

UnderStandingAmericaStudy

UAS 449: INFLUENCE OF PEERS ON BELIEFS ABOUT VACCINATION AND GM
FOOD (PILOT)



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1 INTRODUCTION

This survey, titled "UAS449: Influence of peers on beliefs about vaccination and GM food - Consent to Participate" is the full survey for UAS members in a study that aims to advance the extant knowledge of how social influence affects people's beliefs about scientific and societal issues. Consenting UAS participants nominated non-UAS peers to also participate. Those whose peer participants consented and filled out a survey were invited to fill out this follow up survey. This survey is no longer in the field. Respondents were paid \$7 to complete the survey.

Associated survey: UAS 448 (consent)

1.1 Topics

This survey contains questions (among others) on the following topics: . A complete survey topic categorization for the UAS can be found [here](#).

1.2 Experiments

This survey did not include any experiments. A complete survey experiment categorization for the UAS can be found [here](#).

1.3 Citation

Each publication, press release or other document that cites results from this survey must include an acknowledgment of UAS as the data source and a disclaimer such as, 'The project described in this paper relies on data from survey(s) administered by the Understanding America Study, which is maintained by the Center for Economic and Social Research (CESR) at the University of Southern California. The content of this paper is solely the responsibility of the authors and does not necessarily represent the official views of USC or UAS.' For any questions or more information about the UAS, contact Tania Gutsche, Project and Panel Manager, Center for Economic and Social Research, University of Southern California, at tgutsche@usc.edu.

2 SURVEY RESPONSE AND DATA

2.1 Sample selection and response rate

The sample selection for this survey was:

All active respondents who completed UAS448 and whose listed friend consented to answer sharing.

As such, this survey was made available to 776 UAS participants. Of those 776 participants, 732 completed the survey and are counted as respondents. Of those who are not counted as respondents, 8 started the survey without completing and 36 did not start the survey. The overall response rate was 94.33%.

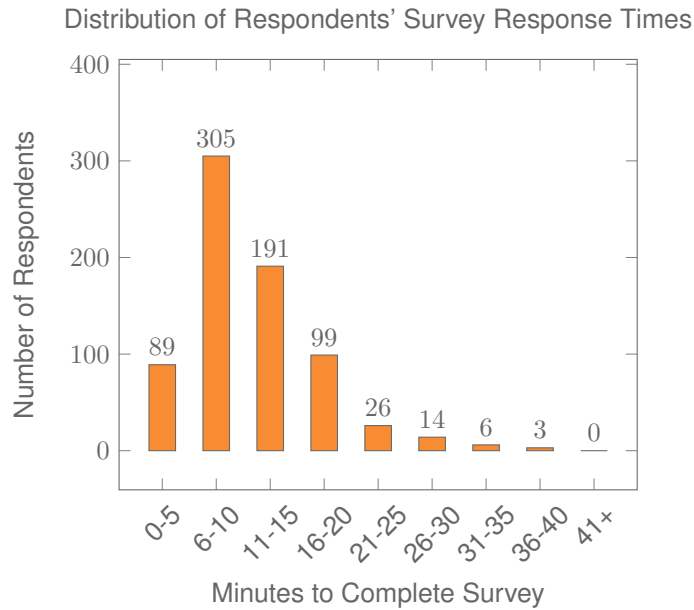
Note: We are unable to provide sample weights for a small number of UAS members (see the Sample weighting section below for details). If they completed the survey, these members are included in the data set with a weight of zero, but accounted for in the computation of total sample size and survey response rate.%.

The detailed survey response rate is as follows:

UAS449 - Response Overview	
Size of selected sample	776
Completed the survey	732
Started but did not complete the survey	8
Did not start the survey	36
Response rate	94.33%

2.2 Timings

The survey took respondents an average of 12 minutes, and the full distribution of survey response times is available in the figure below. Times per question are available upon request.



2.3 Sample & Weighting

Sample weights for this survey are computed following the general UAS Weighting Procedure. Specifically, we use a two-step process where we first compute base weights, which correct for unequal probabilities of sampling UAS members, and then generate final, post-stratification weights, which align the sample to the reference population along certain socio-economic dimensions. These are gender (male/female), race and ethnicity (White/Black/Other/Hispanic/Native American), age (18-39/40-49/50/59/60+), education (High school or less/Some college/Bachelor or more), Census regions (Northeast/Midwest/West, excl. CA/CA, excl. LAC, LAC). Benchmark distributions for these variables are derived from the 6 most recent available Current Population Survey (CPS) Basic Monthly Survey with respect to the survey's completion date. The reference population considered for the weights is the U.S. population of adults age 18 and older.

This survey dataset may contain respondents with a weight of zero. These respondents belong to a small group of UAS members for whom sample weights cannot be computed due to non-probability recruitment for special projects. Hence, while they are accounted for in the total number of survey respondents, they do not contribute to any statistics using sample weights. More information is available from the UAS Weighting Procedure. Please contact UAS staff with any questions.

3 STANDARD VARIABLES

Each Understanding America Study data contains a series of standard variables, consisting of individual, household and sample identifiers, language indicator, time stamps and a rating by the respondent of how much he or she liked the survey:

- **uasid**: the identifier of the respondent. This identifier is assigned to a respondent at recruitment and stays with the respondent throughout each and every survey he/she participates in. When analyzing data from multiple surveys, the 'uasid' can be used to merge data sets.
- **uashhid**: the household identifier of the respondent. Every member is assigned a household identifier, stored in the variable 'uashhid'. For the primary respondent this identifier equals his or her 'uasid'. All other eligible members of the primary respondent's household (everyone who is 18 or older in the household) who become UAS respondents receive the 'uasid' of the primary respondent as their household identifier. The identifier 'uashhid' remains constant over time for all respondents. Thus it is always possible to find the original UAS household of an UAS panel member (even after they, for example, have moved out to form another household).
- **survhhid**: uniquely identifies the household a UAS panel member belongs to in a given survey. For instance, if the primary respondent and his/her spouse are both UAS members at the time of a given survey, they both receive the same 'survhhid' identifier for that survey. If they subsequently split, they receive two different 'survhhid' in subsequent surveys. They, however, always share the same 'uashhid'. The identifier 'survhhid' is set to missing (.) if no other household members are UAS panel members at the time of the survey. Since individuals can answer the same survey at different points in time (which can be relatively far apart if the survey is kept in the field for a prolonged time), it may be possible that, within the same data set, household members have different 'survhhid' reflecting different household compositions at the time they answered the survey. For instance, suppose that the primary respondent and his/her spouse are both UAS members. If the primary respondent answers the survey when he/she is living with the spouse, but the spouse answers the survey when the couple has split, they receive different 'survhhid'. Hence, the variable 'survhhid' identifies household membership of UAS panel members, at the time the respondent answers the survey. Note: in the My Household survey 'survhhid' is set to unknown (.u) for respondents who last participated in the My Household survey prior to January 21, 2015.
- **uasmembers**: is the number of other household members who are also UAS panel members at the time of the survey. Since individuals can answer the same survey at different points in time (which can be relatively far apart if the survey is kept in the field for a prolonged time), it may be possible that, within the same data set, the primary respondent of a household has a value of '0', whereas the second UAS household respondent has a value of '1'. Therefore 'uasmembers' should be interpreted as the

number of household and UAS panel members at the time the respondent answers the survey. Note: in the My Household survey 'uasmembers' is set to unknown (.u) for respondents who last participated in the My Household survey prior to January 21, 2015.

- **sampleframe**: indicates the sampling frame from which the household of the respondent was recruited. All UAS recruitment is done through address based sampling (ABS) in which samples are acquired based on postal records. Currently, the variable 'sampleframe' takes on four values reflecting four distinct sample frames used by the UAS over the year (in future data sets the number of sample frames used for recruitment may increase if additional specific populations are targeted in future recruitment batches):

1. U.S. National Territory: recruited through ABS within the entire U.S.
2. Areas high concentration Nat Ame: recruited through ABS in areas with a high concentration of Native Americans in the zip-code. Within these batches, individuals who are not Native Americans are not invited to join the UAS.
3. Los Angeles County: recruited through ABS within Los Angeles County.
4. California: recruited through ABS within California.

Note: prior to March 6, 2024 this variable was called sampletype and had the following value labels for the above list in UAS data sets:

1. Nationally Representative Sample: recruited through ABS within the entire U.S.
2. Native Americans: recruited through ABS in areas with a high concentration of Native Americans. Within these batches, individuals who are not Native Americans are not invited to join the UAS.
3. LA County: recruited through ABS within Los Angeles County.
4. California: recruited through ABS within California.

- **batch**: indicates the batch from which the respondent was recruited. Currently, this variable takes the following values (in future data sets the number of batches may increase as new recruitment batches are added to the UAS):

1. ASDE 2014/01
2. ASDE 2014/01
3. ASDE 2014/01
4. Public records 2015/05
5. MSG 2015/07
6. MSG 2016/01
7. MSG 2016/01
8. MSG 2016/01
9. MSG 2016/02

10. MSG 2016/03
11. MSG 2016/04
12. MSG 2016/05
13. MSG 2016/08
14. MSG 2017/03
15. MSG 2017/11
16. MSG 2018/02
17. MSG 2018/08
18. MSG 2019/04
19. MSG 2019/05
20. MSG 2019/11
21. MSG 2020/08
22. MSG 2020/10
23. MSG 2021/02
24. MSG 2021/08
25. MSG 2021/08
26. MSG 2022/02
27. MSG 2022/02
28. MSG 2022/08
29. MSG 2022/11
30. MSG 2022/11
31. MSG 2023/01
32. MSG 2023/06
33. MSG 2023/09
34. MSG 2023/10

Note: prior to March 6, 2024 this variable had the following value labels for the above list in UAS data sets:

1. ASDE 2014/01 Nat.Rep.
2. ASDE 2014/01 Native Am.
3. ASDE 2014/11 Native Am.
4. LA County 2015/05 List Sample
5. MSG 2015/07 Nat.Rep.
6. MSG 2016/01 Nat.Rep. Batch 2
7. MSG 2016/01 Nat.Rep. Batch 3

8. MSG 2016/01 Nat.Rep. Batch 4
9. MSG 2016/02 Nat.Rep. Batch 5
10. MSG 2016/03 Nat.Rep. Batch 6
11. MSG 2016/04 Nat.Rep. Batch 7
12. MSG 2016/05 Nat.Rep. Batch 8
13. MSG 2016/08 LA County Batch 2
14. MSG 2017/03 LA County Batch 3
15. MSG 2017/11 California Batch 1
16. MSG 2018/02 California Batch 2
17. MSG 2018/08 Nat.Rep. Batch 9
18. MSG 2019/04 LA County Batch 4
19. MSG 2019/05 LA County Batch 5
20. MSG 2019/11 Nat. Rep. Batch 10
21. MSG 2020/08 Nat. Rep. Batch 11
22. MSG 2020/10 Nat. Rep. Batch 12
23. MSG 2021/02 Nat. Rep. Batch 13
24. MSG 2021/08 Nat. Rep. Batch 15
25. MSG 2021/08 Nat. Rep. Batch 16
26. MSG 2022/02 Nat. Rep. Batch 17 (priority)
27. MSG 2022/02 Nat. Rep. Batch 17 (regular)
28. MSG 2022/08 Nat. Rep. Batch 18
29. MSG 2022/11 LA County Batch 6
30. MSG 2022/11 Nat. Rep. Batch 20
31. MSG 2023/01 Nat. Rep. Batch 21
32. MSG 2023/06 Nat. Rep. Batch 22
33. MSG 2023-09 Native Am. Batch 3
34. MSG 2023-10 Nat. Rep. Batch 23

- **primary_respondent:** indicates if the respondent was the first person within the household (i.e. to become a member or whether s/he was added as a subsequent member. A household in this regard is broadly defined as anyone living together with the primary respondent. That is, a household comprises individuals who live together, e.g. as part of a family relationship (like a spouse/child/parent) or in context of some other relationship (like a roommate or tenant).
- **hardware:** indicates whether the respondent ever received hardware or not. Note: this variable should not be used to determine whether a respondent received hardware at a given point in time and/or whether s/he used the hardware to participate in a survey. Rather, it indicates whether hardware was ever provided:

1. None
 2. Tablet (includes Internet)
- **language**: the language in which the survey was conducted. This variable takes a value of 1 for English and a value of 2 for Spanish.
 - **start_date (start_year, start_month, start_day, start_hour, start_min, start_sec)**: indicates the time at which the respondent started the survey.
 - **end_date (end_year, end_month, end_day, end_hour, end_min, end_sec)**: indicates the time at which the respondent completed the survey.
 - **cs_001**: indicates how interesting the respondent found the survey.

4 BACKGROUND DEMOGRAPHICS

Every UAS survey data set includes demographic variables, which provide background information about the respondent and his/her household. Demographic information such as age, ethnicity, education, marital status, work status, state of residence, family structure is elicited every quarter through the “My Household” survey. The demographic variables provided with each survey are taken from the most recent ‘MyHousehold’ survey answered by the respondent. If at the time of a survey, the information in “My Household” is more than three months old, a respondent is required to check and update his or her information before being able to take the survey.

The following variables are available in each survey data set:

- **gender**: the gender of the respondent.
- **dateofbirth_year**: the year of birth of the respondent.
- **age**: the age of the respondent at the start of the survey.
- **agerange**: if the respondent’s age cannot be calculate due to missing information, ‘agerange’ indicates the approximate age. Should a value for both the ‘age’ and ‘agerange’ be present, then ‘age’ takes precedence over ‘agerange’.
- **citizenus**: indicates whether the respondent is a U.S. citizen.
- **bornus**: indicates whether the respondent was born in the U.S.
- **stateborn**: indicates the state in which the respondent was born. This is set to missing (.) if the respondent was not born in the U.S.
- **countryborn**: indicates the country in which the respondent was born. This is set to missing (.) if the respondent was born in the U.S.
- **countryborn_other**: indicates the country of birth if that country is not on the drop down list of countries shown to the respondent’.
- **statereside**: the state in which the respondent is living.
- **immigration_status**: indicates whether the respondent is an immigrant. It takes one of the following values: 0 Non-immigrant, 1 First generation immigrant (immigrant who migrated to the U.S), 2 Second generation immigrant (U.S.-born children of at least one foreign-born parent), 3 Third generation immigrant (U.S.-born children of at least one U.S.-born parent, where at least one grandparent is foreign-born), or 4 Unknown immigrant status.
- **maritalstatus**: the marital status of the respondent.
- **livewithpartner**: indicates whether the respondent lives with a partner.

- **education**: the highest level of education attained by the respondent.
- **hisplatin**: indicates whether the respondent identifies him or herself as being Hispanic or Latino. This variable is asked separately from race.
- **hisplatinogroup**: indicates which Hispanic or Latino group a respondent identifies him or herself with. This is set to missing (.) if the respondent does not identify him or herself as being Hispanic or Latino.
- **white**: indicates whether the respondent identifies him or herself as white (Caucasian).
- **black**: indicates whether the respondent identifies him or herself as black (African-American).
- **nativeamer**: indicates whether the respondent identifies him or herself as Native American (American Indian or Alaska Native).
- **asian**: indicates whether the respondent identifies him or herself as Asian (Asian-American).
- **pacific**: indicates whether the respondent identifies him or herself as Native Hawaiian or Other Pacific Islander.
- **race**: indicates the race of the respondent as singular (e.g., '1 White' or '2 Black') or as mixed (in case the respondent identifies with two or more races). The value '6 Mixed' that the respondent answered 'Yes' to at least two of the single race categories. This variable is generated based on the values of the different race variables (white, black, nativeamer, asian, pacific). This composite measure is not conditional on hisplatin, so an individual may identify as Hispanic or Latino, and also as a member of one or more racial groups.
- **working**: indicates whether the respondent is working for pay.
- **sick_leave**: indicates whether the respondent is not working because sick or on leave.
- **unemp_layoff**: indicates whether the respondent is unemployed or on lay off.
- **unemp_look**: indicates whether the respondent is unemployed and looking for a job.
- **retired**: indicates whether the respondent is retired.
- **disabled**: indicates whether the respondent has a disability.
- **If_other**: specifies other labor force status.
- **laborstatus**: indicates the labor force status of the respondent as singular (e.g., '1 Working for pay' or '2 On sick or other leave') or as mixed (in case the respondent selects two or more labor statuses). The value '8 Mixed' indicates that the respondent answered 'Yes' to at least two of the single labor force status variables. This variable is generated based on the values of the different labor status variables (working, sick_leave, unempl_layoff, unempl_look, retired, disabled, If_other).

- **employmenttype**: indicates the employment type of the respondent (employed by the government, by a private company, a nonprofit organization, or self-employed). This is set to missing (.) if the respondent is not currently working or currently on sick or other leave.
- **workfullpart**: indicates whether the respondent works full or part-time. This is set to missing (.) if the respondent is not currently working or currently on sick or other leave.
- **hourswork**: indicates the number of hours the respondent works per week. This is set to missing (.) if the respondent is not currently working or currently on sick or other leave.
- **hhincome**: is the total combined income of all members of the respondent's household (living in their household) during the past 12 months.
- **anyhhmember**: indicates whether there were any members in the respondent's household at the time he/she answered the survey as reported by the respondent.
- **hhmembernumber**: indicates the number of household members in the respondent's household at the time of the survey as reported by the respondent. It may be that 'anyhhmember' is 'Yes', but 'hhmembernumber' is missing if the respondent did not provide the number of household members at the time of the survey.
- **hhmemberin_#**: indicates whether a household member is currently in the household as reported by the respondent. Household members are never removed from the stored household roster and their information is always included in survey data sets. The order of the roster is the same order in which household members were specified by the respondent in the 'MyHousehold' survey. The order is identified by the suffix _# (e.g., _1 indicates the first household member, _2 the second household member, etc.).

As an example, if the first household member is in the household at the time of the survey, 'hhmemberin_1' is set to '1 HH Member 1 is in the HH'; if he/she has moved out, 'hhmemberin_1' is set to '0 HH member 1 is no longer in the HH'. Since information of other household members (stored in the variables listed below) is always included in survey data sets, information about 'hhmemberin_1' is available whether this person is still in the household or has moved out.

- **hhmembergen_#**: indicates the gender of another household member as reported by the respondent.
- **hhmemberage_#**: indicates the age of another household member. The age is derived from the month and year of birth of the household member as reported by the respondent.
- **hhmemberrel_#**: indicates the relationship of the respondent to the other household member as reported by the respondent.

- **hhmemberuasid_#:** is the 'uasid' of the other household member if this person is also a UAS panel member. It is set to missing (.) if this person is not a UAS panel member at the time of the survey. Since this identifier is directly reported by the respondent (chosen from a preloaded list), it may differ from the actual (correct) 'uasid' of the UAS member it refers to because of reporting error. Also, this variable should not be used to identify UAS members in a given household at the time of the survey. This is because the variables 'hhmemberuasid_#' are taken from the most recent 'My Household' and changes in household composition involving UAS members may have occurred between the time of the respondent answered 'My Household' and the time the respondent answers the survey. To follow UAS members of a given household, it is advised to use the identifiers 'uashhid' and 'survhhid'.
- **lastmyhh_date:** the date on which the demographics variables were collected through the 'My Household' survey.

5 MISSING DATA CONVENTIONS

Data files provide so-called clean data, that is, answers given to questions that are not applicable anymore at survey completion (for example because a respondent went back in the survey and skipped over a previously answered question) are treated as if the questions were never asked. In the data files all questions that were asked, but not answered by the respondent are marked with (.e). All questions never seen by the respondent (or any dirty data) are marked with (.a). The latter may mean that a respondent did not view the question because s/he skipped over it; or alternatively that s/he never reached that question due to a break off. If a respondent did not complete a survey, the variables representing survey end date and time are marked with (.c). Household member variables are marked with (.m) if the respondent has less household members (e.g. if the number of household members is 2, any variables for household member 3 and up are marked with (.m)).

UAS provides data in STATA and CSV format. Stata data sets come with include variable labels that are not available in the CSV files. Value labels are provided for single-response answer option. In STATA these labels will include the labels 'Not asked' and 'Not answered' for (.a) and (.e), and will show in tabulations such as 'tab q1, missing'. For multiple-response questions a binary variable is created for each answer option indicating whether the option was selected or not. A summary variable is also provided in string format reflecting which options were selected and in which order. For example, if a question asked about favorite animals with options cat, dog, and horse, then if a respondent selected horse and then cat, the binary variables for horse and cat will be set to yes, while the overall variable would have a string value of '3-1'. If no answer was given, all binary variables and the summary variable will be marked with '.e'.

Questions that are asked multiple times are often implemented as so-called array questions. Supposing the name of such question was Q1 and it was asked in 6 different instances, your data set would contain the variables Q1_1_ to Q1_6_. To illustrate, if a survey asked the names of all children, then child_1_ would contain the name of the first child the respondent named and so on.

More information about the UAS data in general can be found on the UAS Data Pages web site.

6 ROUTING SYNTAX

The survey with routing presented in the next section includes all of the questions that make up this survey, the question answers when choices were provided, and the question routing. The routing includes descriptions of when questions are grouped, conditional logic that determines when questions are presented to the respondent, randomization of questions and answers, and fills of answers from one question to another.

If you are unfamiliar with conditional logic statements, they are typically formatted so that **if** the respondent fulfills some condition (e.g. they have a cellphone or a checking account), **then** they are presented with some other question or the value of some variable is changed. If the respondent does not fulfill the condition (e.g. they are not a cellphone adopter or they do not have a checking account), something **else** happens such as skipping the next question or changing the variable to some other value. Some of the logic involved in the randomization of questions or answers being presented to the respondent is quite complex, and in these instances there is documentation to clarify the process being represented by the routing.

Because logic syntax standards vary, here is a brief introduction to our syntax standards. The syntax used in the conditional statements is as follows: '=' is equal to, '<' is less than, '>' is greater than, and '!= ' is used for does not equal. When a variable is set to some number N, the statement looks like 'variable := N'.

The formatting of the questions and routing are designed to make it easier to interpret what is occurring at any given point in the survey. Question ID is the bold text at the top of a question block, followed by the question text and the answer selections. When a question or variable has associated data, the name links to the appropriate data page, so you can easily get directly to the data. Text color is used to indicate the routing: **red** is conditional logic, **gold** is question grouping, **green** is looping, and **orange** is used to document randomization and other complex conditional logic processes. The routing is written for a computer to parse rather than a human to read, so when the routing diverges significantly from what is displayed to the respondent, a screenshot of what the respondent saw is included.

The name of the randomization variables are defined in proximity to where they are put into play, and like the question ID the names of the randomization variables can be used to link directly to the associated data page.

7 SURVEY WITH ROUTING

Start of section **Preload**

/* A pilot version of the survey was administered to a small group of respondents. These can be identified in the data using the survey_version variable. For more information about the pilot, please contact us at uas-l@usc.edu. */

survey_version := 2

intro1 (intro in section Base)

In this survey you will be answering questions about yourself, about your social contacts, and about different scientific and societal issues.

You are being invited to take this survey because you agreed to join our study and the contact that you gave us to invite - (FRIEND) - has also agreed to join the study. As a reminder, (FRIEND) filled out a survey that asked about some social and scientific issues. This survey will ask you about those same issues.

Press "Next" to start.

End of section **Preload**

Start of section **Randomization**

/* Respondents are asked about different topics on different occasions in the survey in random order per variable randomizer_topics with values:

- 1 Climate change
- 2 Genetically modified food
- 3 Childhood vaccination

The variable is preloaded from UAS 448 and randomly assigned if preloading was unsuccessful (as indicated in the variable randomizer_topics_flag). */

randomizer_topics := getUAS448Preload("randomizer_topics", 2)

IF sizeof(randomizer_topics) = 0 **THEN**

randomizer_topics := shuffleArray(array(1 →1, 2 →2, 3 →3))
randomizer_topics_flag := 2

ELSE

randomizer_topics_flag := 1

END OF IF

End of section **Randomization**

LOOP FROM 1 TO 3

IF randomizer_topics(cnt) = 1 THEN

Start of section **Climate**

/* Respondents are asked about their friend's answers if the friend consented to this in their survey per variable answer_sharing. */

IF answer_sharing = 1 AND friend_climate_change = RESPONSE THEN

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

clim002_intro (Section Climate)

Please read the following information carefully:

(IWER: When asked 'What comes closer to your view on climate change?' your friend (FRIEND) answered on a scale from '1=*There is solid evidence that the climate is NOT changing because of human activity*' to '7=*There is solid evidence that the climate is changing because of human activity*'.)

clim002a (climate change uneasy about discrepancy in section Climate)

Do you agree or disagree:

I feel uneasy about the discrepancy between what I thought (FRIEND) believes about climate change and what (FRIEND) actually believes.

1 1 Strongly disagree

2 2

3 3

4 4

5 5

6 6

7 7 Strongly agree

clim002b (climate change lot of conflict in section Climate)

Do you agree or disagree:

I experience a lot of conflict between my beliefs about climate change and the beliefs of (FRIEND).

1 1 Strongly disagree

2 2

3 3

4 4
5 5
6 6
7 7 Strongly agree

clim002c (updated view on climate change in section Climate)

After learning that (FRIEND) answered this way, how would you now answer this question:

What comes closer to your view on **climate change**?

1 1 There is solid evidence that the climate is NOT changing because of human activity

2 2

3 3

4 4

5 5

6 6

7 7 There is solid evidence that the climate is changing because of human activity

END OF GROUP

END OF IF

End of section **Climate**

ELSEIF randomizer_topics(cnt) = 2 THEN

Start of section **Geneticmodified**

/ Respondents are asked about their friend's answers if the friend consented to this in their survey per variable answer_sharing. */*

IF answer_sharing = 1 AND friend_eat_modified = RESPONSE THEN

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

gm002.intro (Section Geneticmodified)

Please read the following information carefully:

(IWER: When asked 'Do you think it is generally unsafe or safe to eat genetically modified foods?' your friend (FRIEND) answered on a scale from '1=*Generally unsafe*' to '7=*Generally safe*'.)

gm002a (genetically modified foods uneasy about discrepancy in section Geneticmodified)

Do you agree or disagree:

I feel uneasy about the discrepancy between what I thought (FRIEND) believes about genetically modified foods and what (FRIEND) actually believes.

1 1 Strongly disagree

2 2

3 3

4 4

5 5

6 6

7 7 Strongly agree

gm002b (genetically modified foods lot of conflict in section Geneticmodified)

Do you agree or disagree:

I experience a lot of conflict between my beliefs about genetically modified foods and the beliefs of (FRIEND).

1 1 Strongly disagree

2 2

3 3

4 4

5 5

6 6

7 7 Strongly agree

gm002c (updated view on genetically modified foods in section Geneticmodified)

After learning that (FRIEND) answered this way, how would you now answer this question:

Do you think it is generally unsafe or safe to eat **genetically modified foods**?

1 1 Generally unsafe

2 2

3 3

4 4

5 5

6 6

7 7 Generally safe

END OF GROUP

END OF IF

End of section **Geneticmodified**

ELSEIF randomizer_topics(cnt) = 3 THEN

Start of section **Childhood**

/* Respondents are asked about their friend's answers if the friend consented to this in their survey per variable answer_sharing. */

IF answer_sharing = 1 AND friend_parents_not_vaccinate = RESPONSE THEN

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

ch002_intro (Section Childhood)

Please read the following information carefully:

(IWER: When asked "Thinking about childhood diseases, such as measles, mumps, rubella and polio, what comes closer to your view?" your friend (FRIEND) answered on a scale from '1=Parents should choose be allowed to choose to NOT vaccinate their children' to "7=All children should be required to be vaccinated".)

ch002a (childhood vaccination uneasy about discrepancy in section Childhood)

Do you agree or disagree:

I feel uneasy about the discrepancy between what I thought (FRIEND) believes about childhood vaccination and what (FRIEND) actually believes.

1 1 Strongly disagree

2 2

3 3

4 4

5 5

6 6

7 7 Strongly agree

ch002b (childhood vaccination lot of conflict in section Childhood)

Do you agree or disagree:

I experience a lot of conflict between my beliefs about childhood vaccination and the beliefs of (FRIEND).

1 1 Strongly disagree

2 2

3 3

4 4

5 5

6 6

7 7 Strongly agree

ch002c (updated view on childhood vaccination in section Childhood)

After learning that (FRIEND) answered this way, how would you now answer this question:

Thinking about childhood diseases, such as measles, mumps, rubella and polio, what comes closer to your view?

1 1 Parents should be allowed to choose to NOT vaccinate their children

2 2

3 3

4 4

5 5

6 6

7 7 All children should be required to vaccinate

END OF GROUP

END OF IF

End of section **Childhood**

END OF IF

END OF LOOP

Start of section **Relationship**

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

rel001 (relationship with friend in section Relationship)

How would you describe your relationship with (FRIEND)? Please select all that applies.

1 Close friend

2 Close family

3 Extended family

4 Neighbor

5 Colleague

6 Other acquaintance, please describe:

rel001_other (other relationship with friend in section Relationship)

STRING

END OF GROUP

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

rel003_intro (Section Relationship)
How likely are you and (FRIEND) to:

SUBGROUP OF QUESTIONS

rel003a (Work successfully on a project together in section Relationship)
Work successfully on a project together

- 1 1 Not at all likely
- 2 2
- 3 3
- 4 4
- 5 5
- 6 6
- 7 7 Very likely

rel003b (Have fun together in section Relationship)
Have fun together

- 1 1 Not at all likely
- 2 2
- 3 3
- 4 4
- 5 5
- 6 6
- 7 7 Very likely

rel003c (Bump into each other frequently in section Relationship)
Bump into each other frequently

- 1 1 Not at all likely
- 2 2
- 3 3
- 4 4
- 5 5
- 6 6
- 7 7 Very likely

END OF SUBGROUP

nt004 (how likely friend can help establish connections in section Network)
How likely is it that (FRIEND) can help you to establish connections with many people you didn't know before?

- 1 1 Not at all likely
- 2 2
- 3 3
- 4 4
- 5 5

6 6
7 7 Very likely

END OF GROUP

End of section **Relationship**

Start of section **Expertise**

IF sizeof(ex_order) = 0 THEN
| ex_order := randomizer_topics
END OF IF

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

LOOP FROM 1 TO 3

IF ex_order(cnt) = 1 THEN

ex001 (who more expertise climate change in section Expertise)
Would you say that you know more than (FRIEND) about **climate change**, or does (FRIEND) know more than you?
1 1 I know a lot more
2 2
3 3
4 4
5 5
6 6
7 7 (FRIEND) knows a lot more

ELSEIF ex_order(cnt) = 2 THEN

ex002 (who more expertise genetically modified (GM) food in section Expertise)
Would you say that you know more than (FRIEND) about **genetically modified (GM) food**, or does (FRIEND) know more than you?
1 1 I know a lot more
2 2
3 3
4 4
5 5
6 6
7 7 (FRIEND) knows a lot more

ELSEIF ex_order(cnt) = 3 THEN

ex003 (who more expertise childhood vaccination in section Expertise)

Would you say that you know more than (FRIEND) about **childhood vaccination**, or does (FRIEND) know more than you?

1 1 I know a lot more

2 2

3 3

4 4

5 5

6 6

7 7 (FRIEND) knows a lot more

END OF IF

END OF LOOP

END OF GROUP

End of section **Expertise**

Start of section **Core**

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

c003_friend (how similar to friend in section Core)

Overall, how similar would you say you are to (FRIEND) regarding things that are important to you?

1 1 Not at all similar

2 2

3 3

4 4

5 5

6 6

7 7 Very similar

c001 (R political views in section Core)

In general, how would you describe your political views?

1 Very liberal

2 Mostly liberal

3 Somewhat liberal

4 Moderate

5 Somewhat conservative

6 Mostly conservative

7 Very conservative

c001_friend (R thinks friend political views in section Core)

When answering the question '*In general, how would you describe your political views?*' about themselves, what do you think (FRIEND) has answered?

- 1 Very liberal
- 2 Mostly liberal
- 3 Somewhat liberal
- 4 Moderate
- 5 Somewhat conservative
- 6 Mostly conservative
- 7 Very conservative

c002 (R how religious in section Core)

Regardless of whether you belong to a particular religion, how religious would you say you are?

- 1 1 Not at all religious
- 2 2
- 3 3
- 4 4
- 5 5
- 6 6
- 7 7 Very religious

c002_friend (R thinks friend how religious in section Core)

When answering the question '*Regardless of whether you belong to a particular religion, how religious would you say you are?*' about themselves, what do you think (FRIEND) has answered?

- 1 1 Not at all religious
- 2 2
- 3 3
- 4 4
- 5 5
- 6 6
- 7 7 Very religious

END OF GROUP

End of section **Core**

Start of section **Network**

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

nt001 (total number of social contacts in section Network)

How many social contacts do you have in total, approximately?

By social contacts we mean any friends, family members, neighbors, colleagues, or acquaintances of 18 years of age or older that you have communicated with regularly within the last month, either face-to-face, or otherwise. Please give your best guess.

RANGE 0..500

nt002 (friend total number of social contacts in section Network)

How many social contacts do you think (FRIEND) has in total, approximately?

By social contacts we mean any friends, family members, neighbors, colleagues, or acquaintances of 18 years of age or older that (FRIEND) has communicated with regularly within the last month, either face-to-face, or otherwise. Please give your best guess.

RANGE 0..500

nt006 (friend knows number of friends, family members in section Network)

How many of **your social contacts** does (FRIEND) also know? Please give your best estimate.

(FRIEND) knows:

RANGE 0..500

END OF GROUP

End of section **Network**

Start of section **Beliefs**

IF nt001 > 0 THEN

IF sizeof(be_order) = 0 THEN

| be_order := ex_order

END OF IF

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

be_intro (Section Beliefs)

Now please think again of **your social contacts again**. You said that you have communicated with roughly **(total number of social contacts())** of them regularly within the last month, either face-to-face, or otherwise.

*The following questions can be difficult, but please just give your best guess. Try to make sure that, in each question, the numbers sum up to roughly **(total number of***

social contacts()).

LOOP FROM 1 TO 3

IF be_order(cnt) = 1 THEN

be001_intro (Section Beliefs)

When asked '*What comes closer to your view on climate change?*', how many of your social contacts that you communicated with regularly last month would answer...

SUBGROUP OF QUESTIONS

be001a (number says evidence that the climate is NOT changing because of human activity in section Beliefs)

There is evidence that the climate is NOT changing because of human activity

RANGE 0..(total number of social contacts())

be001b (number says evidence that the climate is changing because of human activity in section Beliefs)

There is evidence that the climate is changing because of human activity

RANGE 0..(total number of social contacts())

END OF SUBGROUP

ELSEIF be_order(cnt) = 2 THEN

be002_intro (Section Beliefs)

When asked '*Do you think it is generally unsafe or safe to eat genetically modified foods?*', how many of your social contacts that you communicated with regularly last month would answer...

SUBGROUP OF QUESTIONS

be002a (number says generally unsafe to eat genetically modified foods in section Beliefs)

Generally unsafe

RANGE 0..(total number of social contacts())

be002b (number says generally safe to eat genetically modified foods in section Beliefs)

Generally safe

RANGE 0..(total number of social contacts())

```

| | END OF SUBGROUP

| ELSEIF be_order(cnt) = 3 THEN

| | be003_intro (Section Beliefs)
| | When asked 'Thinking about childhood diseases, such as measles, mumps, rubella and polio, what comes closer to your view?', how many of your social contacts that you communicated with regularly last month would answer...

| | SUBGROUP OF QUESTIONS

| | | be003a (number says parents should be allowed to choose to NOT vaccinate their children in section Beliefs)
| | | Parents should be allowed to choose to NOT vaccinate their children
| | | RANGE 0..(total number of social contacts())

| | | be003b (number says all children should be required to be vaccinated in section Beliefs)
| | | All children should be required to be vaccinated
| | | RANGE 0..(total number of social contacts())

| | END OF SUBGROUP

| END OF IF

| END OF LOOP

| END OF GROUP
END OF IF

End of section Beliefs

Start of section Accuracy

IF sizeof(ac_order) = 0 THEN
| ac_order := ex_order
END OF IF

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

| LOOP FROM 1 TO 3

| | IF ac_order(cnt) = 1 THEN

```

ac001 (important accurately perceive climate change belief in section Accuracy)

Do you agree or disagree:

It is important to me that I accurately perceive the belief of (FRIEND) about **climate change**.

1 1 Strongly disagree

2 2

3 3

4 4

5 5

6 6

7 7 Strongly agree

ELSEIF ac_order(cnt) = 2 THEN

ac002 (important accurately perceive genetically modified (GM) food belief in section Accuracy)

Do you agree or disagree:

It is important to me that I accurately perceive the belief of (FRIEND) about **genetically modified (GM) food**.

1 1 Strongly disagree

2 2

3 3

4 4

5 5

6 6

7 7 Strongly agree

ELSEIF ac_order(cnt) = 3 THEN

ac003 (important accurately perceive childhood vaccination belief in section Accuracy)

Do you agree or disagree:

It is important to me that I accurately perceive the belief of (FRIEND) about **childhood vaccination**.

1 1 Strongly disagree

2 2

3 3

4 4

5 5

6 6

| 7 7 Strongly agree

END OF IF

END OF LOOP

END OF GROUP

IF sizeof(fr_order) = 0 THEN

| fr_order := ex_order

END OF IF

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

LOOP FROM 1 TO 3

IF fr_order(cnt) = 1 THEN

| **fr001** (how often discuss climate change in section Accuracy)

About how often do you discuss **climate change** with (FRIEND)?

- 1 Every day
- 2 A few times per week
- 3 A few times per month
- 4 A few times per year
- 5 More rarely

ELSEIF fr_order(cnt) = 2 THEN

| **fr002** (how often discuss genetically modified food (GM) in section Accuracy)

About how often do you discuss **genetically modified food (GM)** with (FRIEND)?

- 1 Every day
- 2 A few times per week
- 3 A few times per month
- 4 A few times per year
- 5 More rarely

ELSEIF fr_order(cnt) = 3 THEN

| **fr003** (how often discuss childhood vaccination in section Accuracy)

About how often do you discuss **childhood vaccination** with (FRIEND)?

- 1 Every day
- 2 A few times per week
- 3 A few times per month
- 4 A few times per year

| 5 More rarely

END OF IF

END OF LOOP

END OF GROUP

End of section **Accuracy**

Start of section **Science**

sc.intro (Section Science)

Next, we are interested in your views about science and health issues after we show you some information about scientists' views on these issues.

LOOP FROM 1 TO 3

IF randomizer_topics(cnt) = 1 THEN

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

clim006a (climate change scientist lot of conflict in section Science)
(IWER: A survey of the largest scientific society in the country, the American Association for the Advancement of Science (AAAS), revealed that 87% of U.S. scientists think that the climate is changing mostly due to human activity.) *Do you agree or disagree:*

I experience a lot of conflict at between **my beliefs** about **climate change** and the beliefs of **U.S. scientists**.

1 1 Strongly disagree

2 2

3 3

4 4

5 5

6 6

7 7 Strongly agree

clim006b (climate change friend scientist lot of conflict in section Science)

Do you agree or disagree:

I perceive a lot of conflict between **(FRIEND)'s** and **U.S. scientists' beliefs** about **climate change**.

1 1 Strongly disagree

2 2

3 3
4 4
5 5
6 6
7 7 Strongly agree

clim007 (updated view scientist on climate change in section Science)
After reading this information, how would you now answer this question:

What comes closer to your view on **climate change**?

1 1 There is solid evidence that the climate is NOT changing because of human activity
2 2
3 3
4 4
5 5
6 6
7 7 There is solid evidence that the climate is changing because of human activity

END OF GROUP

ELSEIF randomizer_topics(cnt) = 2 THEN

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

gm006a (genetically modified foods scientist lot of conflict in section Science)
Please read the following information carefully:
(IWER: A survey of the largest scientific society in the country, the American Association for the Advancement of Science (AAAS), revealed that 88% of U.S. scientists believe that it is safe to eat GM food.) *Do you agree or disagree:*

I experience a lot of conflict at between **my beliefs** about **genetically modified foods** and the beliefs of **U.S. scientists**.

1 1 Strongly disagree
2 2
3 3
4 4
5 5
6 6
7 7 Strongly agree

gm006b (genetically modified foods friend scientist lot of conflict in section Science)
Do you agree or disagree:

I perceive a lot of conflict between **(FRIEND)'s** and **U.S. scientists' beliefs** about **genetically modified foods**.

1 1 Strongly disagree

2 2

3 3

4 4

5 5

6 6

7 7 Strongly agree

gm007 (updated view scientist on genetically modified foods in section Science)

After reading this information, how would you now answer this question:

Do you think it is generally unsafe or safe to eat **genetically modified foods**?

1 1 Generally unsafe

2 2

3 3

4 4

5 5

6 6

7 7 Generally safe

END OF GROUP

ELSEIF randomizer_topics(cnt) = 3 THEN

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

ch006a (childhood vaccination scientist lot of conflict in section Science)

Please read the following information carefully:

(IWER: A survey of the largest scientific society in the country, the American Association for the Advancement of Science (AAAS), revealed that 86% of U.S. scientists believe that all children should be required to be vaccinated.)*Do you agree or disagree:*

I experience a lot of conflict at between **my beliefs** about **childhood vaccination** and the beliefs of **U.S. scientists**.

1 1 Strongly disagree

2 2

3 3

4 4

5 5

6 6

7 7 Strongly agree

ch006b (childhood vaccination friend scientist lot of conflict in section Science)

Do you agree or disagree:

I perceive a lot of conflict between **(FRIEND)'s** and **U.S. scientists' beliefs** about **childhood vaccination**.

1 1 Strongly disagree

2 2

3 3

4 4

5 5

6 6

7 7 Strongly agree

ch007 (updated view scientist on childhood vaccination in section Science)

After reading this information, how would you now answer this question:

Thinking about childhood diseases, such as measles, mumps, rubella and polio, what comes closer to your view?

1 1 Parents should be allowed to choose to NOT vaccinate their children

2 2

3 3

4 4

5 5

6 6

7 7 All children should be required to vaccinate

END OF GROUP

END OF IF

END OF LOOP

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

sc001 (number of scientists social contacts in section Science)

Now please think again of **your social contacts**. You said that you have communicated with roughly (total number of social contacts()) of them regularly within the last month, either face-to-face, or otherwise.

How many of your social contacts are scientists? Please give your best guess. If there are none, please just write 0 and skip the question below.

RANGE 0..(total number of social contacts())

sc002 (relationship with scientist in social contacts in section Science)

If you have any scientists among your social contacts:

How would you describe your relationship with **these scientists**? Please select all that apply.

- 1 Close friend
- 2 Close family
- 3 Extended family
- 4 Neighbor
- 5 Colleague
- 6 Other acquaintance, please describe:

sc002.other (other relationship with scientist in social contacts in section Science)
STRING

sc001.script (Section Science)

You indicated that one or more of your social contacts is a scientist. Please indicate your relationship with these scientists. You indicated one or more relationships with scientists, but also said there are no scientists among your social contacts.

END OF GROUP

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

sc003a (how often read about scientific research or watch programs about science in section Science)

How often do you read about scientific research or watch programs about science?

- 1 Every day
- 2 A few times per week
- 3 A few times per month
- 4 A few times per year
- 5 More rarely

sc003b (how much confidence in U.S. scientists in section Science)

How much confidence, if any, do you have in U.S. scientists to act in the best interests of the public?

- 1 A great deal of confidence
- 2 A fair amount of confidence
- 3 Not too much confidence
- 4 No confidence at all

END OF GROUP

IF sizeof(sc_order) = 0 THEN

| sc_order := randomizer_topics

END OF IF

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

LOOP FROM 1 TO 3

IF sc.order(cnt) = 1 THEN

sc004a (who more expertise climate change R or scientists in section Science)
Would you say that you know more than **most U.S. scientists** about **climate change**,
or do **most U.S. scientists** know more than you?

1 1 I know a lot more
2 2
3 3
4 4
5 5
6 6
7 7 U.S. scientists know a lot more

ELSEIF sc.order(cnt) = 2 THEN

sc004b (who more expertise genetically modified (GM) food R or scientists in section Science)
Would you say that you know more than **most U.S. scientists** about **genetically modified (GM) food**, or do **most U.S. scientists** know more than you?

1 1 I know a lot more
2 2
3 3
4 4
5 5
6 6
7 7 U.S. scientists know a lot more

ELSEIF sc.order(cnt) = 3 THEN

sc004c (who more expertise childhood vaccination R or scientists in section Science)
Would you say that you know more than **most U.S. scientists** about **childhood vaccination**, or do **most U.S. scientists** know more than you?

1 1 I know a lot more
2 2
3 3
4 4
5 5
6 6

| 7 7 U.S. scientists know a lot more

| END OF IF

| END OF LOOP

END OF GROUP

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

sc007_scientist (how similar to scientists in section Science)

Overall, how similar would you say you are to **most U.S. scientists** regarding things that are important to you?

1 1 Not at all similar

2 2

3 3

4 4

5 5

6 6

7 7 Very similar

sc005_scientist (R thinks scientists political views in section Science)

When answering the question '*In general, how would you describe your political views?*' about themselves, what do you think **most U.S. scientists** would answer?

1 Very liberal

2 Mostly liberal

3 Somewhat liberal

4 Moderate

5 Somewhat conservative

6 Mostly conservative

7 Very conservative

sc006_scientist (R thinks scientists how religious in section Science)

When answering the question '*Regardless of whether you belong to a particular religion, how religious would you say you are?*' about themselves, what do you think **most U.S. scientists** would answer?

1 1 Not at all religious

2 2

3 3

4 4

5 5

6 6

7 7 Very religious

END OF GROUP

End of section **Science**

Start of section **Influential**

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

inf001_intro (Section Influential)

When you are considering your beliefs about science-related issues such as climate change, GM food, and childhood vaccination, to what extent do the following groups or people influence your thinking?

SUBGROUP OF QUESTIONS

inf001a (influence scientists in section Influential)

Scientists

1 1 Not at all influential

2 2

3 3

4 4

5 5

6 6

7 7 Very influential

inf001b (influence government agencies in section Influential)

Government agencies

1 1 Not at all influential

2 2

3 3

4 4

5 5

6 6

7 7 Very influential

inf001c (influence friend in section Influential)

(FRIEND)

1 1 Not at all influential

2 2

3 3

4 4

5 5

6 6

7 7 Very influential

inf001d (influence other friends and family in section Influential)

Other friends and family

1 1 Not at all influential

2 2

3 3

4 4

5 5

6 6

7 7 Very influential

inf001e (influence your online community in section Influential)

Your online community

1 1 Not at all influential

2 2

3 3

4 4

5 5

6 6

7 7 Very influential

END OF SUBGROUP

END OF GROUP

children (any children under 18 in household in section Influential)

Do you have any children under the age of 18 living in your household (including your own children, step-children, adopted children, foster children, and a partner's children)?

1 Yes

2 No

End of section **Influential**

Start of section **Closing**

distracted (how distracted in section Closing)

Before we are done, we have one more question that will help us better understand the results.

How much were you distracted while completing this questionnaire?

1 1 Not at all distracted

2 2

3 3

4 4

5 5

6 6

7 7 Very distracted

CS_001 (HOW PLEASANT INTERVIEW in section Closing)

Could you tell us how interesting or uninteresting you found the questions in this interview?

- 1 Very interesting
- 2 Interesting
- 3 Neither interesting nor uninteresting
- 4 Uninteresting
- 5 Very uninteresting

CS_003 (comments in section Closing)

Do you have any other comments on the interview? Please type these in the box below. (If you have no comments, please click next to complete this survey.)

STRING

End of section **Closing**

/* Please note that although question CS_003 is listed in the routing, the answers are not included in the microdata in the event identifiable information is captured. Cleaned responses are available by request. */