https://www.cdc.gov/nchs/rands/rands6.htm); data are also available via NCHS' Research Data Center (https://www.cdc.gov/rdc/index.htm).

Survey Questionnaire.

Questions on religion, contraceptive methods, sex education, male use of health services, and cervical cancer screening were developed by NSFG staff and were fielded on the RANDS platform. Beyond these NSFG questions the questionnaire included items included for adjusting sample weights to the NCHS National Health Interview Survey (NHIS) and for evaluating the weighting methods. Additionally, the questionnaire included sections of questions related to discrimination and gender identity for unrelated measurement work conducted by CCQDER. The questionnaire is available online (https://www.cdc.gov/nchs/rands/rands6.htm).

Research Design and Outcome Metrics.

Respondents were assigned to conditions for each of the four split sample experiments corresponding to the methodological research questions independently and at the point of sampling from the panel into the RANDS 6 sample. Assignment to each was based on a random number generator.

<u>Research Question 1.</u> To answer Research Question 1, a split sample experiment was embedded in RANDS 6 that randomly assigned sampled panelists to one of two conditions using a random number generator. The question texts for both conditions are identical, asking respondents "In what religion were you raised, if any?" or "What religion are you now, if any?" for the question about the religion raised in and current religion, respectively. The variation between the conditions is found in the list of answer categories. One condition

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mirrors the NSFG approach used through 2019 (referred to throughout as the "Original Format" and presents respondents with a list of religions including:

- None
- Catholic
- Jewish
- Southern Baptist
- Baptist
- Methodist or African Methodist
- Lutheran
- Presbyterian
- Episcopal or Anglican
- Church of Jesus Christ of Latter Day Saints, also known as LDS/Mormon]
- Other

Respondents who answered "Other," were then presented with another list (again with the prompt "In what religion were you raised" or "What religion are you now, if any") that includes 17 additional religious affiliations as well as an "Other, specify" option:

- Assemblies of God
- Church of Nazarene
- The Church of God
- The Church of God (Cleveland, TN)
- The Church of God in Christ
- 7th Day Adventist
- United Pentecostal Church
- Pentecostal Assemblies
- Jehovah's Witness
- Christian, another denomination not listed
- Christian, no specific denomination
- Unitarian-Universalist
- Greek Orthodox
- Other Orthodox
- Muslim
- Buddhist
- Hindu
- Other, specify

Based on research conducted by CCQDER for NSFG, the second condition (referred to throughout as the "Revised Format") included only one question and grouped Protestant Christian denominations together using the following answer categories:

- Protestant (for example: Christian-no denomination, Baptist, Methodist, Lutheran, Presbyterian, Pentecostal, Episcopalian, and others)
- Catholic
- Church of Jesus Christ of Latter Day Saints, also known as LDS/Mormon]
- Jewish (Judaism)
- Muslim (Islam)
- Buddhist
- Hindu
- Other religion, please specify
- No religion (agnostic, atheist)

While the Protestant denominations were grouped together in this alternative version of the question, help text was available (either through a hover-text help screen listing examples for web respondents or the option for telephone interviewers to provide help text if asked) that listed the larger set of affiliations. This text read "Protestant denominations include: Assemblies of God, Baptist, Christian - another denomination, Christian - no specific denomination, Church of Nazarene, Congregational Church of Christ, United Church of Christ, The Church of God, The Church of God based in Cleveland, TN, The Church of God in Christ, Disciples of Christ, Episcopal or Anglican, Holiness, Lutheran, Methodist or African Methodist, Pentecostal Assemblies, Presbyterian, Reformed, Southern Baptist, United Pentecostal Church, 7th Day Adventist."

For the purposes of analysis, respondents in the original format condition are grouped together as "Protestants" if they chose one of the affiliations noted in the help text regarding Protestant denominations that was presented to respondents in the revised format condition. Respondents who answered that their affiliations were Jehovah's Witnesses, Unitarian-Universalists, Greek Orthodox, Other Orthodox, or who answered, "Other religion, please specify" were categorized as "Other." The prevalence of the religious affiliations across the experimental groups are examined to determine whether there are differences in response based on the experimental condition.

<u>Research Question 2</u>. To address Research Question 2, another experiment was embedded across three additional questions in the religion section asking about the frequency of attending religious services when the respondent was 14 years old ("When you were 14, about how often did you usually attend religious services"), the importance of religion in their life ("Currently, how important is religion in your daily life?"), and the frequency of attending religious services currently ("About how often do you attend religious services") that determined whether or not the respondent always received the definition of "religious services" (in the first and third of these items) and "religion" (in the second of these three items). Sampled panelists were randomly assigned to one of two experimental conditions using a random number generator.

In the first condition, the definition (For religious services: "Religious services mean official worship services, but not other non-worship types of meetings or church-related events"; for religion: "Religion refers to personal religious beliefs, not necessarily to a specific organized religion") was always presented on the screen or read aloud by the telephone interviewer; in the second condition the definition was only presented via hovering text accessed by placing the cursor over a "?" symbol or by requesting the telephone interviewer provide a

definition. Respondents received the same experimental treatment across all three items. The prevalence of the response to these three items across the experimental groups are examined to determine whether there are differences in response based on condition.

In addition to the experimental design, a series of embedded, close-ended probes were administered directly following each of the three questions related to this research question. The probe used for the questions about frequency attending services was designed to capture the type of religious activity the respondents were thinking about:

In the previous question, which of the following, if any, were you thinking about when asked if you [attended religious services when you were 14/currently attend religious services]?

- 1. Worship services presided over by an ordained member of the clergy
- 2. Worship services presided over by members of the congregation
- 3. Study groups focused on religious texts, such as Bible or Torah studies
- 4. Community or recreational events sponsored by your congregation
- 5. Going to your house of worship to pray individually
- 6. Volunteer outings sponsored by your congregation
- 7. Musical events, such as performances by a choir or cantor
- 8. Something else, please specify

These patterns emerged from the previous CCQDER research [3] and based on NSFG staff's experience with the questions. Respondents could select more than one of these patterns of interpretation. For analytic purposes and based on conversations with NSFG staff and subject matter experts, the first two answer categories ("Worship services presided over by an ordained member of the clergy" and "Worship services presided over by members of the congregation") are considered "in-scope," while the next five are considered "out-of-scope." (The "Something else" category is considered separately in the analysis below, as the write-in answers have not been systematically coded as being either in- or out-of-scope.) The prevalence of the patterns of interpretation and the amount of in- versus only out-of-scope responses are examined across the experimental groups to determine whether there are differences in response based on experimental condition.

The probe used for the importance of religion question is designed to capture how respondents comprehend the term "religion", which is defined in the survey as referring to "personal religious beliefs, not necessarily to a specific organized religion."

In the previous question about the importance of religion in your life, which of the following were you mainly thinking about...

- 1. Your personal spiritual beliefs
- 2. An organized religion
- 3. Something else, please specify

These patterns of interpretation were also derived from the previous cognitive interviewing work [3]. Analytically, neither of these answer categories represent an out-of-scope pattern of interpretation, and the

analysis of this probe will simply focus on their distributions. Again, the text data in the "Something else" answer category was not systematically coded and is therefore considered separately in the analysis.

<u>Research Question 3.</u> To address Research Question 3, a split sample experiment was included that manipulated the formatting of the entire contraceptive methods section for female panelists. In the first condition, which mirrors the current NSFG approach, female respondents received 14 yes/no questions about their ever-use of different contraceptive methods followed by a single select-all item that included an additional ten methods (plus an "Other, specify" option). Respondents in the second condition instead received a single select-all-that-apply question including the full set of 25 (24 individual contraceptive methods plus an "Other Method") options. The prevalence of the response to these two approaches are examined to determine whether there are differences in response based on experimental condition.

Research Question 4. To address Research Question 4 a split sample experiment was included that manipulated which format of the sex education items the respondents received. Half of the sample received the "interleafed" condition wherein they were administered filter questions about whether they had ever received formal instruction about seven areas of sex education—saying no to sex, methods of birth control, where to get birth control, how to use a condom, sexually transmitted diseases, how to prevent HIV/AIDS, and waiting to have sex until marriage. Respondents in this condition who answered "Yes" to any of these seven filter question then immediately received a set of follow-up questions about where they received this education, what grade they were in when they first received this education, and whether this was before or after they first had sex (which was only asked of respondents who had indicated they had previously had sex in their life). Respondents in the second condition were instead presented with a "grouped" formatted section, and instead received all seven of the filter questions about whether they had received formal sex education first, and then received all the followup questions for which they were eligible. The prevalence of the response to these two are examined to determine whether there are differences in response based on the section formatting. Additionally, the total number of "endorsements," or selecting "Yes" in a binary Yes/No item format or any of the options in a selectall-that-apply item format, are calculated for the seven filter questions and the seven education location questions, and compared across the experimental conditions.

Two subjective burden questions were administered at the end of the RANDS 6 questionnaire and are used to examine whether respondents who received the various experimental conditions perceived the questionnaire as either burdensome or difficult to answer. Analysis of these questions will compare the average burden or difficulty score (from a one to five scale with one being not at all burdensome or difficulty and five being extremely burdensome or difficult) across experimental conditions.

Covariates.

In addition to experimental condition, the following independent variables were used in the analysis: binary gender, age, race and Hispanic origin, education, marital or cohabitating status, household income, metropolitan status, and having a usual place of care. Of these variables, all but usual place of care are captured by NORC as part of the initial recruitment into the AmeriSpeak panel, and were not asked about separately on RANDS 6. Age is categorized in groups of 18-29, 30-49, and 50 and older. (Note that the age range of AmeriSpeak panelists, and thus the RANDS sample, differs from that of NSFG. RANDS includes respondents aged 18 and

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over, while NSFG includes respondents between the ages of 15 and 49.) Race is categorized in groups of non-Hispanic Black, non-Hispanic Other Race, non-Hispanic White, and Hispanic. Education is categorized in groups of less than high school graduate, high school graduate, some college including associates degree, and bachelor's degree and above. Marital status is categorized in groups of married, widowed or living with a partner, divorced or separated, and never married. Household income is categorized as less than \$15K, \$15K to less than \$60K, \$60K to less than \$200K, and \$200K or greater. Both metropolitan status and having a usual place of care are binary (non-metro/metro and yes/no, respectively).

Analysis.

Unless otherwise noted, quantitative findings presented in this report are weighted. The survey weights constructed by NORC were also calibrated by NCHS to the 2020 NHIS [16]. Analysis was conducted using R and the "survey" package [5] [6], which allows estimates to be calculated that take RANDS 6's complex survey design into account.

The prevalence of the outcome variables described above were compared across experimental conditionsusing chi square tests using Rao and Scott's second-order correction [7]. Logistic regressions were conducted using a binomial distribution; analysis of variance of the regression models used Type-II Wald tests via the "Anova" function of R's "car" package [8]. Pseudo R-squares for logistic regression models were calculated using the Nagelkerke method. T-tests were used to compare continuous variables across experimental conditions. Proportions were checked for compliance with NCHS' Data Presentation Standards for Proportions (https://www.cdc.gov/nchs/data/series/sr-02/sr02_175.pdf). P-values were not adjusted for multiple comparisons, and an alpha of 0.05 is used throughout.

Findings.

Sample.

Table A presents the characteristics of the respondents by selected demographic variables.

Table A: Weighted percents (with standard errors) of selected population subgroups, adults age 18 and older, Research and Development Survey 6

Characteristic	Variable	Percent (SE)
Gender	Male	48.4 (1.5)
	Female	51.6 (1.5)
Education	Less than High School Graduate	9.5 (1.2)
	High School Graduate	28.4 (1.5)
	Some College, including Associate Degree	27.3 (1.2)
	Bachelor's Degree or Above	34.8 (1.4)
Race/Ethnicity	Black, non-Hispanic	11.7 (1.1)
	Other, non-Hispanic ¹	8.6 (1.0)
	White, non-Hispanic	62.8 (1.7)
	Hispanic	16.9 (1.1)

Age	18 to 29	19.5 (1.2)
	30 to 39	18.1 (1.2)
	40 to 49	15.6 (1.0)
	50 or Older	46.8 (1.4)
Marital Status	Married, Widowed, or Living with a Partner	54.4 (1.4)
	Divorced or Separated	13.5 (1.0)
	Never Married	32.1 (1.3)
Household Income	Less than \$15,000	10.6 (1.0)
	\$15,000 to \$59,999	35.3 (1.1)
	\$60,000 to \$199,999	48.4 (1.3)
	\$200,000 or more	5.7 (0.7)
Metropolitan Status	Non-Metro Area	16.4 (1.0)
	Metro Area	83.6 (1.0)
Usual Place of Care²	Yes	84.6 (1.3)
	No	15.3 (1.3)

Footnote: ¹ "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

Source: National Center for Health Statistics, Research and Development Survey 6, 2022

Research Question 1.

Tables showing the prevalence of Protestantism, Catholicism, Judaism, Mormonism, Islam, Hinduism, Buddhism, Other Religions, and No Religion for the population and for selected covariates by the experimental conditions are available for both religion raised (Table 1) and current religion (Table 2). Table B shows the prevalence of being raised in each religion, overall and within each experimental condition, as well as the results of chi-square tests comparing the conditions. Table C shows the prevalence of current religious affiliation, overall and within each experimental condition, as well as the results of chi-square tests comparing the conditions.

Table B: Weighted percents (with standard errors) of religion in which a person was raised in, adults age 18 and older, overall and by formatting experimental condition, Research and Development Survey 6

Religion Raised	Combined Sample Percent (SE)	Original Format Only Percent (SE)	Revised Format Only Percent (SE)	p-value ¹
Catholicism	29.2 (1.5)	27.8 (2.0)	30.6 (1.6)	0.191
Protestantism	48.1 (1.6)	48.2 (1.9)	48.1 (2.2)	0.984
Judaism	1.6 (0.4)	1.5 (0.4)	1.6 (0.6)	0.846

 $^{^2}$ Does not sum to 100% as there was $\sim 0.1\%$ missing data for this survey item. **Note**: Total number of complete cases: n = 2,312. "SE" refers to standard error.

Islam	1.1 (0.4)	1.0 (0.6)	1.2 (0.6)	0.815
Buddhism	1.2 (0.4)	1.0 (0.4)	1.3 (0.5)	0.591
Hinduism	0.8 (0.2)	0.4 (0.3)	1.2 (0.4)	0.298
Church of Latter Day Saints	1.4 (0.2)	1.6 (0.4)	1.2 (0.3)	0.406
Other Religion	4.3 (0.5)	5.9 (0.8)	2.8 (0.6)	Less than 0.01
No Religion	14.4 (0.9)	15.3 (1.5)	13.6 (1.3)	0.396

Footnote: ¹ p-values based on a second-order chi-squared test of independence between the religion in which a person was raised in and the experimental condition

Note: Total number of complete cases: n = 2,312. "SE" refers to standard error.

Source: National Center for Health Statistics, Research and Development Survey 6, 2022

Table C: Weighted percents (with standard errors) of current religion, adults age 18 and older, overall and by formatting experimental condition, Research and Development Survey 6

	Combined Sample	Original Format Only	S	
Current Religion	Percent (SE)	Percent (SE)	Percent (SE)	p-value ¹
Catholicism	17.2 (1.1)	15.2 (1.6)	19.0 (1.5)	0.072
Protestantism	40.0 (1.6)	39.8 (2.2)	40.2 (2.2)	0.901
Judaism	1.3 (0.3)	1.3 (0.4)	1.2 (0.4)	0.834
Islam	0.9 (0.4)	0.7 (0.5)	1.1 (0.6)	0.635
Buddhism	1.2 (0.3)	0.5 (0.3)	1.8 (0.5)	Less than 0.05
Hinduism	0.9 (0.3)	0.7 (0.3)	1.0 (0.4)	0.375
Church of Latter Day Saints	1.8 (0.7)	2.7 (1.5)	1.0 (0.2)	0.093
Other Religion	5.6 (0.7)	6.8 (1.0)	4.5 (0.7)	Less than 0.05
No Religion	29.8 (1.4)	30.9 (1.7)	28.7 (2.0)	0.376

Footnote: ¹ p-values based on a second-order chi-squared test of independence between current religion and the experimental condition

Note: Total number of complete cases: n = 2,312. "SE" refers to standard error.

Source: National Center for Health Statistics, Research and Development Survey 6, 2022

For the religion raised in question, only the estimate of "Other Religion" differed across the two experimental conditions, while for the current religion question the only differences were seen in the "Buddhism" and "Other Religion" estimates. The "Other Religion" category includes not only the specific "Other, specify" responses, but also the Jehovah's Witnesses, Unitarian-Universalists, Greek Orthodox, and Another Orthodox responses in the first experimental condition. However, when directly comparing the "Other, specify" categories across the two experimental conditions (and thus excluding the Jehovah's Witnesses, Unitarian-Universalists, Greek Orthodox, Other Orthodox responses) for either religion construct, no significant differences were found (religion raised: F = 0.3; p-value = 0.559, current religion F = 0.1, p-value = 0.802 [not shown]).

Research Question 2.

The estimates of attendance at religious services at age 14 for the population are found in Table 3. The estimates of importance of religion in current life for the population are found in Table 4. The estimates of current attendance at religious services are found in Table 5. No statistically significant differences were observed across experimental condition on whether or not the respondent always saw or had the option of receiving the definitions for these three survey items (p= 0.511, 0.358, and 0.162 respectively based on second-order Rao-Scott tests).

The probes for both the items regarding frequency of attendance at age 14 and current frequency of attendance asked respondents to indicate how they interpreted the term "religious services". Table D presents the distribution of the patterns of interpretation by experimental condition for the question about attendance at age 14, while Table E presents the same for the question about current attendance.

Table D: Weighted percents (with standard errors) of patterns of interpretation used when answering question regarding attending religious services at age 14, adults age 18 and older, by definition text experimental condition, Research and Development Survey 6

	Optional Text	Always Displayed	
Interpretation	Percent (SE)	Percent (SE)	p-value ¹
Clergy Worship Service	63.0 (2.2)	57.2 (1.8)	0.067
Lay Worship Service	31.9 (1.9)	32.6 (1.8)	0.749
Study Group	23.3 (2.0)	25.1 (1.4)	0.521
Community Events	20.3 (1.5)	18.7 (1.7)	0.482
Individual Prayer	16.3 (1.6)	14.9 (1.4)	0.437
Volunteer Outings	13.2 (1.5)	11.7 (1.3)	0.520
Musical Events	16.7 (1.6)	16.7 (1.6)	0.989
Something Else	8.8 (1.1)	7.0 (0.9)	0.200

Footnote: ¹ p-values based on a second-order chi-squared test of independence between the two experimental formats. **Note:** Total number of complete cases: n = 2,312. "SE" refers to standard error. **Source:** National Center for Health Statistics, Research and Development Survey 6, 2022

Table E: Weighted percents (with standard errors) of patterns of interpretation used when answering question regarding current religious service attendance, adults age 18 and older, by definition text experimental condition, Research and Development Survey 6

	Optional Text	Always Displayed	
Interpretation	Percent (SE)	Percent (SE)	p-value ¹
Clergy Led Worship Service	54.9 (2.2)	56.5 (2.4)	0.631
Lay Led Worship Service	34.3 (1.6)	37.1 (1.7)	0.233
Study Group	21.0 (1.8)	19.6 (1.4)	0.514
Community Events	15.2 (1.1)	16.2 (1.9)	0.635
Individual Prayer	26.6 (1.9)	20.5 (1.5)	Less than 0.01
Volunteer Outings	14.4 (1.2)	13.7 (1.5)	0.716

Musical Events	15.6 (1.5)	15.3 (1.5)	0.857
Something Else	10.0 (0.9)	8.0 (1.1)	0.115

Footnote: 1 p-values based on a second-order chi-squared test of independence between the two experimental formats. **Note:** Total number of complete cases: n = 2,312. "SE" refers to standard error.

Source: National Center for Health Statistics, Research and Development Survey 6, 2022

The only pattern that showed any significant difference across the two conditions was that respondents who were always shown the definition of a religious service reported counting "individual prayer" less frequently when answering about their current attendance than the respondents who were given the option of receiving the definition.

When comparing the use of any in-scope pattern ("Clergy Led Worship Service" and "Lay led worship service") versus the use of only out-of-scope patterns (all other patterns besides the clergy and lay led worship services), there was no significant difference in the distribution of the in-scope and out-of-scope patterns across the experimental conditions for either survey item (p-value = 0.483 and p-value = 0.349 for the age 14 and current attendance items, respectively [not shown]).

To examine whether attendance impacts how respondents interpret these items. A set of unadjusted logistic regressions were conducted to determine whether a respondent's use of only an out-of-scope pattern of interpretation related to attendance at religious services (either at age 14 or currently). The results of these regressions indicate that the likelihood of using an only out-of-scope interpretation does not depend on the respondent's answer to the actual survey items regarding attendance either at age 14 (Odds Ratio (OR) = 0.989, 95% Confidence Interval (CI) = (0.959, 1.020), not shown) or currently (OR = 0.974, 95% CI = (0.925, 1.025), not shown). A series of two adjusted logistic regressions evaluating the impact of the help text experimental condition, gender, age, education, race/ethnicity, income, and marital status alongside the responses to the attendance questions on only interpreting the items with an out-of-scope pattern were also conducted (Tables F and G, respectively). These results indicate that in the attendance at age 14 question education and race were significant predictors of only using an out-of-scope pattern of interpretation (Table F), while race and income were significant predictors of only using an out-of-scope interpretation in the current attendance question (Table G).

Table F: Results of a multiple logistic regression analysis relating the use of only out-of-scope patterns of interpretation with attendance at religious services at age 14, the help text experimental condition, and selected demographic characteristics, adults age 18 and older, Research and Development Survey 6.

Variable	OR	CI 2.5	CI 97.5	χ ²	p-value
Attendance at Age 14	1.0	1.0	1.0	0.5	0.50
Help Text Experimental Condition ¹	3.6	0.06			
Always Displayed	1.4	1.0	2.0		
Gender ²				0.0	0.99
Female	1.0	0.7	1.4		
Age ³	Age^3				

30-39	1.1	0.7	2.0		
40-49	0.8	0.4	1.4		
50+	0.9	0.5	1.6		
Education ⁴				41.6	Less than 0.001
High School Graduate	0.7	0.4	1.2		
Some College, including Associate Degree	0.4	0.2	0.7		
Bachelor's Degree or Above	0.2	0.1	0.4		
Race/Ethnicity ⁵	1			21.1	Less than 0.001
Black, non-Hispanic	1.4	0.9	2.2		
Other, non-Hispanic ⁶	3.8	2.0	7.2		
Hispanic	2.0	1.3	3.0		
Income ⁷	1			6.4	0.10
\$15,000 to \$59,999	1.5	0.8	2.6		
\$60,000 to \$199,999	1.0	0.5	1.9		
\$200,000 or more	0.6	0.2	1.5		
Marital Status ⁸	1			1.5	0.47
Divorced or Separated	1.4	0.8	2.4		
Never Married	1.1	0.7	1.9		
Metropolitan Status ⁹				0.2	0.67
Metro Area	0.9	0.6	1.4		

Footnotes:

Notes: Total number of complete cases: n = 2,312. "OR" refers to odds ratio "CI 2.5" refers to the lower bound of the 95% confidence interval. "CI 97.5" refers to the upper bound of the 95% confidence interval. χ^2 statistic and p-value derived from Type II Wald test.

Source: National Center for Health Statistics, Research and Development Survey 6, 2022

Table G: Results of a multiple logistic regression analysis relating the use of only out-of-scope patterns of interpretation with current religious service attendance, the help text experimental condition, and selected demographic characteristics, adults age 18 and older, Research and Development Survey 6.

Variable	OR	CI 2.5	CI 97.5	χ^2	p-value

¹ Reference category is optional help text.

² Reference category is male.

³ Reference category is 18-29.

⁴ Reference category is less than high school.

⁵ Reference category is White, non-Hispanic.

⁶ "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

⁷ Reference category is less than or equal to \$14,999.

⁸ Reference category is married, widowed, or living with a partner.

⁹ Reference category is non-metro area.

Current Attendance	1.0	0.9	1.0	1.5	0.22
Help Text Experimental Condition ¹	, I		I	0.6	0.45
Always Displayed	0.9	0.6	1.3		
Gender ²				2.0	0.16
Female	0.8	0.5	1.1		
Age ³				7.7	0.05
30-39	1.3	0.8	2.1		
40-49	0.9	0.4	1.7		
50+	0.6	0.4	1.1		
Education ⁴				1.8	0.63
High School Graduate	1.5	0.7	3.2		
Some College, including Associate Degree	1.4	0.7	2.7		
Bachelors Degree or Above	1.3	0.6	2.6		
Race/Ethnicity ⁵				17.4	Less than 0.001
Black, non-Hispanic	1.4	0.7	2.5		
Other, non-Hispanic ⁶	3.4	1.7	6.9		
Hispanic	2.3	1.5	3.6		
Income ⁷				13.9	Less than 0.01
\$15,000 to \$59,999	0.5	0.3	0.8		
\$60,000 to \$199,999	0.4	0.2	0.6		
\$200,000 or more	0.3	0.1	0.8		
Marital Status ⁸				0.9	0.63
Divorced or Separated	1.4	0.7	2.6		
Never Married	1.0	0.6	1.8		
Metropolitan Status ⁹				0.2	0.64
Metro Area	1.1	0.7	1.9		

Footnotes:

¹ Reference category is optional help text.

² Reference category is male.

³ Reference category is 18-29.

⁴ Reference category is less than high school.

⁵ Reference category is White, non-Hispanic.

⁶ "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

⁷ Reference category is less than or equal to \$14,999.

⁸ Reference category is married, widowed, or living with a partner.

⁹ Reference category is non-metro area.

Notes: Total number of complete cases: n = 2,312. "OR" refers to odds ratio "CI 2.5" refers to the lower bound of the 95% confidence interval. "CI 97.5" refers to the upper bound of the 95% confidence interval. χ^2 statistic and p-value derived from Type II Wald test.

Source: National Center for Health Statistics, Research and Development Survey 6, 2022

While the open-text data for the "Something else, specify" response to the religious service attendance probes were not systematically coded for inclusion in the in- and out-of-scope analysis, a qualitative examination of these data show that both in-scope and out-of-scope responses appear. For instance, the open-text data from the probe for the attendance at age 14 for the respondents who had the option of seeing the definitions included examples such as "Sunday church services with a priest" (in-scope) and "Youth group," (out-of-scope) while data from the same probe from respondents who always received the definition included both "Confirmation and regular church services" (in-scope) and "Attending a private Christian school" (out-of-scope).

The other survey item included in this experiment asked respondents about the current importance of religion in their daily life. This question was only administered to respondents who did not respond "No religion" when asked what their current religion was, or who had missing data for the current religion question (this includes both item non-response and answers of "Don't Know" in telephone interviews). Table 6 presents this item's estimates across the two experimental conditions. The estimates are not significantly different across the two experimental conditions (F = 1.6, p-value = 0.209).

The probe of this survey item asked respondents how they interpreted the term "religion." The distribution of the patterns of interpretation are displayed in Table H and is not significantly different across the experimental conditions (F = 0.3, p-value = 0.872).

Table H: Weighted percents (with standard errors) of patterns of interpretation of the term "religion" used when answering question regarding current importance of religion in daily life, adults age 18 and older identifying with a religion, by definition text experimental condition, Research and Development Survey 6

	Text Optional	Text Always Provided	
Pattern	Percent (SE)	Percent (SE)	p-value ¹
Your personal spiritual beliefs	75.6 (1.9)	73.7 (1.8)	
An organized religion	19.3 (1.9)	21.6 (1.9)	0.073
Something else, please specify	3.5 (0.8)	3.6 (0.9)	0.872
Don't Know	0.4 (0.2)	0.2 (0.1)	

Footnote: ¹ p-values based on a second-order chi-squared test of independence between the responses to the survey item regarding the interpretation of the term religion for each pattern of interpretation.

Notes: Total number of eligible cases: n = 1,615. Cases of item missing data (n=10) excluded from analysis. "SE" refers to standard error.

Source: National Center for Health Statistics, Research and Development Survey 6, 2022

Table I shows the distribution of the levels of importance of religion in daily life by each pattern of interpretation. The distributions of all the patterns are significantly different across the three levels of

importance. For instance, more respondents who reported religion being very important in their daily life used the "your personal spiritual beliefs" pattern than did respondents who reported religion was not important in their daily life; the opposite trend emerged for the "an organized religion" answer to the probe with more respondents who reported religion being not important using this pattern of interpretation than people who reported religion being very or somewhat important.

Table I: Weighted percents (with standard errors) of patterns of interpretation used when answering question regarding current importance of religion in daily life, adults age 18 and older identifying with a religion, by reported important of religion in daily life, Research and Development Survey 6.

	Very Important	Somewhat Important	Not Important	
Pattern	Percent (SE)	Percent (SE)	Percent (SE)	p-value ¹
Your personal spiritual beliefs	86.2 (1.1)	71.5 (2.7)	36.2 (4.7)	Less than 0.001
An organized religion	9.6 (1.2)	26.4 (2.6)	55.3 (5.1)	Less than 0.001
Something else, please specify	4.1 (0.9)	1.5 (0.7)	7.9 (2.7)	Less than 0.01
Don't Know		0.6 (0.5)	0.5 (0.4)	Less than 0.05

Footnote: ¹ p-values based on a second-order chi-squared test of independence between the responses to the survey item regarding importance of religion in daily life for each pattern of interpretation.

Notes: Total number of eligible cases: n = 1,615. Cases of item missing data (n=14) excluded from analysis. "SE" refers to standard error. "—" indicates a quantity of zero.

Source: National Center for Health Statistics, Research and Development Survey 6, 2022

When controlling for experimental condition using a series of unadjusted logistic regression analyses, importance of religion in daily life is still a significant predictor of the probes "your personal spiritual beliefs," "an organized religion" and "something else, please specify" answer categories ($\chi^2 = 141.3$, p-value <0.001; $\chi^2 = 103.0$, p-value <0.001; $\chi^2 = 8.6$, p-value = 0.014, respectively [not shown]). However, when controlling for the experimental conditions, the effect of the importance of religion is diminished and is not a significant predictor of the "Don't know" response option ($\chi^2 = 5.2$, p-value = 0.074 [not shown]).

Research Question 3.

The estimates for the 14 contraceptive methods whose formatting varied across the two experimental conditions are presented in Tables 7 through 20. Table J presents the results of chi square tests comparing the estimates of all 25 of the contraceptive method across the two experimental conditions.

Table J: Results of second order Rao Scott chi square tests comparing the estimates for each contraceptive method, women age 18 and older, by contraceptive methods formatting experimental, condition, Research and Development Survey 6

Birth Control Method	F statistic	p-value ¹
Birth Control Pills ²	0.6	0.426

Partner with a condom ³	32.6	Less than 0.001
Partner Vasectomy ³	13.2	Less than 0.001
Depo-Provera ²	4.2	Less than 0.05
Partner withdrawal ³	19.3	Less than 0.001
Calendar Rhythm Method ³	8.1	Less than 0.01
Cycle Beads ³	16.3	Less than 0.001
Safe Period by Temperature ³	1.5	0.231
Natural Cycles App ³	0.1	0.715
Contraceptive Patch ²	2.0	0.158
Vaginal Contraceptive Ring ²	3.1	0.083
Emergency Contraception Pills ³	7.6	Less than 0.01
Hormonal Implant ²	0.2	0.690
Intrauterine device ²	0.0	0.864
Vaginal Contraceptive Film ³	1.7	0.195
Diaphragm ³	0.4	0.549
Female Condom ³	25.9	Less than 0.001
Foam ³	0.0	0.844
Jelly or cream ³	8.2	Less than 0.01
Cervical Cap ³	2.8	0.099
Suppository ³	1.1	0.292
Today Sponge ³	0.2	0.632
Phexxi Gel ³	2.0	0.164
Lunelle ²	1.0	0.316
Other method ²	39.4	Less than 0.001

Footnotes:

Note: "0.0" is greater than zero but less than 0.05.

Source: National Center for Health Statistics, Research and Development Survey 6, 2022

Ten out of the 25 individual contraceptive methods have statistically significant differences in their weighted estimates across the experimental conditions, with the original formatting as a series of yes/no questions consistently producing greater estimates than the select-all-that apply format. This difference in response is further visible when considering the total number of contraceptive methods endorsed by the respondents across

¹ p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions excluding the cases that were not eligible for the question.

² Administered only to female respondents, n = 1,189

 $^{^{3}}$ Administered only to female respondents who had reported ever having sexual intercourse, n = 1,068

the two formats. On average, women who received the original format endorsed 4.59 (SE = 0.1) methods, while women who received the select-all format endorsed 3.17 (SE = 0.1) methods (t = -8.5, p-value < 0.001) [not shown].

Research Question 4.

Table K summarizes chi square tests comparing the estimates from each sex education question across the two experimental conditions.

Table K: Results of second order Rao Scott chi square tests comparing sex education and sex education location estimates, adults age 18 and older, by interleafed and grouped formatting experimental conditions, Research and Development Survey 6

Survey Item	F Statistic	p-value ¹
Education on saying no to sex ²	2.3	0.083
Education in School	2.3	0.137
Education in Church	8.6	Less than 0.01
Education at Community Center	0.0	0.832
Education Somewhere Else	0.8	0.377
Grade First Received Education	1.5	0.123
Education Before or After First Sex	0.9	0.428
Education on birth control methods ³	0.4	0.683
Education in School	0.5	0.500
Education in Church	0.2	0.659
Education at Community Center	2.1	0.154
Education Somewhere Else	1.6	0.211
Grade First Received Education	0.9	0.495
Education Before or After First Sex	0.7	0.522
Education on where to get birth control ⁴	2.7	0.055
Education in School	0.9	0.337
Education in Church	0.6	0.447
Education at Community Center	0.6	0.431
Education Somewhere Else	0.8	0.374
Grade First Received Education	1.5	0.167
Education Before or After First Sex	1.6	0.202
Education on how to use condom ⁵	0.9	0.414
Education in School	1.8	0.189
Education in Church	0.8	0.367
Education at Community Center	2.4	0.127
Education Somewhere Else	0.7	0.397

C 1 E' (D ' 1 E 1 ('	1.5	0.146
Grade First Received Education	1.5	0.146
Education Before or After First Sex	1.9	0.162
Education on sexually transmitted diseases ⁶	1.5	0.218
Education in School	2.7	0.106
Education in Church	0.1	0.810
Education at Community Center	0.1	0.786
Education Somewhere Else	0.0	0.834
Grade First Received Education	1.2	0.300
Education Before or After First Sex	1.8	0.173
Education on preventing HIV/AIDS ⁷	1.0	0.375
Education in School	0.1	0.810
Education in Church	0.1	0.816
Education at Community Center	0.0	0.944
Education Somewhere Else	0.0	0.918
Grade First Received Education	0.6	0.806
Education Before or After First Sex	1.1	0.346
Education on waiting until marriage to have sex ⁸	2.8	0.055
Education in School	95.1	Less than 0.001
Education in Church	56.4	Less than 0.001
Education at Community Center	3.1	0.081
Education Somewhere Else	2.0	0.157
Grade First Received Education	1.1	0.393
Education Before or After First Sex	1.3	0.277
•	I .	•

Footnotes:

Notes: Filter questions about receiving types of education were administered to the full sample, with a total number of eligible case n=2,312. "0.0" is greater than zero but less than 0.05.

Source: National Center for Health Statistics, Research and Development Survey 6, 2022

Across the 42 questions in the sex education section, only three (receiving an education in a community center about saying no to sex, receiving education in a school about waiting until marriage to have sex, and receiving education in a church about waiting until marriage to have sex) differed across the interleafed and grouped

¹F statistic and p-value derived from second order Rao Scott chi square test.

² n=1,209 respondents were eligible for follow-up questions on saying no to sex.

³ n=1,121 respondents were eligible for follow-up questions on birth control methods.

⁴ n=774 respondents were eligible for follow-up questions on where to get birth control.

⁵ n=904 respondents were eligible for follow-up questions on how to use a condom.

⁶ n=1,363 respondents were eligible for follow-up questions on sexually transmitted diseases.

⁷ n=978 respondents were eligible for follow-up questions on preventing HIV/AIDS.

⁸ n=1,318 respondents were eligible for follow-up questions on waiting until marriage to have sex.

formats. Within these three, the interleafed format produced higher estimates in the first two, and the grouped format produced higher estimates in the third.

On average respondents who received the interleafed formatting condition answered "Yes" to 3.2 (SE = 0.1) of the seven filter questions, while those who received the grouped formatting condition answered "Yes" to 3.3 (SE = 0.1) filter questions. These mean number of endorsements do not differ statistically (t = 0.9, df = 145, p-value = 0.374 [not shown]). Likewise, the average number of endorsements for the six sex education location questions were not significantly different across the two conditions (t = -0.1, df = 145, p-value = 0.960 [not shown]), with respondents to the interleafed format answering an average of 3.7 (SE = 0.1) locations, while respondents who got the grouped format also answered an average of 3.7 (SE = 0.1).

The amount of item missing did not differ for the filter questions across the two formats (t = -0.7, df = 145, p-value = 0.469 [not shown]). Neither the average subjective burden score (t = 0.8, df = 144, p-value = 0.403 [not shown]) or the average subjective difficulty score (t = 0.5, df = 144, p-value = 0.636 [not shown]) differed across the interleafed or grouped formatting conditions.

Discussion.

Research Question 1.

The re-formatting of the religion raised in and current religion questions to group the various Protestant denominations together and move answer categories indicating Islam, Buddhism, and Hinduism to a more prominent position did not appear to have large impacts on the estimates. At the population level, the only significant differences between the two experimental conditions were seen in the Other Religion category for the religion raised question, and the Buddhism and Other Religion categories for the current religion question. The Other Religion estimates for both the religion raised in and current religion werelower in the revised formatting, while the estimate of Buddhism was larger in the revised formatting.

Given that no difference was seen across the experimental for the specific "Other religion, please specify" response itself, the differences seen in the overall "other" category (which for the revised format included both the "Other specify" responses and those religions not classified as Protestant—namely "Jehovah's Witnesses," "Unitarian-Universalists," "Greek Orthodox," and "Other Orthodox") grouping look to be related to the absence of explicit Jehovah's Witnesses, Unitarian-Universalists, Greek Orthodox, and Another Orthodox answer categories in the revised format. Respondents who would have answered using these options in the original format apparently chose one of the other affiliations (presumably either Protestant or Catholic, though without specific probing this cannot be determined) instead of the "Other" category, comparatively lowering its estimate.

Buddhism likely showed a higher estimate in the revised format as compared to the original format due to its placement in a more prominent position, as noted above. While not significant, the other two religions that also "moved" from the follow-up item in the original format to the list of nine in the revised format (Islam and Hinduism) also had a higher point estimate in the latter as compared to the former across both religion constructs.

Research Question 2.

This research question focused in on whether always including a definition or making it optional affected survey response. With a shift in data collection mode from interviewer-administered to self-administered, surveys such as the NSFG can take advantage of formatting options that are only available on web survey interfaces. One such feature is allowing respondents to access definitions or help text by either clicking on a link or hovering their cursor over a symbol (typically a "?") on the same screen as the survey item. An experiment examining the effect of either always including definitions or making them optional was embedded across three items in the religion section of the RANDS 6 questionnaire: two items asking about the frequency of attendance at religion services (either at age 14 or currently) and one item asking about the importance of religion in daily life.

Manipulating whether a respondent always saw or had to actively access the definitions did not lead to significant differences in the prevalence estimates across the three questions. Each of the three items was followed by a probe designed to capture how the respondents interpreted the survey question—it logically follows that those who always received a definition in the question text may use different patterns of interpretation and comprehension than those that had to take extra steps to access the definition. However, in RANDS 6, the results were mixed. At the population level there were almost no significant differences in the patterns of interpretation across the two experimental conditions for any of the three survey questions (one exception was a difference in the use of the "individual prayer" pattern of interpretation in the question asking about current attendance). When examining population subgroups, more differences emerged. For instance, whether a respondent used an out-of-scope pattern of interpretation on the question regarding attending religious services at age 14 differed across education and race/ethnicity groups when controlling for experimental condition. While hypothetically, respondents who attend or attended services more frequently would have a more nuanced understanding of the term "religious services," frequency of attendance itself was not a predictor of using out-of-scope patterns of interpretation.

For the probe following the question about the importance of religion in daily life, the use of the patterns of interpretations did differ by the respondents' underlying survey response. Respondents who said that religion was very or somewhat important to them understood religion to mean their personal spiritual beliefs, while those who said religion was not as important were more likely to think of religion in terms of organized religion. However, these trends did not change when controlling for experimental condition (apart from the people who reported not knowing how they understood the term "religion"), indicating that that whether a respondent always received a definition did not appear to affect response.

Research Question 3.

There are two major approaches to collecting endorsement data—for instance which contraceptive method or methods in a list—in surveys: questions can either be formatted as a series of individual (often "Yes/No") items or as a single item asking respondents to select all the options that apply to them. The former option is typically seen as taking more time than the latter, since the respondent must answer a separate question for each, but less cognitively burdensome and less prone to satisficing effects (such as primacy and recency effects) [4]. The findings from the experiment comparing a series of individual items to select-all-that-apply formats in the

RANDS 6 contraceptive methods section confirm these expectations. The approach that is currently used on the NSFG—wherein a series of 14 Yes/No items are presented followed by a single select-all-that-apply item for 10 less commonly used contraceptive methods—consistently produced higher estimates and led to a greater number of total endorsements than the single, select-all question approach. Given that the ordering of the questions and answer categories is based on *a priori* information about the prevalence of the various methods, the data do not support any analysis of primacy or recency bias. While it is possible that for other concepts, or shorter lists of options, the questionnaire space savings afforded by using a select-all-that-apply approach may be beneficial, the analysis of RANDS 6 does not support this approach for the contraceptive methods section.

Research Question 4.

Previous research has shown that an inter-leafed format can produce smaller estimates as compared to grouped formats when respondents begin to learn the format as they go through the questionnaire—in short, they attempt to reduce their burden by under-reporting and thus skipping out of questions [9] [10] [11]. However, there is also some qualitative evidence that the grouped format has decreased response quality as compared to the inter-leafed format [12].

The formatting of the sex education questions did not have a large effect on survey response. While previous research in the survey methods literature indicate that interleafed formatting tends to produce lower estimates and a lower number of endorsements as compared to grouped formats, the findings from the sex education section of RANDS 6 does not support this. Only three of the 42 survey items in the section produced significantly different estimates across the two formats, and the differences were not all in the same direction [not shown]. There were no differences in item missing rates for the filter questions between the experimental conditions, and while the literature suggests that interleafed formatting is more burdensome, the subjective measures of burden and difficulty did not differ across the formats.

Limitations of RANDS.

While RANDS 6 was conducted using a statistically sampled panel, it is important to note that the estimates derived from these data are not of the same quality as NCHS' traditional household surveys, including the NHIS and the NSFG. For instance, certain groups (such as low-education or younger individuals) are less likely to participate in these panels [13]. Both NORC and NCHS attempt to correct for this coverage bias through weighting, but this is not a perfect solution and the relative bias between RANDS and these high-quality NCHS surveys persist [14]. The purpose of RANDS 6 was for methodological research and is not intended to replace or substitute for the use of NSFG data.

References

- [1] Parker J, Miller K, He Y, Scanlon P, Cai B, Shin H-C, Parsons, V, Irimata K. (2020). "Overview and initial results of the National Center for Health Statistics' Research and Development Survey." Stat J IAOS 36(4):1199–1211. 2020. https://doi.org/10.3233/SJI-200678.
- [2] Willson, S and L. Creamer. (2020). "Cognitive interview evaluation of the national survey of family growth life history calendar." National Center for Health Statistics CCQDER. Hyattsville, MD. https://wwwn.cdc.gov/qbank/report.aspx?1213.
- [3] Willson, S. (2022). "Cognitive interview evaluation of select questions for the national survey of family growth." National Center for Health Statistics CCQDER. Hyattsville, MD. https://wwwn.cdc.gov/qbank/report.aspx?1229.
- [4] Smyth, J, Dillman, D, Christian, L M, Stern, M. (2006). "Comparing check-all and forced-choice questions in web surveys." Public Opinion Quarterly 70(1): 66-77. https://doi.org/10.1093/poq/nfj007.
- [5] Lumley, Thomas. 2010. Complex Surveys: A Guide to Analysis Using R. Hoboken, NJ: John Wiley; Sons.
- [6] Lumley, Thomas. 2023. survey: Analysis of Complex Survey Samples. R package version 4.2. http://r-survey.r-forge.r-project.org/survey/.
- [7] Rao, JNK., Scott, A J. (1987). "On simple adjustments to chi-square tests with sample survey data." The Annals of Statistics 15 (1): 385–97. https://doi.org/10.1214/aos/1176350273.
- [8] Fox J, Weisberg S. (2019). An R Companion to Applied Regression, Third edition. Sage, Thousand Oaks CA. https://socialsciences.mcmaster.ca/jfox/Books/Companion.
- [9] Kreuter, F, McCulloch, S, Presser, S, Tourangeau, R. (2011). "The effects of asking filter questions in interleafed versus grouped format." Sociological Methods and Research: 40 (1): 88-104. https://doi.org/10.1177/0049124110392342.
- [10] Siordia, C. (2013). "Evaluating response mechanisms in a life-space mobility instrument with a 'stem and leaf' format." The Journal of Frailty & Aging. 2 (2): 84-89. https://doi.org/10.14283/jfa.2013.13.
- [11] Bach, R L., Eckman, S. (2018). "Motivated misreporting in web panels." Journal of Survey Statistics and Methodology. 6: 418-430. https://doi.org/10.1093/jssam/smx030.
- [12] Clark-Fobia, A, Kephart, K, Nelson, D V. (2018). "A qualitative study on the effects of grouped versus interleafed filter questions." Survey Practice, 11(2). https://doi.org/10.29115/SP-2018-0009.
- [13] Callegaro, Mario, Reginald P. Baker, Jelke Bethlehem, Anja S. Göritz, Jon A. Krosnick, and Paul J. Lavrakas, eds. Online panel research: A data quality perspective. John Wiley & Sons, 2014.

[14] Irimata, Katherine E., Yulei He, Van L. Parsons, Hee-Choon Shin, and Guangyu Zhang. "Calibration Weighting Methods for the National Center for Health Statistics Research and Development Survey." Vital and health statistics. Ser. 1, Programs and collection procedures 87 (2023): 1-23.

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Supplementary Tables

Table 1: Weighted percentages (with standard errors) of the religion in which a person was raised in, adults age 18 and older, by selected population subgroups, overall and by religion formatting experimental condition, Research and Development Survey 6

		Combined Sample	Original Format Only	Revised Format Only	
Characteristic	Subgroup	Percent (SE)	Percent (SE)	Percent (SE)	p-value ¹
	Cat	holicism			
Population		29.2 (1.5)	27.8 (2.0)	30.6 (1.6)	0.191
Gender	Male	28.8 (1.7)	28.7 (2.6)	29.0 (2.5)	0.937
	Female	29.6 (1.9)	26.9 (2.8)	32.0 (2.2)	0.130
Education	Less than High School Graduate	28.6 (5.7)	*	*	0.078
	High School Graduate	24.8 (2.5)	19.5 (2.7)	28.9 (3.6)	Less than 0.05
	Some College, including Associate Degree	33.5 (1.7)	33.0 (2.7)	34.0 (2.8)	0.814
	Bachelor's Degree or Above	29.6 (2.1)	31.8 (3.0)	27.7 (2.7)	0.282
Race /	Black, non-Hispanic	8.1 (1.7)	*	6.4 (1.7)	0.353
Ethnicity	Other, non-Hispanic ²	22.7 (4.8)	22.5 (6.0)	*	0.962
	White, non-Hispanic	27.4 (1.6)	26.0 (2.4)	28.7 (2.0)	0.371
	Hispanic	53.8 (4.5)	52.3 (5.3)	55.1 (5.7)	0.667
Age	18-29	29.2 (3.4)	28.2 (4.4)	30.2 (5.6)	0.792
	30-39	23.9 (2.6)	22.9 (3.4)	24.9 (4.2)	0.719

	40-49	28.8 (4.1)	27.9 (5.9)	29.8 (5.4)	0.812		
	50+	31.4 (1.8)	29.8 (2.6)	32.8 (2.1)	0.352		
Marital Status	Married, Widowed, or Living with a Partner	29.7 (1.4)	28.6 (2.2)	30.7 (2.2)	0.531		
	Divorced or Separated	27.1 (3.3)	24.1 (4)	29.6 (5.0)	0.392		
	Never Married	29.4 (2.7)	27.8 (3.6)	30.8 (3.6)	0.543		
Household Income	Less than \$15,000	22.9 (4.0)	*	30.8 (5.4)	Less than 0.05		
	\$15,000 to \$59,999	25.6 (2.2)	23.2 (2.5)	27.8 (2.9)	0.187		
	\$60,000 to \$199,999	34.6 (2.0)	35.5 (2.9)	33.8 (2.3)	0.635		
	\$200,000 or more	17.9 (3.4)	*	*	0.648		
Metropolitan	Metro Area	30.6 (1.6)	28.9 (2.2)	32.2 (2.0)	0.957		
Status	Non-Metro Area	22.3 (3.3)	22.1 (4.9)	22.4 (4.3)	0.214		
Protestantism							
Population		48.1 (1.6)	48.2 (1.9)	48.1 (2.2)	0.984		
Gender	Male	47.4 (2.1)	45.5 (2.8)	49.3 (3.3)	0.390		
	Female	48.8 (1.9)	50.8 (2.8)	47.0 (2.5)	0.319		
Education	Less than High School Graduate	49.6 (6.6)	*	*	0.062		
	High School Graduate	51.7 (3.0)	50.8 (3.9)	52.4 (4.6)	0.802		
	Some College, including Associate Degree	47.9 (1.6)	46.2 (2.4)	49.6 (2.9)	0.429		
	Bachelor's Degree or Above	45.0 (2.1)	44.4 (2.9)	45.6 (3.0)	0.756		
Race /	Black, non-Hispanic	76.0 (3.8)	74.8 (5.4)	77.3 (4.3)	0.696		
Ethnicity	Other, non-Hispanic ²	30.0 (5.9)	*	23.5 (5.5)	0.213		
	White, non-Hispanic	50.4 (1.7)	48.3 (2.1)	52.3 (2.9)	0.297		
	Hispanic	29.6 (4.0)	32.9 (4.4)	27.0 (5.7)	0.385		
Age	18-29	41.8 (4.0)	44.8 (5.0)	39.0 (5.5)	0.409		
	30-39	49.8 (3.2)	49.5 (4.2)	50.2 (5.1)	0.913		
	40-49	44.6 (3.4)	41.7 (4.5)	48.0 (5.9)	0.433		
	50+	51.3 (1.8)	51.7 (2.6)	50.9 (2.7)	0.847		
Marital Status	Married, Widowed, or Living with a Partner	49.2 (1.7)	49.2 (2.0)	49.1 (3.1)	0.992		
	Divorced or Separated	52.3 (3.8)	48.2 (4.8)	55.6 (5.3)	0.288		
	Never Married	44.7 (3.0)	46.4 (4.5)	43.0 (4.3)	0.601		

Household	\$15,000 to \$59,999	54.6 (2.4)	55.2 (3.3)	54.0 (3.5)	0.807
Income	\$60,000 to \$199,999	43.2 (1.9)	40.9 (2.6)	45.2 (2.9)	0.287
	\$200,000 or more	44.2 (5.9)	*	*	0.477
Metropolitan	Metro Area	46.1 (1.8)	47.1 (2.0)	45.1 (2.4)	0.156
Status	Non-Metro Area	58.7 (3.0)	53.5 (4.2)	63.5 (5.0)	0.442
	Jı	ıdaism	•		
Population		1.6 (0.4)	1.5 (0.4)	1.6 (0.6)	0.846
Gender	Male	1.8 (0.5)	1.3 (0.5)	2.2 (0.8)	0.332
	Female	1.4 (0.5)	1.7 (0.7)	1.1 (0.6)	0.515
Education	Less than High School Graduate	0.4 (0.4)	_	*	0.306
	High School Graduate	0.2 (0.1)	0.4 (0.3)	_	0.103
	Some College, including Associate Degree	1.1 (0.4)	1.0 (0.5)	1.2 (0.5)	0.705
	Bachelor's Degree or Above	3.4 (1.0)	*	*	0.833
Race /	Black, non-Hispanic	_	_	_	
Ethnicity	Other, non-Hispanic ²	0.7 (0.4)	0.9 (0.6)	0.4 (0.4)	0.529
	White, non-Hispanic	2.2 (0.5)	2.2 (0.7)	2.1 (0.7)	0.93
	Hispanic	0.9 (0.6)	0.3 (0.2)	*	Less than 0.05
Age	18-29	0.7 (0.4)	1.4 (0.8)	_	0.097
	30-39	1.2 (0.6)	*	0.8 (0.6)	0.518
	40-49	1.3 (0.9)	*	0.5 (0.5)	0.190
	50+	2.2 (0.5)	1.3 (0.4)	2.9 (0.9)	0.090
Marital Status	Married, Widowed, or Living with a Partner	2.0 (0.6)	1.9 (0.7)	2.2 (0.9)	0.772
	Divorced or Separated	1.3 (0.5)	1.0 (0.5)	1.5 (0.9)	0.616
	Never Married	0.9 (0.3)	1.1 (0.5)	0.7 (0.4)	0.574
Household	Less than \$15,000	0.9 (0.5)	0.8 (0.6)	1.0 (0.9)	0.821
Income	\$15,000 to \$59,999	1.6 (0.5)	1.3 (0.6)	1.8 (0.8)	0.575
	\$60,000 to \$199,999	1.3 (0.5)	1.5 (0.7)	1.1 (0.5)	0.618
	\$200,000 or more	*	*	*	0.698
Motropoliton	Metro Area	1.8 (0.4)	1.8 (0.5)	1.9 (0.7)	0.657
Metropolitan					
Status	Non-Metro Area	0.2 (0.2)	0.2 (0.2)	0.3 (0.3)	0.865

Population		1.1 (0.4)	1.0 (0.6)	1.2 (0.6)	0.815
Gender	Male	1.6 (0.7)	*	*	0.607
	Female	0.7 (0.5)	0.9 (0.9)	0.6 (0.6)	0.771
Education	Less than High School Graduate	*	*	_	0.362
	High School Graduate	*	*	*	0.633
	Some College, including Associate Degree	0.2 (0.2)	_	0.5 (0.5)	0.293
	Bachelor's Degree or Above	0.4 (0.3)	0.3 (0.3)	0.6 (0.6)	0.631
Race /	Black, non-Hispanic	0.7 (0.7)	_	*	0.302
Ethnicity	Other, non-Hispanic ²	*	*	*	0.801
	White, non-Hispanic	0.2 (0.2)	_	0.5 (0.5)	0.335
	Hispanic	_	_	_	0.379
Age	18-29	*	*	*	0.834
	30-39	0.4 (0.3)	_	0.8 (0.7)	0.283
	40-49	_	_	_	
	50+	1.1 (0.6)	*	1 (0.7)	0.831
Marital Status	Married, Widowed, or Living with a Partner	1.0 (0.5)	0.8 (0.8)	1.2 (0.7)	0.696
	Divorced or Separated	0.4 (0.4)	0.8 (0.8)	_	0.28
	Never Married	1.6 (1.0)	*	*	0.891
Household	Less than \$15,000	*	*	_	0.287
Income	\$15,000 to \$59,999	1.3 (0.8)	_	*	0.118
	\$60,000 to \$199,999	0.7 (0.5)	*	0.3 (0.3)	0.179
	\$200,000 or more	*	_	*	0.339
Metropolitan	Metro Area	1.4 (0.5)	1.2 (0.8)	1.5 (0.7)	0.810
Status	Metro Area	_	_	_	
	Bu	ıddhism			
Population		0.9 (0.3)	0.4 (0.3)	1.3 (0.5)	0.179
Gender	Male	1.3 (0.6)	0.8 (0.7)	1.7 (0.9)	0.441
	Female	0.5 (0.4)	_	1.0 (0.7)	0.197
Education	Less than High School Graduate	_	_	_	
	High School Graduate	0.5 (0.5)	_	0.8 (0.8)	0.345
	Some College, including Associate Degree	0.1 (0.1)	0.1 (0.1)	0.1 (0.1)	0.684

	Bachelor's Degree or Above	2.1 (0.8)	*	*	0.288
Race /	Black, non-Hispanic	0.1 (0.1)	_	0.1 (0.1)	0.322
Ethnicity	Other, non-Hispanic ²	*	*	*	0.222
	White, non-Hispanic	0.0 (0.0)	_	0.0 (0.0)	0.345
	Hispanic	0.6 (0.6)	_	*	0.363
Age	18-29	_	_	_	
	30-39	1.0 (0.9)	0.1 (0.1)	*	Less than 0.01
	40-49	*	*	*	0.569
	50+	0.5 (0.3)	_	0.9 (0.6)	0.197
Marital Status	Married, Widowed, or Living with a Partner	1.6 (0.6)	0.7 (0.6)	2.4 (0.9)	0.176
	Divorced or Separated	0.1 (0.1)	0.2 (0.2)	0 (0)	0.274
	Never Married	0.0 (0.0)	_	0.1 (0.1)	0.192
Household	Less than \$15,000	_	_	_	
Income	\$15,000 to \$59,999	_	_	_	
	\$60,000 to \$199,999	1.8 (0.7)	0.8 (0.7)	2.8 (1.0)	0.175
	\$200,000 or more	0.2 (0.2)	0.3 (0.4)	-	0.332
Metropolitan	Metro Area	1.0 (0.4)	0.5 (0.4)	1.5 (0.6)	0.334
Status	Non-Metro Area	0.3 (0.3)	_	0.6 (0.6)	0.215
	Hi	nduism			
Population		1.1 (0.3)	1.0 (0.4)	1.2 (0.4)	0.771
Gender	Male	1.6 (0.5)	2.0 (0.9)	1.1 (0.6)	0.373
	Female	0.6 (0.3)	_	1.2 (0.6)	0.073
Education	Less than High School Graduate	-	-	-	
	High School Graduate	0.6 (0.6)	*	_	0.250
	Some College, including Associate Degree	0.7 (0.5)	_	1.3 (1.0)	0.167
	Bachelor's Degree and Above	2.2 (0.8)	1.9 (0.8)	2.4 (1.1)	0.652
Race /	Black, non-Hispanic	*	*	_	0.338
Ethnicity	Other, non-Hispanic ²	*	*	*	0.229
	White, non-Hispanic	_	_	_	
	Hispanic	_	_	_	
Age	18-29	1.4 (1.0)	*	*	0.730

	30-39	*	*	*	0.127		
	40-49	1.0 (0.7)	0.7 (0.5)	*	0.540		
	50+	0.3 (0.2)	0.4 (0.4)	0.3 (0.3)	0.753		
Marital Status	Married, Widowed, or Living with a Partner	1.5 (0.5)	1.5 (0.7)	1.6 (0.7)	0.967		
	Divorced or Separated	-	_	_			
	Never Married	0.8 (0.5)	0.5 (0.5)	1.1 (0.8)	0.588		
Household	Less than \$15,000	_	_	_			
Income	\$15,000 to \$59,999	0.9 (0.5)	*	0.4 (0.4)	0.258		
	\$60,000 to \$199,999	1.3 (0.5)	0.9 (0.5)	1.8 (0.8)	0.343		
	\$200,000 or more	*	*	*	0.258		
Metropolitan	Metro Area	1.2 (0.4)	1.2 (0.5)	1.2 (0.5)	0.957		
Status	Non-Metro Area	0.4 (0.4)	_	0.8 (0.8)	0.351		
Church of Latter Days Saints							
Population		1.4 (0.2)	1.6 (0.4)	1.2 (0.3)	0.407		
Gender	Male	1.3 (0.4)	1.4 (0.6)	1.2 (0.5)	0.687		
	Female	1.4 (0.5)	1.7 (0.6)	1.2 (0.6)	0.547		
Education	Less than High School Graduate	*	*	4.3 (0.9)	0.531		
	High School Graduate	0.5 (0.4)	0.3 (0.2)	0.7 (0.7)	0.514		
	Some College, including Associate Degree	1.6 (0.5)	2.1 (0.8)	1.1 (0.5)	0.273		
	Bachelor's Degree and Above	1.4 (0.3)	1.8 (0.7)	1.0 (0.5)	0.415		
Race /	Black, non-Hispanic	0.7 (0.4)	1.1 (0.7)	0.2 (0.2)	0.157		
Ethnicity	Other, non-Hispanic ²	0.5 (0.4)	*	0.2 (0.3)	0.401		
	White, non-Hispanic	1.7 (0.3)	1.6 (0.6)	1.8 (0.4)	0.759		
	Hispanic	1.1 (0.4)	2.4 (1.0)	0.1 (0.1)	Less than 0.001		
Age	18-29	3.1 (0.9)	*	*	0.782		
	30-39	1.3 (0.7)	*	1.0 (0.5)	0.457		
	40-49	1.3 (0.4)	1.8 (0.7)	0.7 (0.4)	0.171		
	50+	0.7 (0.3)	0.9 (0.4)	0.6 (0.4)	0.642		
Marital Status	Married, Widowed, or Living with a Partner	1.3 (0.3)	1.7 (0.6)	1.0 (0.3)	0.269		
	Divorced or Separated	0.3 (0.2)	0.7 (0.5)	_	0.168		

	Never Married	1.9 (0.5)	1.7 (0.8)	2.0 (0.7)	0.813
Household	Less than \$15,000	0.6 (0.4)	1.0 (0.7)	0.2 (0.2)	0.205
Income	\$15,000 to \$59,999	0.4 (0.1)	0.7 (0.3)	0.1 (0.1)	0.095
	\$60,000 to \$199,999	2.2 (0.5)	2.2 (0.8)	2.3 (0.5)	0.902
	\$200,000 or more	*	*	_	0.166
Metropolitan	Metro Area	1.5 (0.3)	1.7 (0.4)	1.3 (0.3)	0.409
Status	Non-Metro Area	0.7 (0.4)	0.8 (0.6)	0.6 (0.5)	0.771
	Oth	ner Religion	-	'	,
Population		4.3 (0.5)	5.9 (0.8)	2.8 (0.6)	Less than 0.01
Gender	Male	3.4 (0.5)	5.1 (1)	1.8 (0.5)	Less than 0.01
	Female	5.1 (0.9)	6.7 (1.3)	3.7 (1.1)	0.074
Education	Less than High School Graduate	*	*	*	0.132
	High School Graduate	5.7 (0.9)	9.9 (1.7)	2.5 (1.0)	Less than 0.01
	Some College, including Associate Degree	5.0 (0.9)	6.1 (1.2)	*	0.117
	Bachelor's Degree and Above	2.9 (0.6)	3.0 (0.7)	2.8 (0.9)	0.886
Race /	Black, non-Hispanic	*	*	*	0.176
Ethnicity	Other, non-Hispanic ²	*	*	*	1.000
	White, non-Hispanic	3.9 (0.5)	6.2 (1.1)	1.8 (0.7)	Less than 0.01
	Hispanic	5.3 (1.4)	*	3.4 (1.0)	0.070
Age	18-29	*	*	*	0.284
	30-39	4.5 (1.1)	5.0 (1.2)	*	0.547
	40-49	*	*	*	0.299
	50+	4.6 (0.7)	7.0 (1.1)	*	Less than 0.05
Marital Status	Married, Widowed, or Living with a Partner	4.1 (0.6)	5.9 (1)	2.3 (0.7)	Less than 0.01
	Divorced or Separated	5.3 (1.5)	*	*	0.055
	Never Married	4.3 (0.7)	4.9 (1.0)	3.8 (1.0)	0.429
Household	Less than \$15,000	*	*	*	0.278
Income	\$15,000 to \$59,999	5.6 (1.0)	7.9 (1.9)	*	0.103
	\$60,000 to \$199,999	3.1 (0.5)	4.2 (0.9)	2.0 (0.6)	0.073

	\$200,000 or more	*	*	*	0.820
Metropolitan Status	Metro Area	4.4 (0.5)	5.7 (0.8)	3.1 (0.6)	Less than 0.01
	Non-Metro Area	4.0 (0.8)	6.7 (1.7)	*	Less than 0.05
	N	o Religion			
Population		14.4 (0.9)	15.3 (1.5)	13.6 (1.3)	0.396
Gender	Male	15.6 (1.4)	17.1 (2.1)	14 (1.7)	0.237
	Female	13.4 (1.3)	13.6 (2.0)	13.2 (2.0)	0.907
Education	Less than High School Graduate	14.5 (4.0)	*	*	0.502
	High School Graduate	16.0 (2.1)	18.6 (3.6)	13.9 (2.5)	0.278
	Some College, including Associate Degree	12.4 (1.1)	15.5 (2.1)	9.3 (1.3)	Less than 0.05
	Bachelor's Degree and Above	14.7 (1.9)	13.8 (2.3)	15.6 (2.8)	0.610
Race /	Black, non-Hispanic	9.7 (2.8)	*	*	0.926
Ethnicity	Other, non-Hispanic ²	15.9 (3.8)	*	*	0.838
	White, non-Hispanic	15.7 (1.2)	18.1 (2.0)	13.6 (1.7)	0.110
	Hispanic	12.1 (2.3)	*	14.4 (3.1)	0.186
Age	18-29	20.1 (2.4)	16.7 (3.3)	23.3 (3.8)	0.221
	30-39	16.9 (2.1)	19.1 (3.3)	14.3 (2.8)	0.285
	40-49	18.8 (3.3)	22.0 (5.5)	15.1 (3.0)	0.262
	50+	9.7 (1.3)	10.2 (1.6)	9.2 (1.8)	0.658
Marital Status	Married, Widowed, or Living with a Partner	11.7 (1.3)	11.8 (1.5)	11.7 (1.9)	0.983
	Divorced or Separated	15.9 (2.9)	21.6 (4.4)	*	0.081
	Never Married	18.4 (1.8)	18.9 (3.4)	17.8 (2.3)	0.799
Household Income	Less than \$15,000	17.4 (3.5)	15.7 (3.0)	*	0.586
	\$15,000 to \$59,999	12.5 (1.5)	13.6 (3.1)	11.5 (1.7)	0.575
	\$60,000 to \$199,999	13.8 (1.3)	15.4 (2.0)	12.4 (1.7)	0.252
	\$200,000 or more	25.8 (6.1)	*	*	0.905
Metropolitan	Metro Area	14.2 (1.1)	14.4 (1.5)	14.1 (1.6)	0.863
Status	Metro Area	15.4 (2.8)	20.1 (4.9)	11.2 (3.0)	0.111

Footnotes: * Estimate does not meet NCHS standards of reliability.

[–] Quantity zero.0.0 Quantity more than zero but less than 0.5.--- Data not available.

¹p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions excluding the cases that were not eligible for the question (n=1,123).

Notes: Total number of complete cases: n = 2,312. Respondents could select more than one religion that they were raised in. "SE" refers to standard error. Chi square tests were not conducted when both conditions had observed values of 0 (signified with ---).

Source: National Center for Health Statistics, Research and Development Survey 6. 2022

Table 2: Weighted percentages (with standard errors) of current religion, adults age 18 and older, by selected population subgroups, overall and by religion formatting experimental condition, Research and Development Survey 6

		Combined Sample	Original Format Only	Revised Format Only	
Characteristic	Subgoup	Percent (SE)	Percent (SE)	Percent (SE)	p-value ¹
	•	Catholicism			
Population		17.2 (1.1)	15.2 (1.6)	19.0 (1.5)	0.072
Gender	Male	16.2 (1.3)	16.0 (2.1)	16.4 (2.0)	0.897
	Female	18.1 (1.6)	14.4 (1.9)	21.3 (2.2)	Less than 0.05
Education	Less than High School Graduate	17.8 (4.6)	*	*	0.152
	High School Graduate	17.4 (2.6)	12.3 (2.6)	21.2 (3.7)	Less than 0.05
	Some College, including Associate Degree	17.2 (1.4)	16.8 (1.9)	17.5 (2.2)	0.807
	Bachelor's Degree and Above	16.9 (1.7)	17.0 (2.6)	16.9 (2.2)	0.974
Race /	Black, non-Hispanic	*	*	*	0.433
Ethnicity	Other, non-Hispanic ²	15.1 (4.3)	*	*	0.243
	White, non-Hispanic	15.9 (1.4)	14.1 (1.7)	17.5 (1.9)	0.139
	Hispanic	32.2 (4.4)	30.4 (5.4)	33.7 (5.3)	0.599
Age	18-29	16.9 (2.8)	13.1 (3.2)	20.5 (4.7)	0.226
	30-39	12.1 (2.3)	8.7 (2.3)	16.0 (3.8)	0.093
	40-49	17.4 (3.1)	17.4 (4.1)	17.3 (4.5)	0.987
	50+	19.2 (1.5)	18.4 (2.1)	19.9 (2.0)	0.607
Marital Status	Married, Widowed, or Living with a Partner	18.2 (1.3)	15.6 (1.8)	20.5 (1.8)	0.067
	Divorced or Separated	13.6 (2.2)	17.0 (3.3)	10.8 (2.7)	0.144
	Never Married	17.1 (1.8)	13.8 (2.5)	20.1 (3.0)	0.140

² "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

Household Income	Less than \$15,000	12.0 (3.3)	*	18.3 (5.1)	Less than 0.01
	\$15,000 to \$59,999	14.9 (1.7)	11.1 (1.8)	18.4 (2.8)	Less than 0.05
	\$60,000 to \$199,999	21.0 (1.6)	21.4 (2.6)	20.6 (2.2)	0.842
	\$200,000 or more	*	*	*	0.567
Metropolitan	Metro Area	17.5 (1.3)	15.8 (1.7)	19.1 (1.6)	0.157
Status	Non-Metro Area	15.7 (2.5)	12.5 (3.0)	18.7 (3.9)	0.218
	P	rotestantism			
Population		40.0 (1.6)	39.8 (2.2)	40.2 (2.2)	0.902
Gender	Male	39.6 (2.3)	40.6 (3.1)	38.7 (3.0)	0.638
	Female	40.4 (1.8)	39.1 (2.7)	41.6 (2.5)	0.520
Education	Less than High School Graduate	35.8 (5.5)	*	29.9 (5.2)	0.261
	High School Graduate	48.8 (2.9)	54.1 (3.9)	44.8 (4.7)	0.171
	Some College, including Associate Degree	38.7 (2.3)	36.1 (2.8)	41.4 (3.6)	0.245
	Bachelor's Degree and Above	35.0 (2.4)	32.1 (3.2)	37.7 (2.9)	0.140
Race /	Black, non-Hispanic	65.4 (3.9)	64.9 (5.6)	65.9 (5.2)	0.883
Ethnicity	Other, non-Hispanic ²	21.3 (4.2)	*	*	0.742
	White, non-Hispanic	41.6 (2.1)	39.9 (2.4)	43.1 (3.0)	0.353
	Hispanic	26.2 (3.7)	28.8 (5.2)	24.0 (5.5)	0.549
Age	18-29	29.9 (3.4)	38.0 (5.3)	22.1 (5.2)	0.070
	30-39	39.6 (3.6)	38.1 (5.5)	41.2 (5.0)	0.699
	40-49	39.8 (3.8)	35.1 (5.4)	45.2 (5.7)	0.215
	50+	44.5 (2.3)	43.3 (2.7)	45.4 (2.9)	0.534
Marital Status	Married, Widowed, or Living with a Partner	42.9 (2.2)	42.2 (2.7)	43.6 (2.9)	0.694
	Divorced or Separated	42.3 (3.1)	35.8 (4.9)	47.7 (5.2)	0.143
	Never Married	34.1 (2.2)	37.3 (4.2)	31.0 (3.7)	0.353
Household Income	Less than \$15,000	46.0 (4.0)	50.6 (5.8)	41.7 (6.7)	0.369
	\$15,000 to \$59,999	42.9 (2.7)	43.6 (3.8)	42.3 (3.6)	0.807
	\$60,000 to \$199,999	37.3 (2.1)	34.9 (3.0)	39.5 (2.7)	0.254
	\$200,000 or more	33.9 (4.8)	*	*	0.555
	Metro Area	37.5 (1.5)	37.5 (2.4)	37.5 (2.3)	0.992

Metropolitan Status	Non-Metro Area	52.9 (3.4)	51.9 (4.3)	53.8 (4.8)	0.758
		Judaism			
Population		1.3 (0.3)	1.3 (0.4)	1.2 (0.4)	0.902
Gender	Male	1.3 (0.4)	1.1 (0.5)	1.4 (0.6)	0.709
	Female	1.3 (0.4)	1.6 (0.7)	1.0 (0.4)	0.485
Education	Less than High School Graduate	_	_	_	
	High School Graduate	0.1 (0.1)	0.2 (0.2)	0.1 (0.1)	0.626
	Some College, including Associate Degree	0.9 (0.3)	0.7 (0.5)	1.2 (0.5)	0.541
	Bachelor's Degree and Above	2.8 (0.9)	*	*	0.730
Race /	Black, non-Hispanic	_	_	_	
Ethnicity	Other, non-Hispanic ²	0.4 (0.3)	0.5 (0.4)	0.4 (0.4)	0.947
	White, non-Hispanic	1.8 (0.4)	2.1 (0.7)	1.5 (0.5)	0.519
	Hispanic	0.7 (0.6)	0.1 (0.1)	*	Less than 0.05
Age	18-29	0.7 (0.4)	1.1 (0.8)	0.4 (0.3)	0.274
	30-39	1.2 (0.6)	*	0.8 (0.6)	0.518
	40-49	0.9 (0.9)	*	_	0.343
	50+	1.7 (0.4)	1.2 (0.4)	2.0 (0.7)	0.323
Marital Status	Married, Widowed, or Living with a Partner	1.8 (0.5)	1.9 (0.7)	1.7 (0.7)	0.875
	Divorced or Separated	0.7 (0.3)	0.3 (0.3)	1.1 (0.8)	0.446
	Never Married	0.6 (0.3)	0.8 (0.5)	0.4 (0.3)	0.450
Household	Less than \$15,000	0.3 (0.2)	0.4 (0.4)	0.3 (0.3)	0.739
Income	\$15,000 to \$59,999	1.5 (0.5)	1.1 (0.6)	1.8 (0.8)	0.474
	\$60,000 to \$199,999	1.0 (0.4)	1.5 (0.7)	0.6 (0.3)	0.158
	\$200,000 or more	*	*	*	0.824
Metropolitan Status	Metro Area	1.5 (0.4)	1.6 (0.5)	1.3 (0.5)	0.684
	Non-Metro Area	0.4 (0.3)	-	0.7 (0.5)	0.199
		Islam		•	•
Population		0.9 (0.4)	0.7 (0.5)	1.1 (0.6)	0.635
Gender	Male	1.4 (0.7)	*	1.6 (1.0)	0.740
	Female	0.4 (0.3)	0.3 (0.2)	0.6 (0.6)	0.537

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Education	Less than High School Graduate	*	*	_	0.304
	High School Graduate	*	0.2 (0.2)	*	Less than 0.001
	Some College, including Associate Degree	0.3 (0.2)	0.2 (0.2)	0.5 (0.5)	0.503
	Bachelor's Degree and Above	0.1 (0.1)	0.1 (0.1)	_	0.306
Race /	Black, non-Hispanic	1.0 (0.6)	1.1 (0.6)	0.8 (0.8)	0.733
Ethnicity	Other, non-Hispanic ²	*	*	*	0.847
	White, non-Hispanic	0.2 (0.2)	0 (0)	0.5 (0.5)	0.335
	Hispanic	0.5 (0.4)	0.4 (0.4)	0.6 (0.6)	0.843
Age	18-29	*	*	*	0.884
	30-39	0.7 (0.4)	0.2 (0.2)	1.3 (0.9)	0.126
	40-49	0.3 (0.3)	_	0.7 (0.7)	0.296
	50+	0.4 (0.3)	0.2 (0.2)	0.6 (0.6)	0.418
Marital Status	Married, Widowed, or Living with a Partner	0.3 (0.3)	0.1 (0.1)	0.6 (0.6)	0.120
	Divorced or Separated	0.2 (0.2)	0.4 (0.4)	_	0.276
	Never Married	2.1 (1.0)	*	*	0.806
Household	Less than \$15,000	0.7 (0.5)	0.4 (0.4)	*	0.533
Income	\$15,000 to \$59,999	1.1 (0.8)	_	*	0.181
	\$60,000 to \$199,999	0.9 (0.5)	*	0.4 (0.3)	0.274
	\$200,000 or more	_	_	_	
Metropolitan	Metro Area	1.1 (0.4)	0.8 (0.6)	1.3 (0.7)	0.631
Status	Non-Metro Area	_	_	_	
		Buddhism			·
Population		1.2 (0.3)	0.5 (0.3)	1.8 (0.5)	Less than 0.05
Gender	Male	1.3 (0.5)	0.6 (0.5)	2.0 (0.8)	0.178
	Female	1.0 (0.4)	0.3 (0.2)	1.6 (0.8)	Less than 0.05
Education	Less than High School Graduate	_	_	_	
	High School Graduate	0.7 (0.5)	*	0.4 (0.4)	0.470
	Some College, including Associate Degree	0.8 (0.4)	0.3 (0.2)	1.4 (0.7)	Less than 0.05

	•				•
	Bachelor's Degree and Above	2.2 (0.7)	0.4 (0.2)	*	Less than 0.001
Race /	Black, non-Hispanic	0.2 (0.1)	0.2 (0.2)	0.1 (0.1)	0.724
Ethnicity	Other, non-Hispanic ²	*	_	*	0.063
	White, non-Hispanic	0.8 (0.3)	0.7 (0.4)	0.9 (0.3)	0.758
	Hispanic	1.1 (0.6)	0.1 (0.1)	*	Less than 0.001
Age	18-29	0.8 (0.6)	*	0.2 (0.2)	0.103
	30-39	1.7 (1.0)	_	*	0.059
	40-49	*	1.2 (0.5)	*	Less than 0.05
	50+	0.5 (0.2)	_	0.9 (0.4)	Less than 0.05
Marital Status	Married, Widowed, or Living with a Partner	1.6 (0.5)	0.6 (0.5)	2.4 (0.9)	0.088
	Divorced or Separated	0.6 (0.3)	0.8 (0.5)	0.5 (0.4)	0.632
	Never Married	0.7 (0.3)	0.1 (0.1)	1.3 (0.6)	Less than 0.01
Household	Less than \$15,000	0.2 (0.2)	_	0.4 (0.5)	0.349
Income	\$15,000 to \$59,999	0.7 (0.4)	0.8 (0.7)	0.6 (0.4)	0.756
	\$60,000 to \$199,999	1.7 (0.6)	0.4 (0.2)	2.9 (1.1)	Less than 0.001
	\$200,000 or more	*	_	*	0.359
Metropolitan	Metro Area	1.2 (0.4)	0.6 (0.3)	1.8 (0.6)	0.078
Status	Non-Metro Area	1.0 (0.6)	_	*	0.096
		Hinduism			
Population		0.9 (0.3)	0.7 (0.3)	1.0 (0.4)	0.375
Gender	Male	1.0 (0.4)	1.2 (0.6)	0.8 (0.5)	0.604
	Female	0.7 (0.3)	0.1 (0.1)	1.2 (0.6)	Less than 0.01
Education	Less than High School Graduate	_	_	_	
	High School Graduate	0.1 (0.1)	_	0.1 (0.1)	0.390
	Some College, including Associate Degree	0.7 (0.5)	_	1.3 (1.0)	0.167
	Bachelor's Degree and Above	1.9 (0.7)	1.9 (0.8)	1.9 (1.0)	0.998
Race /	Black, non-Hispanic	0.2 (0.2)	_	0.3 (0.3)	0.309
Ethnicity	Other, non-Hispanic ²	*	*	*	0.320

	White, non-Hispanic	_	0.1 (0.1)	_	0.300
	Hispanic	_	_	_	
Age	18-29	0.5 (0.5)	_	*	0.323
	30-39	*	1.6 (1.0)	*	0.185
	40-49	1.0 (0.7)	0.7 (0.5)	*	0.540
	50+	0.4 (0.2)	0.5 (0.4)	0.3 (0.3)	0.596
Marital Status	Married, Widowed, or Living with a Partner	1.2 (0.4)	0.9 (0.4)	1.5 (0.7)	0.443
	Divorced or Separated	_	_	_	
	Never Married	0.7 (0.4)	0.5 (0.5)	0.8 (0.6)	0.810
Household	Less than \$15,000	_	_	_	
Income	\$15,000 to \$59,999	0.5 (0.3)	0.5 (0.5)	0.5 (0.4)	0.989
	\$60,000 to \$199,999	1.2 (0.4)	0.9 (0.5)	1.5 (0.7)	0.498
	\$200,000 or more	*	*	*	0.483
Metropolitan	Metro Area	0.9 (0.3)	0.7 (0.3)	1.1 (0.5)	0.473
Status	Non-Metro Area	0.6 (0.4)	0.3 (0.3)	0.8 (0.8)	0.462
	Church o	of Latter Days	Saints		
Population		1.8 (0.7)	2.7 (1.5)	1.0 (0.2)	0.093
Gender	Male	1.0 (0.3)	1.2 (0.5)	0.7 (0.4)	0.541
	Female	*	*	1.3 (0.3)	0.097
Education	Less than High School Graduate	*	*	*	0.112
	High School Graduate	0.4 (0.3)	0.2 (0.2)	0.5 (0.5)	0.511
	Some College, including Associate Degree	1.8 (0.7)	1.8 (0.8)	1.9 (0.8)	0.872
	Bachelor's Degree and Above	1.0 (0.5)	1.5 (0.7)	0.5 (0.4)	0.154
Race /	Black, non-Hispanic	0.3 (0.2)	0.4 (0.4)	0.2 (0.2)	0.748
Ethnicity	Other, non-Hispanic ²	*	*	0.2 (0.3)	Less than 0.001
	White, non-Hispanic	1.6 (0.4)	1.8 (0.7)	1.4 (0.4)	0.616
	Hispanic	1.0 (0.3)	1.9 (0.6)	0.3 (0.3)	Less than 0.05
Age	18-29	*	*	*	Less than 0.05
	30-39	0.9 (0.4)	1.0 (0.8)	0.8 (0.3)	0.764
	40-49	1.1 (0.6)	1.6 (0.9)	0.7 (0.4)	0.238

	50+	1.3 (0.4)	1.5 (0.8)	1.1 (0.3)	0.508
Marital Status	Married, Widowed, or Living with a Partner	1.3 (0.4)	1.4 (0.6)	1.3 (0.3)	0.766
	Divorced or Separated	1.7 (0.9)	*	0.5 (0.5)	0.075
	Never Married	*	*	0.8 (0.6)	0.066
Household	Less than \$15,000	*	*	0.8 (0.7)	0.130
Income	\$15,000 to \$59,999	*	*	0.9 (0.5)	0.160
	\$60,000 to \$199,999	1.5 (0.4)	1.8 (0.8)	1.2 (0.2)	0.395
	\$200,000 or more	*	*	_	0.307
Metropolitan Status	Metro Area	1.9 (0.9)	*	0.8 (0.3)	Less than 0.05
	Non-Metro Area	1.3 (0.4)	0.8 (0.6)	1.9 (0.5)	0.243
	0	ther Religion			
Population		5.6 (0.7)	6.8 (1)	4.5 (0.7)	Less than 0.05
Gender	Male	4.2 (0.7)	5.5 (1.1)	2.9 (0.6)	Less than 0.05
	Female	7.0 (1.0)	8.0 (1.6)	6.0 (1.2)	0.274
Education	Less than High School Graduate	*	*	0.6 (0.7)	0.374
	High School Graduate	5.6 (1.2)	7.7 (2.1)	*	0.090
	Some College, including Associate Degree	8.5 (1.3)	11.2 (2.0)	5.7 (1.3)	Less than 0.05
	Bachelor's Degree and Above	4.5 (0.8)	*	5.1 (1.1)	0.414
Race /	Black, non-Hispanic	8.7 (2.0)	*	12.5 (3.1)	0.117
Ethnicity	Other, non-Hispanic ²	*	*	1.9 (0.8)	Less than 0.05
	White, non-Hispanic	5.0 (0.8)	7.1 (1.2)	3.1 (0.8)	Less than 0.01
	Hispanic	6.2 (1.5)	*	*	0.989
Age	18-29	*	*	*	0.853
	30-39	4.3 (1.3)	*	*	0.316
	40-49	5.2 (1.6)	*	*	0.312
	50+	7.2 (1.1)	9.0 (1.6)	5.7 (1.3)	0.081
Marital Status	Married, Widowed, or Living with a Partner	6.0 (0.9)	7.9 (1.5)	4.1 (0.9)	Less than 0.05
	Divorced or Separated	7.2 (1.8)	*	*	0.677

	Never Married	4.3 (0.8)	*	3.7 (0.8)	0.428
Household	Less than \$15,000	8.3 (2.3)	*	*	0.108
Income	\$15,000 to \$59,999	6.1 (1.1)	8.2 (1.9)	*	0.100
	\$60,000 to \$199,999	4.6 (0.8)	4.9 (1.2)	4.3 (0.9)	0.615
	\$200,000 or more	*	*	*	0.125
Metropolitan	Metro Area	5.8 (0.8)	6.4 (1.1)	5.1 (0.8)	0.253
Status	Non-Metro Area	4.9 (1.4)	*	1.5 (0.9)	Less than 0.01
	N	No Religion			
Population		29.8 (1.4)	30.9 (1.7)	28.7 (2.0)	0.376
Gender	Male	33.1 (2.0)	32.0 (2.5)	34.1 (3.1)	0.590
	Female	26.6 (1.8)	29.9 (2.4)	23.7 (2.5)	0.063
Education	Less than High School Graduate	30.4 (5.7)	*	*	0.351
	High School Graduate	24.1 (2.7)	23.0 (4.2)	25.0 (3.8)	0.732
	Some College, including Associate Degree	29.3 (1.7)	31.5 (2.2)	27.0 (2.9)	0.249
	Bachelor's Degree and Above	34.5 (2.1)	38.1 (2.7)	31.2 (2.7)	Less than 0.05
Race /	Black, non-Hispanic	17.7 (2.7)	21.0 (4.2)	14.0 (4.0)	0.270
Ethnicity	Other, non-Hispanic ²	27.6 (5.2)	26.4 (6.3)	*	0.766
	White, non-Hispanic	32.0 (1.6)	33.5 (2.1)	30.7 (2.3)	0.359
	Hispanic	30.8 (4.5)	31.6 (5.5)	30.2 (6.1)	0.857
Age	18-29	38.9 (4.1)	31.5 (4.6)	46.0 (6.5)	0.076
	30-39	34.3 (3.1)	39.6 (3.9)	28.2 (4.4)	0.056
	40-49	30.0 (3.5)	34.6 (4.8)	25.0 (4.5)	0.149
	50+	24.1 (1.9)	25.2 (2.8)	23.2 (2.5)	0.585
Marital Status	Married, Widowed, or Living with a Partner	25.6 (1.9)	27.7 (2.4)	23.6 (2.6)	0.213
	Divorced or Separated	32.5 (2.7)	35 (5.1)	30.5 (3.7)	0.513
	Never Married	35.7 (2.4)	35 (3.6)	36.4 (3.5)	0.787
Household	Less than \$15,000	29.1 (4.5)	27.2 (4.4)	*	0.661
Income	\$15,000 to \$59,999	28.5 (2.6)	30 (3.9)	27.1 (3.2)	0.536
	\$60,000 to \$199,999	29.4 (1.7)	30.9 (2.5)	28.0 (2.5)	0.415
	\$200,000 or more	41.9 (5.2)	*	*	0.732
	Metro Area	31.1 (1.6)	31.9 (1.9)	30.3 (2.4)	0.576

Metropolitan	Non-Metro Area	23.1 (3.2)	26 (5.2)	20.5 (3.9)	0.398
Status					

Notes: Total number of complete cases: n = 2,312. Respondents could select only one current religion. "SE" refers to standard error. Chi square tests were not conducted when both conditions had observed values of 0 (signified with ---).

Source: National Center for Health Statistics, Research and Development Survey 6. 2022

Table 3: Weighted percents (with standard errors) of reported frequency of attending a religious service at age 14, adults age 18 and older, overall and by definition text experimental condition, Research and Development Survey 6

	Combined Sample	Text Optional	Text Always Provided	
Attendance	Percent (SE)	Percent (SE)	Percent (SE)	p-value ¹
More than once a week	15.5 (0.9)	15.1 (1.4)	15.8 (1.8)	
Once a week	36.4 (1.5)	35.5 (2.0)	37.3 (1.8)	
2-3 times a month	10.0 (0.7)	10.5 (1.1)	9.6 (1.1)	
Once a month	4.8 (0.6)	4.9 (0.8)	4.6 (1.0)	0.511
3-11 times a year	5.7 (0.6)	4.9 (1.0)	6.4 (0.9)	
Once or twice a year	10.7 (0.8)	10.1 (1.1)	11.2 (1.1)	
Never	16.8 (1.2)	18.8 (1.8)	14.8 (1.3)	

Footnote: ¹ p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions. **Notes**: Total number of complete cases: n = 2,312. "SE" refers to standard error.

Source: National Center for Health Statistics, Research and Development Survey 6. 2022

Table 4: Weighted percents (with standard errors) of reported current importance of religion in daily life, adults age 18 and older, overall and by definition text experimental condition, Research and Development Survey 6

	Combined Sample	Text Optional	Text Always Provided	
Importance	Percent (SE)	Percent (SE)	Percent (SE)	p-value ¹
Very important	37.6 (1.5)	39.5 (1.8)	35.8 (2.4)	
Somewhat important	24.2 (1.1)	22.1 (1.4)	26.2 (1.9)	
Not important	7.9 (0.8)	7.9 (1.2)	8.0 (0.9)	0.358
Don't Know	0.5 (0.2)	0.6 (0.4)	0.4 (0.3)	
Not Eligible	29.8 (1.4)	29.9 (1.6)	29.6 (1.8)	

Footnote: 1 p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions. **Notes**: Total number of complete cases: n = 2,312. "SE" refers to standard error.

[–] Quantity zero.

⁻⁻⁻ Data not available.

¹p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions excluding the cases that were not eligible for the question (n=1,123).

² "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

Table 5: Weighted percents (with standard errors) of reported current frequency of attending a religious service, adults age 18 and older, overall and by definition text experimental condition, Research and Development Survey 6

	Combined Sample	Text Optional	Text Always Provided	
Attendance	Percent (SE)	Percent (SE)	Percent (SE)	p-value ¹
More than once a week	8.5 (0.7)	8.1 (0.9)	8.8 (1.3)	
Once a week	17.8 (1.4)	18.6 (1.7)	17.0 (1.5)	
2-3 times a month	6.9 (0.7)	8.2 (1.0)	5.6 (1.0)	
Once a month	4.2 (0.6)	3.9 (0.8)	4.6 (1.0)	0.162
3-11 times a year	6.6 (0.7)	7.8 (0.9)	5.4 (0.9)	
Once or twice a year	18.6 (1.4)	16.7 (1.5)	20.4 (1.9)	
Never	36.9 (1.6)	36.3 (1.8)	37.5 (2.3)	

Footnote: 1 p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions. **Notes:** Total number of complete cases: n = 2,312. "SE" refers to standard error.

Source: National Center for Health Statistics, Research and Development Survey 6. 2022

Table 6: Weighted percents (with standard errors) of reported current importance of religion in daily life, adults age 18 and older, overall and by definition text experimental condition, Research and Development Survey 6

	Combined Sample	Text Optional	Text Always Provided	
Current Importance of Religion in Daily Life	Percent (SE)	Percent (SE)	Percent (SE)	p-value ¹
Very important	37.8 (1.6)	39.8 (1.8)	36.0 (2.4)	
Somewhat important	24.2 (1.1)	22.2 (1.4)	26.3 (1.9)	0.209
Not important	8.0 (0.8)	7.9 (1.2)	8.0 (1.0)	

Footnote: ¹p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions excluding the cases that were not eligible for the question (n=697).

Note: Total number of eligible cases: n = 1,615. Cases of item missing data (n=10) excluded from analysis.

Table 7: Weighted percents (with standard errors) of lifetime use of birth control pills, women age 18 and older, by selected population subgroups, overall and by contraceptive method formatting experimental condition, Research and Development Survey 6

		Combined	Single	Multi-	
		Sample	Punch	Punch	
Characteristic	Subgroup	Percent	Percent	Percent	p-value ¹
		(SE)	(SE)	(SE)	p-value
Population		74.8 (1.6)	76.4 (2.6)	73.2 (2.5)	0.426
Education	Less than High School	*	*	*	0.560
Education	Graduate				

	High School Graduate	69.1 (3.2)	69.1 (5.3)	69.1 (5.3)	0.995
	Some College, including Associate Degree	76.9 (2.6)	78.6 (4.0)	75.2 (3.4)	0.523
	Bachelor's Degree and Above	81.5 (2.3)	83.5 (3.5)	79.5 (3.1)	0.412
	Black, non-Hispanic	70.4 (4.2)	76.3 (5.6)	*	0.214
Race /	Other, non-Hispanic ²	*	*	*	0.858
Ethnicity	White, non-Hispanic	79.6 (2.0)	79.1 (2.9)	80.2 (2.6)	0.768
	Hispanic	66.5 (4.4)	72.3 (6.5)	*	0.298
	18 to 29	49.4 (6.4)	*	*	0.758
	30 to 39	77.5 (3.7)	81.5 (4.2)	72.4 (6.1)	0.195
Age	40 to 49	79 (4.9)	78.8 (6.5)	79.2 (6.1)	0.958
	50 or Older	82.3 (2.0)	82.3 (2.4)	82.2 (3.0)	0.970
	Married, Widowed, or Living with a Partner	80.0 (1.7)	82.9 (2.3)	77.5 (3.0)	0.181
Marital Status	Divorced or Separated	85.9 (2.7)	86.9 (3.6)	84.8 (4.0)	0.700
	Never Married	60.1 (4.4)	59.9 (6.3)	60.2 (6.1)	0.975
	Less than \$15,000	73.5 (4.7)	74.4 (5.7)	*	0.807
Household	\$15,000 to \$59,999	69.5 (2.9)	73.5 (3.8)	65.7 (4.8)	0.243
Income	\$60,000 to \$199,999	78.2 (2.2)	79.5 (3.6)	77.0 (3.3)	0.631
	\$200,000 or more	*	*	*	0.174
N. A. C. A.	Metro Area	74.2 (1.8)	74.8 (3.0)	73.5 (2.9)	0.780
Metro Status	Non-Metro Area	77.9 (4.0)	85.8 (4.1)	71.6 (6.3)	0.063

Note: Total number of eligible cases: n = 1,189.

Table 8: Percentages (with standard errors) of lifetime use of condoms during sex, women age 18 and older who have had sexual intercourse, by selected population subgroups, overall and by contraceptive method formatting experimental condition, Research and Development Survey 6

Characteristic		Combined Sample	Single Punch	Multi- Punch	
	Subgroup	Percent (SE)	Percent (SE)	Percent (SE)	p-value ¹
Population		85.0 (1.5)	89.4 (1.6)	81.0 (2.2)	Less than 0.01

¹p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions excluding the cases that were not eligible for the question (n=1,123).

² "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

	Less than High School Graduate	*	*	*	Less than 0.001
Education	High School Graduate	77.5 (3.3)	90.2 (3.8)	66.5 (5.7)	Less than 0.001
Education	Some College, including Associate Degree	89.0 (1.5)	90.1 (2.0)	87.9 (2.2)	Less than 0.01
	Bachelor's Degree and Above	85.8 (2.3)	86.7 (3.8)	85.0 (3.2)	0.441
	Black, non-Hispanic	82.2 (4.4)	88.7 (4.5)	*	Less than 0.01
Race /	Other, non-Hispanic ²	*	*	*	0.098
Ethnicity	White, non-Hispanic	86.0 (1.9)	90.0 (2.4)	82.4 (2.4)	Less than 0.01
	Hispanic	84.5 (4.0)	90.3 (3.4)	79.2 (6.0)	Less than 0.01
	18 to 29	86.1 (4.2)	97.7 (2.2)	80.0 (6.3)	Less than 0.001
	30 to 39	94.7 (1.7)	95.3 (2.6)	93.9 (2.2)	0.160
Age	40 to 49	89.9 (3.8)	97.9 (1.5)	81.5 (6.7)	Less than 0.001
	50 or Older	79.3 (2.5)	82.1 (2.9)	76.7 (3.4)	Less than 0.05
	Married, Widowed, or Living with a Partner	83.3 (1.9)	86.1 (2.7)	80.7 (2.6)	Less than 0.01
Marital Status	Divorced or Separated	87.7 (2.5)	92.9 (2.2)	81.9 (5.3)	Less than 0.01
	Never Married	87.0 (2.9)	93.7 (2.4)	81.1 (5.0)	Less than 0.001
	Less than \$15,000	89.1 (3.4)	97.1 (1.7)	*	Less than 0.001
Household	\$15,000 to \$59,999	79.6 (3.0)	84.4 (3.2)	75.2 (4.1)	Less than 0.01
Income	\$60,000 to \$199,999	88.4 (1.6)	91.3 (2.2)	86.1 (2.4)	Less than 0.01
	\$200,000 or more	*	*	*	0.432
Metro Status	Metro Area	85.9 (1.7)	88.6 (1.7)	83.4 (2.4)	Less than 0.001
Meno Status	Non-Metro Area	80.5 (4.9)	93.6 (4.1)	*	Less than 0.01

Note: Total number of eligible cases: n = 1,068

¹p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions excluding the cases that were not eligible for the question (n=1,123).

² "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

Table 9: Percentages (with standard errors) of lifetime use of partner vasectomy, women age 18 and older who have had sexual intercourse, by selected population subgroups, overall and by contraceptive method formatting experimental condition, Research and Development Survey 6

Characteristic		Combined Sample	Single Punch	Multi- Punch	p-value ¹
Characteristic	Subgroup	Percent (SE)	Percent (SE)	Percent (SE)	p-varue
Population		21.8 (1.9)	26.5 (2.8)	17.4 (2.1)	Less than 0.01
	Less than High School Graduate	*	*	*	0.565
Education	High School Graduate	17.8 (3.5)	*	10.6 (2.6)	Less than 0.01
Education	Some College, including Associate Degree	22.5 (2.0)	24.8 (4.0)	20.2 (3.3)	0.264
	Bachelor's Degree and Above	23.9 (2.6)	31.3 (4.1)	17.3 (4.1)	Less than 0.05
	Black, non-Hispanic	*	*	*	Less than 0.001
Race /	Other, non-Hispanic ²	*	*	*	Less than 0.05
Ethnicity	White, non-Hispanic	26.5 (2.6)	34.0 (4.1)	19.9 (2.5)	Less than 0.001
	Hispanic	15.3 (4.2)	*	*	0.093
	18 to 29	*	*	*	0.392
A 00	30 to 39	18.4 (4.5)	22.8 (6.0)	*	Less than 0.05
Age	40 to 49	22.0 (3.0)	22.3 (5.9)	21.7 (6.0)	0.906
	50 or Older	28.1 (3.2)	33.8 (4.0)	22.7 (3.5)	Less than 0.01
	Married, Widowed, or Living with a Partner	22.2 (2.4)	28.6 (3.6)	16.4 (2.3)	Less than 0.001
Marital Status	Divorced or Separated	35.1 (5.9)	*	*	0.656
	Never Married	12.3 (2.9)	15.1 (4.2)	*	0.135
	Less than \$15,000	*	*	*	0.482
Household	\$15,000 to \$59,999	20.8 (3.2)	23.9 (5.4)	18.0 (3.5)	0.158
Income	\$60,000 to \$199,999	22.6 (2.1)	30.2 (3.7)	16.4 (2.5)	Less than 0.01
	\$200,000 or more	*	*	*	0.273
Metro Status	Metro Area	21.2 (2.0)	25.7 (2.9)	16.9 (2.4)	Less than 0.01

Non-Metro Area	24.8 (3.5)	30.6 (6.1)	19.8 (4.4)	0.091
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Note: Total number of eligible cases: n = 1,068

Table 10: Percentages (with and standard errors) of lifetime use of Depo-Provera, women age 18 and older, by selected population subgroups, overall and by contraceptive method formatting experimental condition, Research and Development Survey 6

Chamatai t		Combined Sample	Single Punch	Multi- Punch	1
Characteristic	Subgroup	Percent (SE)	Percent (SE)	Percent (SE)	p-value ¹
Population		15.4 (1.6)	18.3 (2.3)	12.6 (1.8)	Less than 0.05
	Less than High School Graduate	*	*	*	Less than 0.05
	High School Graduate	13.4 (2.8)	*	10.8 (3.0)	0.358
Education	Some College, including Associate Degree	20.2 (2.6)	22.8 (3.4)	17.63 (3.1)	0.204
	Bachelor's Degree and Above	11.7 (2.5)	*	12.0 (3.2)	0.897
	Black, non-Hispanic	27.7 (5.0)	*	23.4 (5.5)	0.328
Race /	Other, non-Hispanic ²	*	*	*	Less than 0.05
Ethnicity	White, non-Hispanic	12.3 (1.8)	13.6 (2.9)	11.0 (2.1)	0.467
	Hispanic	22.7 (5.0)	28.1 (6.5)	*	0.329
	18 to 29	19.4 (3.8)	*	19.1 (4.9)	0.915
Age	30 to 39	26.3 (4.5)	*	15.6 (4.3)	Less than 0.05
8-	40 to 49	26.2 (5.5)	26.2 (6.1)	*	0.998
	50 or Older	6.3 (1.6)	*	*	0.266
	Married, Widowed, or Living with a Partner	11.0 (1.7)	12.6 (2.3)	9.5 (2.4)	0.339
Marital Status	Divorced or Separated	16.3 (2.6)	20.4 (5.0)	*	0.319
	Never Married	22.3 (3.6)	26.1 (5.1)	18.6 (4.1)	0.204
	Less than \$15,000	20.7 (4.7)	*	*	0.054
Household Income	\$15,000 to \$59,999	19.1 (3.1)	20.9 (4.8)	17.5 (3.9)	0.583
income	\$60,000 to \$199,999	11.5 (1.7)	12.6 (2.1)	10.6 (2.6)	0.546

¹p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions excluding the cases that were not eligible for the question (n=1,123).

² "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

	\$200,000 or more	*	*	*	Less than
					0.05
Matua Status	Metro Area	15.7 (1.7)	18.9 (2.4)	12.6 (2.2)	0.053
Metro Status	Non-Metro Area	13.5 (3.4)	*	*	0.738

Note: Total number of eligible cases: n = 1,189.

Table 11: Percentages (with standard errors) of lifetime use of partner withdrawal, women age 18 and older who have had sexual intercourse, by selected population subgroups, overall and by contraceptive method formatting experimental condition, Research and Development Survey 6

Characteristic		Combined Sample	Single Punch	Multi- Punch	p-value ¹
Characteristic	Subgroup	Percent (SE)	Percent (SE)	Percent (SE)	p-value
Population		58.1 (2.3)	64.7 (3.1)	51.9 (3.0)	Less than 0.01
	Less than High School Graduate	*	*	*	Less than 0.05
F.J 4	High School Graduate	49.1 (4.7)	*	36.7 (5.3)	Less than 0.01
Education	Some College, including Associate Degree	62.0 (2.7)	64.6 (3.8)	59.4 (3.7)	Less than 0.05
	Bachelor's Degree and Above	58.7 (3.5)	63.0 (4.7)	54.9 (4.6)	0.122
	Black, non-Hispanic	58.3 (5.4)	*	*	Less than 0.001
Race /	Other, non-Hispanic ²	*	*	*	Less than 0.05
Ethnicity	White, non-Hispanic	56.1 (2.8)	59.1 (4.1)	53.5 (3.8)	0.144
	Hispanic	64.9 (4.2)	78.1 (4.3)	52.8 (5.6)	Less than 0.001
	18 to 29	66.8 (5.5)	83.5 (5.5)	*	Less than 0.001
Age	30 to 39	73.2 (3.4)	78.9 (5.0)	66.3 (5.3)	Less than 0.05
	40 to 49	77.3 (4.5)	88.8 (3.2)	*	Less than 0.001
	50 or Older	43.4 (3.1)	46.2 (4.2)	40.8 (4.3)	0.165
Marital Status	Married, Widowed, or Living with a Partner	53.8 (2.9)	58.3 (4.5)	49.9 (4.0)	0.071

¹p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions excluding the cases that were not eligible for the question (n=1,123).

² "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

	Divorced or Separated	57.6 (4.0)	64.2 (5.9)	*	0.124
	Never Married	67.2 (4.3)	78.4 (4.4)	57.3 (5.4)	Less than 0.001
	Less than \$15,000	60.8 (6.9)	*	*	0.082
Household	\$15,000 to \$59,999	52.8 (4.1)	60.9 (4.7)	45.5 (4.9)	Less than 0.001
Income	\$60,000 to \$199,999	62.4 (2.4)	67.3 (3.9)	58.4 (3.8)	0.053
	\$200,000 or more	*	*	*	0.055
Metro Status	Metro Area	59.8 (2.2)	67.8 (2.9)	52.2 (3.0)	Less than 0.001
	Non-Metro Area	49.2 (5.8)	*	50.6 (5.7)	0.731

Note: Total number of eligible cases: n = 1,068

Table 12: Percentages (with standard errors) of lifetime use of the rhythm method, women age 18 and older who have had sexual intercourse, by selected population subgroups, overall and by contraceptive method formatting experimental condition, Research and Development Survey 6

Characteristic		Combined Sample	Single Punch	Multi- Punch	n voluel
Characteristic	Subgroup	Percent (SE)	Percent (SE)	Percent (SE)	p-value ¹
Population		18.9 (1.8)	23.6 (2.8)	14.5 (2.5)	Less than 0.05
	Less than High School Graduate	*	*	*	0.989
	High School Graduate	17.9 (4.2)	*	*	0.100
Education	Some College, including Associate Degree	21.0 (2.8)	28.5 (4.8)	13.8 (2.7)	Less than 0.01
	Bachelor's Degree and Above	19.6 (2.6)	22.9 (4.3)	16.8 (3.6)	0.249
	Black, non-Hispanic	20.1 (3.8)	27.6 (6.6)	*	Less than 0.01
Race /	Other, non-Hispanic ²	28.7 (6.5)	*	*	Less than 0.01
Ethnicity	White, non-Hispanic	18.4 (2.3)	19.8 (3.2)	17.0 (3.2)	0.395
	Hispanic	16.5 (3.5)	*	*	Less than 0.05
Age	18 to 29	19.4 (4.2)	*	*	Less than 0.01

¹p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions excluding the cases that were not eligible for the question (n=1,123).

² "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

	30 to 39	15.7 (4.0)	*	*	Less than 0.05
	40 to 49	14.7 (4.4)	*	*	0.789
	50 or Older	21.3 (2.4)	24.1 (3.3)	18.7 (3.8)	0.194
	Married, Widowed, or Living with a Partner	22.5 (2.6)	29.5 (4.2)	16.3 (2.8)	Less than 0.01
Marital Status	Divorced or Separated	20.1 (4.6)	*	*	0.600
	Never Married	10.6 (2.7)	*	*	0.280
	Less than \$15,000	*	*	*	Less than 0.05
Household	\$15,000 to \$59,999	16.9 (2.9)	16.7 (4.4)	17.1 (4.4)	0.794
Income	\$60,000 to \$199,999	21.9 (2.2)	30.8 (3.5)	14.6 (3.2)	Less than 0.01
	\$200,000 or more	*	*	*	0.533
Metro Status	Metro Area	19.5 (1.9)	25.0 (3.0)	14.4 (2.7)	Less than 0.01
	Non-Metro Area	15.6 (4.1)	*	*	0.763

Note: Total number of eligible cases: n = 1,068

Table 13: Percentages (with standard errors) of lifetime use of the standard days method or "CycleBeads", women age 18 and older who have had sexual intercourse, by selected population subgroups, overall and by contraceptive method formatting experimental condition, Research and Development Survey 6

Characteristic		Combined Sample	Single Punch	Multi- Punch	p-value ¹
Characteristic	Subgroup	Percent (SE)	Percent (SE)	Percent (SE)	p value
Population		5.3 (0.8)	8.6 (1.6)	2.2 (0.7)	Less than 0.001
	Less than High School Graduate	* (*)	* (*)	* (*)	0.254
	High School Graduate	6.9 (1.7)	* (*)	* (*)	0.235
Education	Some College, including Associate Degree	6.8 (1.9)	12.7 (3.8)	0.9 (0.7)	Less than 0.001
	Bachelor's Degree and Above	3.6 (1.1)	* (*)	* (*)	0.083
Race /	Black, non-Hispanic	* (*)	* (*)	* (*)	0.110
Ethnicity	Other, non-Hispanic ²	* (*)	* (*)	_	0.073

¹p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions excluding the cases that were not eligible for the question (n=1,123).

² "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

	White, non-Hispanic	5.1 (1.0)	7.7 (1.7)	2.5 (0.9)	Less than 0.01
	Hispanic	* (*)	* (*)	0.2 (0.2)	Less than 0.001
	18 to 29	* (*)	* (*)	_	Less than 0.01
Age	30 to 39	* (*)	* (*)	* (*)	Less than 0.01
8	40 to 49	* (*)	* (*)	_	0.344
	50 or Older	5.2 (1.3)	* (*)	* (*)	Less than 0.05
	Married, Widowed, or Living with a Partner	6.1 (1.2)	11.0 (2.4)	1.7 (0.7)	Less than 0.001
Marital Status	Divorced or Separated	* (*)	* (*)	* (*)	0.871
	Never Married	* (*)	* (*)	1.5 (1.0)	Less than 0.05
	Less than \$15,000	* (*)	* (*)	* (*)	0.748
Household	\$15,000 to \$59,999	5.8 (1.5)	10.1 (3.1)	1.7 (1.0)	Less than 0.01
Income	\$60,000 to \$199,999	5.0 (1.2)	8.7 (2.2)	1.8 (1.0)	Less than 0.01
	\$200,000 or more	* (*)	* (*)	* (*)	0.186
Metro Status	Metro Area	4.8 (1.1)	* (*)	* (*)	Less than 0.001
3-2-	Non-Metro Area	7.8 (2.3)	8.6 (1.9)	1.1 (0.6)	0.585

Note: Total number of eligible cases: n = 1,068

Source: National Center for Health Statistics, Research and Development Survey 6. 2022

Table 14: Percentages (with standard errors) of lifetime use of the safe period by temperature or cervical mucus test, women age 18 and older who have had sexual intercourse, by selected population subgroups, overall and by contraceptive method formatting experimental condition, Research and Development Survey 6

Characteristic	Subaroun	Combined Sample	Single Punch Percent	Multi- Punch Percent	p-value ¹
	Subgroup	Percent (SE)	(SE)	(SE)	
Population		3.6 (0.9)	4.4 (1.4)	2.9 (1.0)	0.358

Footnotes: ¹p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions excluding the cases that were not eligible for the question (n=1,123).

Quantity zero.

¹p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions excluding the cases that were not eligible for the question (n=1,123).

² "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

Note: Total number of eligible cases: n = 1,068. More than 50% of the estimates for this variable were suppressed as they do not meet NCHS standards of reliability; therefore, only the national estimate is reported. **Source**: National Center for Health Statistics, Research and Development Survey 6. 2022

Table 15: Percentages (with standard errors) of lifetime use of the Natural Cycles App, women age 18 and older who have had sexual intercourse, by selected population subgroups, overall and by contraceptive method formatting experimental condition, Research and Development Survey 6

Characteristic		Combined Sample	Single Punch	Multi- Punch	n valual	
Characteristic	Subgroup	Percent	Percent	Percent	p-value ¹	
		(SE)	(SE)	(SE)		
Population		4.0 (1.0)	4.1 (1.5)	3.9 (1.2)	0.907	

Footnotes: ¹p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions excluding the cases that were not eligible for the question (n=1,123).

Note: Total number of eligible cases: n = 1,068. More than 50% of the estimates for this variable were suppressed as they do not meet NCHS standards of reliability; therefore, only the national estimate is reported.

Source: National Center for Health Statistics, Research and Development Survey 6. 2022

Table 16: Percentages (with standard errors) of lifetime use of the contraceptive patch, women age 18 and older who have had sexual intercourse, by selected population subgroups, overall and by contraceptive method formatting experimental condition, Research and Development Survey 6

Characteristic		Combined Sample	Single Punch	Multi- Punch	n valual	
Characteristic	Subgroup	Percent	Percent	Percent	p-value ¹	
		(SE)	(SE)	(SE)		
Population		5.3 (1.0)	6.6 (1.7)	4.0 (1.0)	0.159	

Footnotes: ¹p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions excluding the cases that were not eligible for the question (n=1,123).

Note: Total number of eligible cases: n = 1,189. More than 50% of the estimates for this variable were suppressed as they do not meet NCHS standards of reliability; therefore, only the national estimate is reported.

Table 17: Percentages (with standard errors) of lifetime use of the vaginal contraceptive ring, women age 18 and older who have had sexual intercourse, by selected population subgroups, overall and by contraceptive method formatting experimental condition, Research and Development Survey 6

Characteristic	Subgroup	Combined Sample Percent (SE)	Single Punch Percent (SE)	Multi- Punch Percent (SE)	p-value ¹
Population		9.4 (1.2)	11.4 (1.9)	7.5 (1.4)	0.083
-	Less than High School Graduate	*	*	*	0.158
Education	High School Graduate	9.3 (2.5)	*	*	0.065
	Some College, including Associate Degree	9.4 (1.8)	8.1 (2.1)	10.6 (3.0)	0.439

	Bachelor's Degree and Above	12.9 (2.3)	15.0 (3.6)	11.0 (2.7)	0.393
	Black, non-Hispanic	*	*	1.1 (0.8)	Less than 0.01
Race /	Other, non-Hispanic ²	*	*	*	0.973
Ethnicity	White, non-Hispanic	11.0 (1.6)	12.5 (2.7)	9.6 (1.9)	0.365
	Hispanic	8.1 (2.3)	*	*	0.25
	18 to 29	*	*	1.2 (0.7)	Less than 0.01
Age	30 to 39	16.7 (3.4)	*	14.3 (3.1)	0.492
1-90	40 to 49	10.5 (3.1)	*	*	0.598
	50 or Older	8.0 (1.3)	9.3 (1.9)	*	0.416
	Married, Widowed, or Living with a Partner	11.2 (1.7)	12.1 (2.5)	10.4 (2.3)	0.630
Marital Status	Divorced or Separated	8.8 (2.5)	*	*	0.314
	Never Married	6.9 (1.8)	*	*	Less than 0.05
	Less than \$15,000	*	*	*	0.059
Household	\$15,000 to \$59,999	6.8 (1.8)	8.8 (3.2)	*	0.213
Income	\$60,000 to \$199,999	11.3 (1.6)	12.1 (2.5)	10.6 (2.1)	0.763
	\$200,000 or more	*	*	*	0.883
N. A. C. A.	Metro Area	9.1 (1.3)	11.0 (1.9)	7.2 (1.5)	0.078
Metro Status	Non-Metro Area	11.3 (2.7)	*	*	0.467

Note: Total number of eligible cases: n = 1,189.

Table 18: Percentages (with standard errors) of lifetime use of emergency contraception pills, women age 18 and older who have had sexual intercourse, by selected population subgroups, overall and by contraceptive method formatting experimental condition, Research and Development Survey 6

Chavaatavistia		Combined Sample		Multi- Punch	n voluel
Characteristic	Subgroup	Percent (SE)	Percent (SE)	Percent (SE)	p-value ¹
Population		15.8 (1.6)	19.0 (2.5)	12.9 (1.8)	Less than 0.05
Education	Less than High School Graduate	*	*	*	0.481

¹p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions excluding the cases that were not eligible for the question (n=1,123).

² "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

	High School Graduate	10.4 (2.4)	19.8 (4.5)	*	Less than 0.01
	Some College, including Associate Degree	13.8 (1.6)	16.4 (2.4)	11.2 (2.5)	0.088
	Bachelor's Degree and Above	20.1 (2.8)	20.2 (4.4)	20.0 (3.3)	0.884
	Black, non-Hispanic	12.2 (3.5)	18.7 (5.2)	*	Less than 0.01
Race /	Other, non-Hispanic ²	*	*	*	0.313
Ethnicity	White, non-Hispanic	12.6 (1.9)	14.8 (3.1)	10.7 (2.1)	0.173
	Hispanic	25.1 (4.3)	*	*	0.259
	18 to 29	27.3 (4.9)	*	*	Less than 0.001
Age	30 to 39	35.7 (4.1)	39.3 (5.9)	31.3 (6.6)	0.304
1-90	40 to 49	17.0 (3.6)	*	*	0.672
	50 or Older	*	*	*	0.994
	Married, Widowed, or Living with a Partner	10.7 (1.4)	11.0 (2.3)	10.5 (1.6)	0.671
Marital Status	Divorced or Separated	14.6 (4.0)	17.8 (5.0)	*	0.175
	Never Married	27.3 (4.0)	36.7 (5.8)	18.9 (4.9)	Less than 0.01
	Less than \$15,000	22.5 (4.6)	29.1 (5.8)	*	0.117
Household	\$15,000 to \$59,999	11.7 (2.3)	17.4 (4.3)	*	Less than 0.01
Income	\$60,000 to \$199,999	17.6 (2.2)	17.3 (3.3)	18.0 (3.0)	0.924
	\$200,000 or more	*	*	*	0.572
Metro Status	Metro Area	16.9 (1.7)	20.3 (2.6)	13.8 (2.1)	Less than 0.05
	Non-Metro Area	*	*	*	0.376

Footnotes: * Estimate does not meet NCHS standards of reliability. ¹p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions excluding the cases that were not eligible for the question (n=1,123).

Note: Total number of eligible cases: n = 1,068

Table 19: Percentages (with standard errors) of a contractive hormonal implant, women age 18 and older who have had sexual intercourse, by selected population subgroups, overall and by contraceptive method formatting experimental condition, Research and Development Survey 6.

Characteristic	Comb	bined Single	Multi-	n voluo ¹
Characteristic	Sam	iple Punch	Punch	p-value ¹

² "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

	Subgroup	Percent	Percent	Percent	
		(SE)	(SE)	(SE)	
Population		7.3 (1.1)	7.9 (1.6)	6.7 (2.2)	0.690

Footnotes: ¹p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions excluding the cases that were not eligible for the question (n=1,123).

Note: Total number of eligible cases: n = 1,189. More than 50% of the estimates for this variable were suppressed as they do not meet NCHS standards of reliability; therefore, only the national estimate is reported.

Table 20: Percentages (with standard errors) of an intrauterine device, women age 18 and older who have had sexual intercourse, by selected population subgroups, overall and by contraceptive method formatting experimental condition, Research and Development Survey 6

Characteristic		Combined Sample	Single Punch	Multi- Punch	n voluel
Characteristic	Subgroup	Percent (SE)	Percent (SE)	Percent (SE)	p-value ¹
Population		18.7 (1.7)	18.9 (2.5)	18.4 (1.9)	0.864
	Less than High School Graduate	*	*	*	0.457
Education	High School Graduate	17.2 (3.6)	23.6 (5.0)	*	Less than 0.05
Laucation	Some College, including Associate Degree	19.5 (2.6)	18.8 (3.6)	20.3 (2.7)	0.692
	Bachelor's Degree and Above	20.6 (2.8)	15.7 (3.5)	25.1 (4.7)	0.125
	Black, non-Hispanic	19.9 (4.5)	18.7 (5.0)	*	0.768
Race /	Other, non-Hispanic ²	*	*	*	0.162
Ethnicity	White, non-Hispanic	18.5 (2.0)	19.5 (2.9)	17.6 (2.3)	0.574
	Hispanic	19.9 (3.8)	23.1 (5.6)	16.9 (4.3)	0.327
	18 to 29	13.6 (3.1)	*	*	0.491
	30 to 39	29.4 (4.0)	30.8 (5.7)	27.5 (5.4)	0.675
Age	40 to 49	23.0 (4.3)	19.5 (5.2)	26.9 (6.6)	0.367
	50 or Older	15.2 (2.3)	16.1 (3.1)	14.3 (2.6)	0.562
	Married, Widowed, or Living with a Partner	20.2 (2.4)	19.2 (3.0)	21.1 (3.0)	0.616
Marital Status	Divorced or Separated	22.6 (4.2)	26.8 (5.9)	17.5 (4.5)	0.145
	Never Married	13.9 (2.4)	13.8 (3.9)	14.1 (3.6)	0.961
	Less than \$15,000	19.3 (5.0)	*	*	0.654
Household	\$15,000 to \$59,999	13.1 (2.4)	15.6 (3.5)	10.8 (2.2)	0.134
Income	\$60,000 to \$199,999	23.5 (2.0)	21.4 (3.3)	25.3 (3.0)	0.416
	\$200,000 or more	*	*	*	0.885

Matua Status	Metro Area	18.9 (1.7)	18.2 (2.5)	19.7 (2.2)	0.636
Metro Status	Non-Metro Area	17.2 (4.0)	*	12.3 (3.1)	0.962

Note: Total number of eligible cases: n = 1,189.

¹p-value derived from second order Rao Scott chi square test for differences across the two experimental conditions excluding the cases that were not eligible for the question (n=1,123).

² "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

Appendix Tables

Table XII: Weighted percents (with standard errors) of having heard about Human Papillomavirus (HPV) testing, women age 18 and older, by selected population subgroups, Research and Development Survey 6

Characteristic	Subgroup	Percent (SE)
Population		60.2 (2.2)
Education	Less than High School Graduate	*
	High School Graduate	55.0 (4.7)
	Some College, including Associate Degree	58.1 (3.1)
	Bachelor's Degree and Above	71.0 (2.3)
Race/Ethnicity	Black, non-Hispanic	59.3 (6.5)
	Other, non-Hispanic ¹	*
	White, non-Hispanic	62.1 (2.5)
	Hispanic	65.3 (4.2)
Age	18 to 29	49.7 (5.7)
	30 to 39	63.2 (3.7)
	40 to 49	70.8 (4.6)
	50 or Older	59.9 (2.9)
Marital Status	Married, Widowed, or Living with a Partner	60.7 (2.4)
	Divorced or Separated	64.6 (3.7)
	Never Married	57.1 (4.2)
Household	Less than \$15,000	48.9 (6.4)
Income	\$15,000 to \$59,999	56.1 (3.9)
	\$60,000 to \$199,999	67.8 (2.0)
	\$200,000 or more	*
Metropolitan	Metro Area	60.2 (2.4)
Status	Non-Metro Area	60.3 (4.6)
Usual Place of	Has a Usual Place of Care	62.2 (2.2)
Care	Does Not Have a Usual Place of Care	47.7 (6.8)

Footnotes: * Estimate does not meet NCHS standards of reliability.

Note: Total number of eligible cases: n = 1,189.

¹ "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

Table XIII: Weighted percents (with standard errors) of time period since most recent test to check for cervical cancer, women age 18 and older, by selected population subgroups, Research and Development Survey 6

		0-1	1-2	2-3	3-5	5-10	More than 10	Never
		Years	Years	Years	Years	Years	Years	
Characteristic	Subgroup	Percent (SE)						
Population		29.6 (1.8)	17.3 (1.4)	10.8 (1.3)	8.7 (1.1)	7.4 (0.9)	11.9 (1.1)	12.5 (1.4)
Education	Less than High School Graduate	*	8.9 (4.1)	4.9 (2.9)	*	2.2 (2.2)	*	46.2 (8.2)
	High School Graduate	28.7 (3.6)	16.4 (3.0)	8.6 (2.2)	6.9 (2.5)	7.4 (2.0)	14.3 (2.8)	15.2 (3.4)
	Some College, including Associate Degree	29.3 (2.5)	17.0 (2.1)	11.0 (1.9)	9.8 (1.7)	8.8 (1.8)	11.5 (1.6)	10.5 (2.0)
	Bachelor's Degree and Above	34.8 (3)	20.3 (2.5)	13.7 (2.6)	9.9 (1.7)	7.8 (1.8)	9.4 (1.6)	3.1 (1.0)
Race/Ethnicity	Black, non-Hispanic	40.0 (6.4)	16.9 (3.7)	7.1 (2.2)	5.4 (1.8)	1.9 (0.9)	10.3 (2.7)	13.9 (3.7)
	Other, non-Hispanic ¹	*	18.8 (6.1)	8.3 (3.9)	*	4.6 (3.5)	*	24.4 (11.3)
	White, non-Hispanic	27.8 (1.8)	15.7 (1.7)	12.4 (1.6)	8.1 (1.2)	9.5 (1.3)	14.8 (1.3)	9.6 (1.5)
	Hispanic	29.6 (5.7)	22.4 (3.7)	8.8 (2.6)	10.5 (2.9)	5.3 (2.5)	*	15.8 (3.8)
Age	18 to 29	32.6 (5.1)	10.4 (2.7)	7.0 (2.4)	7.9 (2.7)	3.0 (2.1)	_	38.6 (6.1)
	30 to 39	36.9 (3.9)	22.6 (3.7)	13.5 (3.2)	7.5 (2.0)	3.9 (1.7)	*	10.6 (2.8)
	40 to 49	39.9 (4.7)	17.8 (3.9)	13.6 (3.8)	8.3 (2.6)	4.6 (1.5)	*	8.1 (2.7)
	50 or Older	22.4 (2.3)	17.7 (2.0)	10.3 (1.4)	9.6 (1.4)	11.4 (1.5)	20.8 (1.7)	4.4 (0.9)
Marital Status	Married, Widowed, or Living with a Partner	30.1 (2.1)	18.4 (2.0)	11.2 (2.2)	9.4 (1.6)	8.2 (1.1)	15.2 (1.8)	5.5 (1.2)
	Divorced or Separated	25.8 (3.7)	19.0 (3.9)	8.8 (2.1)	9.5 (2.6)	7.9 (2.0)	18.0 (3.4)	6.4 (1.8)
	Never Married	30.6 (4.2)	14.5 (2.7)	11.0 (2.4)	7.1 (1.5)	5.9 (1.7)	*	27.2 (3.8)
Household	Less than \$15,000	26.9 (5.9)	10.1 (4.1)	13.2 (3.8)	*	4.5 (1.0)	17.3 (4.0)	14.0 (4.0)
Income	\$15,000 to \$59,999	28.1 (3.4)	12.9 (1.9)	9.5 (2.4)	8.0 (1.9)	7.4 (1.5)	17.5 (2.2)	15.3 (3.0)
	\$60,000 to \$199,999	32.0 (2.2)	23.0 (2.2)	10.7 (1.6)	9.6 (1.4)	8.0 (1.7)	6.2 (1.2)	8.9 (1.7)
	\$200,000 or more	*	15.7 (5.7)	14.1 (4.5)	*	11.1 (6.2)	*	20.9 (10.6)
Metropolitan	Metro Area	30.2 (2.1)	17.4 (1.5)	10.4 (1.3)	9.1 (1.2)	7.0 (1.0)	10.9 (1.2)	13.2 (1.6)
Status	Non-Metro Area	26.0 (3.4)	16.6 (3.8)	12.8 (3.8)	6.7 (2.3)	9.7 (2.6)	17.3 (3.6)	8.5 (2.8)
	Has a Usual Place of Care	31.6 (1.9)	18.1 (1.7)	10.2 (1.3)	8.7 (1.1)	7.3 (1.0)	12.1 (1.2)	10.0 (1.2)

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Usual Place of	Does Not Have a Usual Place of	16.8 (4.6)	12.1 (4.0)	14.5 (3.7)	*	8.5 (2.6)	10.8 (2.7)	28.1 (7.0)
Care	Care							

Note: Total number of eligible cases: n = 1,189.

Footnotes: * Estimate does not meet NCHS standards of reliability.

— Quantity zero.¹ "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

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Table XIV: Weighted percents (with standard errors) of being told what type of cervical cancer test an individual had, women age 18 and older who have had a cervical cancer test within the previous five years, by selected population subgroups, Research and Development Survey 6

Characteristic	Subgroup	Percent (SE)
Population		55.0 (2.6)
Education	Less than High School Graduate	*
	High School Graduate	51.7 (5.5)
	Some College, including Associate	57.7 (4.4)
	Degree	ì
	Bachelor's Degree and Above	53.2 (3.8)
Race/Ethnicity	Black, non-Hispanic	63.9 (6.7)
	Other, non-Hispanic ¹	*
	White, non-Hispanic	51.1 (2.9)
	Hispanic	60.8 (5.2)
Age	18 to 29	54.9 (6.7)
	30 to 39	63.0 (4.2)
	40 to 49	62.3 (5.9)
	50 or Older	48.1 (3.3)
Marital Status	Married, Widowed, or Living with a Partner	53.3 (3.0)
	Divorced or Separated	56.7 (6.0)
	Never Married	57.5 (4.7)
Household Income	Less than \$15,000	*
	\$15,000 to \$59,999	51.6 (4.6)
	\$60,000 to \$199,999	55.3 (2.9)
	\$200,000 or more	*
Metropolitan Status	Metro Area	56.5 (2.7)
	Non-Metro Area	46.5 (5.6)
Usual Place of Care	Has a Usual Place of Care	57.6 (2.6)
	Does Not Have a Usual Place of Care	*
TD 4 4 4 1 1 1		•

Footnotes: * Estimate does not meet NCHS standards of reliability.

Note: Total number of eligible cases: n = 823.

Table XV: Weighted percents (with standard errors) of having a Pap Test at an individual's most recent cervical cancer screening, women age 18 and older who have had a cervical cancer test within the previous five years, by selected population subgroups, Research and Development Survey 6

Characteristic	Subgroup	Percent
		(SE)
Population		92.7 (1.2)

¹ "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

Education	Less than High School Graduate	*
	High School Graduate	95.3 (2.2)
	Some College, including Associate	91.2 (2.0)
	Degree	
	Bachelor's Degree and Above	95.0 (1.2)
Race/Ethnicity	Black, non-Hispanic	85.3 (4.3)
	Other, non-Hispanic ¹	89.7 (5.2)
	White, non-Hispanic	94.0 (1.3)
	Hispanic	95.0 (2.2)
Age	18 to 29	92.3 (2.2)
	30 to 39	93.6 (2.3)
	40 to 49	95.0 (2.2)
	50 or Older	91.4 (2.3)
Marital Status	Married, Widowed, or Living with a	93.8 (1.6)
	Partner	
	Divorced or Separated	93.3 (2.7)
	Never Married	90.3 (2.0)
Household	Less than \$15,000	91.3 (3.9)
Income	\$15,000 to \$59,999	92.8 (2.2)
	\$60,000 to \$199,999	92.5 (1.3)
	\$200,000 or more	97.7 (2.2)
Metropolitan	Metro Area	93.1 (1.1)
Status	Non-Metro Area	90.0 (4.4)
Usual Place of	Has a Usual Place of Care	94.1 (1.1)
Care	Does Not Have a Usual Place of Care	80.5 (5.7)

Note: Total number of eligible cases: n = 823.

Table XVI: Weighted percents (with standard errors) of having an Human Papillomavirus (HPV) test at an individual's most recent cervical cancer screening, women age 18 and older who have heard of an HPV test, by selected population subgroups, Research and Development Survey 6

Characteristic	Subgroup	Percent
		(SE)
Population		49.4 (2.6)
Education	Less than High School Graduate	*
	High School Graduate	50.6 (5.6)
	Some College, including Associate	49.1 (3.2)
	Degree	

¹ "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

	Bachelor's Degree and Above	51.1 (4.2)
Race/Ethnicity	Black, non-Hispanic	*
	Other, non-Hispanic ¹	*
	White, non-Hispanic	44.7 (2.8)
	Hispanic	58.8 (5.5)
Age	18 to 29	63.0 (6.1)
	30 to 39	71.1 (4.6)
	40 to 49	53.1 (5.2)
	50 or Older	35.0 (3.9)
Marital Status	Married, Widowed, or Living with a	44.0 (3.2)
	Partner	
	Divorced or Separated	50.8 (4.9)
	Never Married	58.3 (5.5)
Household Income	Less than \$15,000	*
	\$15,000 to \$59,999	50.9 (5.2)
	\$60,000 to \$199,999	48.4 (3.4)
	\$200,000 or more	*
Metropolitan Status	Metro Area	50.1 (3.1)
	Non-Metro Area	46.1 (4.5)
Usual Place of Care	Has a Usual Place of Care	49.2 (2.7)
	Does Not Have a Usual Place of Care	*

Note: Total number of eligible cases: n = 713.

Table XVII: Weighted percents (with standard errors) of cervical cancer screening tests requiring a follow-up check for cancer or precancerous cells, women age 18 and older who have had a cervical cancer test within the previous five years, by selected population subgroups, Research and Development Survey 6

Characteristic	Subgroup	Percent
		(SE)
Population		16.5 (2.0)
Education	Less than High School Graduate	*
	High School Graduate	14 (3.9)
	Some College, including Associate	16.8 (2.8)
	Degree	
	Bachelor's Degree and Above	16.7 (3.1)
Race/Ethnicity	Black, non-Hispanic	20.9 (4.1)
	Other, non-Hispanic ¹	*
	White, non-Hispanic	15.8 (2.2)

¹ "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

	Hispanic	*
Age	18 to 29	*
	30 to 39	19.9 (4.3)
	40 to 49	23.1 (4.3)
	50 or Older	13.0 (2.2)
Marital Status	Married, Widowed, or Living with a Partner	12.7 (1.9)
	Divorced or Separated	18.5 (3.7)
	Never Married	22.4 (4.7)
Household Income	Less than \$15,000	*
	\$15,000 to \$59,999	22.5 (4.4)
	\$60,000 to \$199,999	13.1 (2.0)
	\$200,000 or more	*
Metropolitan Status	Metro Area	15.6 (2.0)
	Non-Metro Area	21.6 (4.7)
Usual Place of Care	Has a Usual Place of Care	16.3 (1.8)
	Does Not Have a Usual Place of Care	*

Note: Total number of eligible cases: n = 823.

Table XVIII: Weighted percents (with standard errors) of individuals preferring to test themselves for Human Papillomavirus (HPV) infection using a simple kit, women age 18 and older, by selected population subgroups, Research and Development Survey 6

Characteristic	Subgroup	Percent (SE)
Population		44.3 (2.3)
Education	Less than High School Graduate	*
	High School Graduate	43.5 (4.5)
	Some College, including Associate Degree	44.1 (2.6)
	Bachelor's Degree and Above	45.7 (3.5)
Race/Ethnicity	Black, non-Hispanic	35.8 (5.0)
	Other, non-Hispanic ¹	*
	White, non-Hispanic	48.0 (2.3)
	Hispanic	38.3 (5.4)
Age	18 to 29	43.4 (6.6)
	30 to 39	43.7 (4.0)
	40 to 49	49.8 (4.7)

¹ "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

	50 or Older	43.2 (2.6)
Marital Status	Married, Widowed, or Living with a	44.7 (2.5)
	Partner	
	Divorced or Separated	49.5 (4.2)
	Never Married	40.9 (4.3)
Household Income	Less than \$15,000	41.4 (6.6)
	\$15,000 to \$59,999	43.5 (3.5)
	\$60,000 to \$199,999	45.3 (2.8)
	\$200,000 or more	*
Metropolitan Status	Metro Area	44.9 (2.5)
	Non-Metro Area	41.1 (4.1)
Usual Place of Care	Has a Usual Place of Care	43.7 (2.2)
	Does Not Have a Usual Place of Care	48.1 (6.6)

Note: Total number of eligible cases: n = 1,189.

Table XIX: Weighted percents (with standard errors) of individuals preferring to test themselves for Human Papillomavirus (HPV) infection at home, at a doctor's office, or with no preference, women age 18 and older who would prefer to test themselves for HPV infection using a simple kit, by selected population subgroups, Research and Development Survey 6

		Prefer to take at home	Prefer to take at doctor's office	No preference
Characteristic	Subgroup	Percent (SE)	Percent (SE)	Percent (SE)
Population		81.9 (2.8)	7.8 (2.0)	10.3 (1.9)
Education	Less than High School Graduate	*	20.8 (12.3)	17.0 (9.4)
	High School Graduate	74.2 (5.6)	11.6 (4.7)	14.2 (4.2)
	Some College, including Associate Degree	83.6 (3.4)	4.8 (1.9)	11.7 (3.1)
	Bachelor's Degree and Above	91.0 (2.1)	4.4 (1.4)	4.6 (1.5)
Race/Ethnicity	Black, non-Hispanic	*	20.2 (7.3)	14.6 (5.4)
	Other, non-Hispanic ¹	*	18.4 (12.2)	14.7 (9.8)
	White, non-Hispanic	84.9 (3.3)	5.2 (1.9)	9.9 (2.4)
	Hispanic	87.6 (3.1)	5.8 (1.9)	6.6 (2.5)
Age	18 to 29	*	23.4 (8.6)	10.3 (3.9)
	30 to 39	81.5 (5.5)	3.6 (1.6)	14.9 (5.5)

¹ "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

	40 to 49	86.6 (5.1)	2.3 (1.0)	11.2 (5.1)
	50 or Older	86.5 (3.5)	5.4 (2.3)	8.1 (2.4)
Marital Status	Married, Widowed, or	86.4 (2.9)	5.6 (1.7)	7.9 (2.3)
	Living with a Partner			
	Divorced or Separated	84.9 (4.7)	2.9 (1.6)	12.3 (4.7)
	Never Married	71.7 (5.8)	15.1 (6.0)	13.2 (3.9)
Household	Less than \$15,000	*	11.2 (5.6)	8.7 (4.7)
Income	\$15,000 to \$59,999	79.5 (4.2)	9.0 (3.3)	11.5 (2.8)
	\$60,000 to \$199,999	84.8 (3.2)	4.5 (1.5)	10.7 (2.6)
	\$200,000 or more	*	21.8 (17.7)	1.8 (1.8)
Metropolitan	Metro Area	80.9 (3.3)	8.8 (2.3)	10.3 (2.1)
Status	Non-Metro Area	87.5 (4.2)	2.1 (1.4)	10.4 (4.3)
Usual Place of	Has a Usual Place of Care	81.9 (3.1)	8.0 (2.1)	10.0 (2.1)
Care	Does Not Have a Usual	*	6.8 (4.8)	11.6 (4.7)
	Place of Care			

Note: Total number of eligible cases: n = 509.

Source: National Center for Health Statistics, Research and Development Survey 6. 2022

Table XX: Weighted percents (with standard errors) of individuals who received a testicular exam in the past 12 months, men age 18 and older who visited a doctor or other health provider in the past 12 months, by selected population subgroups, Research and Development Survey 6

Characteristic	Subgroup	Percent (SE)
Population		10.0 (1.6)

Notes: Total number of eligible cases: n = 827. More than 50% of the estimates for this variable were suppressed as they do not meet NCHS standards of reliability; therefore, only the national estimate is reported.

Table XXI: Weighted percents (with standard errors) of individuals who received a test for sexually transmitted diseases in the past 12 months, men age 18 and older who visited a doctor or other health provider in the past 12 months, by selected population subgroups, Research and Development Survey 6

Characteristic	Subgroup	Percent (SE)
Population		7.3 (1.1)
Education	Less than High School Graduate	*
	High School Graduate	*
	Some College, including Associate	8.7 (2.2)
	Degree	
	Bachelor's Degree and Above	8.4 (2.2)
Race/Ethnicity	Black, non-Hispanic	*

¹ "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

	Other, non-Hispanic ¹	*
	White, non-Hispanic	4.3 (1.1)
	Hispanic	14.6 (4.4)
Age	18 to 29	*
	30 to 39	15.4 (4.2)
	40 to 49	*
	50 or Older	2.6 (0.8)
Marital Status	Married, Widowed, or Living with a	4.4 (1.1)
	Partner	
	Divorced or Separated	*
	Never Married	16.4 (3.1)
Household Income	Less than \$15,000	*
	\$15,000 to \$59,999	6.6 (2.0)
	\$60,000 to \$199,999	7.7 (1.6)
	\$200,000 or more	*
Metropolitan Status	Metro Area	7.6 (1.3)
	Non-Metro Area	*
Usual Place of Care	Has a Usual Place of Care	7.5 (1.2)
	Does Not Have a Usual Place of Care	*

Note: Total number of eligible cases: n = 827.

Source: National Center for Health Statistics, Research and Development Survey 6. 2022

Table XXII: Weighted percents (with standard errors) of individuals who received treatment for sexually transmitted diseases in the past 12 months, men age 18 and older who visited a doctor or other health provider in the past 12 months, by selected population subgroups, Research and Development Survey 6

Characteristic	Subgroup	Percent
		(SE)
Population		1.9 (0.9)

Notes: Total number of eligible cases: n = 827. More than 50% of the estimates for this variable were suppressed as they do not meet NCHS standards of reliability; therefore, only the national estimate is reported.

Table XXIII: Weighted percents (with standard errors) of individuals who received information or advice about your partner using female methods of birth control in the past 12 months, men age 18 and older who visited a doctor or other health provider in the past 12 months, by selected population subgroups, Research and Development Survey 6

Characteristic	Subgroup	Percent (SE)
Population		3.0 (0.8)

¹ "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

Notes: Total number of eligible cases: n = 827. More than 50% of the estimates for this variable were suppressed as they do not meet NCHS standards of reliability; therefore, only the national estimate is reported.

Source: National Center for Health Statistics, Research and Development Survey 6. 2022

Table XXIV: Weighted percents (with standard errors) of individuals who received information or advice about human immunodeficiency virus (HIV) or acquired immune deficiency syndrome (AIDS) in the past 12 months, men age 18 and older who visited a doctor or other health provider in the past 12 months, by selected population subgroups, Research and Development Survey 6

Characteristic	Subgroup	Percent (SE)
Population		2.6 (0.7)
Education	Less than High School Graduate	*
	High School Graduate	*
	Some College, including Associate Degree	3.0 (1.1)
	Bachelor's Degree and Above	2.8 (1.1)
Race/Ethnicity	Black, non-Hispanic	*
·	Other, non-Hispanic ¹	*
	White, non-Hispanic	1.5 (0.6)
	Hispanic	*
Age	18 to 29	*
S	30 to 39	3.1 (1.0)
	40 to 49	*
	50 or Older	1.6 (0.8)
Marital Status	Married, Widowed, or Living with a Partner	1.0 (0.5)
	Divorced or Separated	0.5 (0.4)
	Never Married	7.3 (2.2)
Household Income	Less than \$15,000	*
	\$15,000 to \$59,999	1.2 (0.9)
	\$60,000 to \$199,999	1.9 (0.4)
	\$200,000 or more	*
Metropolitan Status	Metro Area	3.1 (0.8)
_	Non-Metro Area	_
Usual Place of Care	Has a Usual Place of Care	2.7 (0.7)
	Does Not Have a Usual Place of Care	*

Footnotes: * Estimate does not meet NCHS standards of reliability.

Note: Total number of eligible cases: n = 827.

Quantity zero.

¹ "Other Race, Non-Hispanic" includes panelists who indicated their race(s) were non-Hispanic Asian, some other non-Hispanic race, or a combination of two or more non-Hispanic races.

Table XXV: Weighted percents (with standard errors) of individuals who received information or advice about other sexually transmitted diseases besides human immunodeficiency virus (HIV) or acquired immune deficiency syndrome (AIDS) in the past 12 months, men age 18 and older who visited a doctor or other health provider in the past 12 months, by selected population subgroups, Research and Development Survey 6

Characteristic	Subgroup	Percent (SE)
Population		2.5 (0.8)

Note: Total number of eligible cases: n = 827. More than 50% of the estimates for this variable were suppressed as they do not meet NCHS standards of reliability; therefore, only the national estimate is reported.

Source: National Center for Health Statistics, Research and Development Survey 6. 2022

Table XXVI: Weighted percents (with standard errors) of individuals who received information or advice about using condoms to prevent pregnancy in the past 12 months, men age 18 and older who visited a doctor or other health provider in the past 12 months, by selected population subgroups, Research and Development Survey 6

Characteristic	Subgroup	Percent
		(SE)
Population		2.8 (0.7)

Note: Total number of eligible cases: n = 827. More than 50% of the estimates for this variable were suppressed as they do not meet NCHS standards of reliability; therefore, only the national estimate is reported.

Source: National Center for Health Statistics, Research and Development Survey 6. 2022

Table XXVII: Weighted percents (with standard errors) of individuals who received information or advice about using condoms to prevent sexually transmitted diseases in the past 12 months, men age 18 and older who visited a doctor or other health provider in the past 12 months, by selected population subgroups, Research and Development Survey 6

Characteristic	Subgroup	Percent (SE)
Population		2.8 (0.8)

Note: Total number of eligible cases: n = 827. More than 50% of the estimates for this variable were suppressed as they do not meet NCHS standards of reliability; therefore, only the national estimate is reported.

Source: National Center for Health Statistics, Research and Development Survey 6. 2022

Table XXVIII: Weighted percents (with standard errors) of individuals who received male health services at a private doctors office or health maintenance organization in the past 12 months, men age 18 and older who received male health services in the past 12 months, by selected population subgroups, Research and Development Survey 6

Characteristic	Subgroup	Percent
		(SE)
Population		66.1 (5.2)

Note: Total number of eligible cases: n = 207. More than 50% of the estimates for this variable were suppressed as they do not meet NCHS standards of reliability; therefore, only the national estimate is reported.