

UnderStandingAmericaStudy

UAS 448: INFLUENCE OF PEERS ON BELIEFS ABOUT VACCINATION AND GM
FOOD - CONSENT TO PARTICIPATE (PILOT)



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1 INTRODUCTION

This UAS panel survey, titled UAS448: Influence of peers on beliefs about vaccination and GM food - Consent to Participate” is the consent survey for 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 nominate non-UAS peers to also participate. Those whose peer participants consent and fill out a survey are then asked to fill out a follow up survey. This survey is no longer in the field.

Associated surveys: UAS449 (Follow up).

1.1 Topics

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

1.2 Experiments

This survey includes experiment(s) of the following type(s): Auxiliary Randomization. Please refer to explanatory comments in the Routing section for detailed information. 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:

Custom selection of active English speaking respondents.

As such, this survey was made available to 4731 UAS participants. Of those 4731 participants, 3039 completed the survey and are counted as respondents. Of those who are not counted as respondents, 464 started the survey without completing and 1228 did not start the survey. The overall response rate was 64.24%.

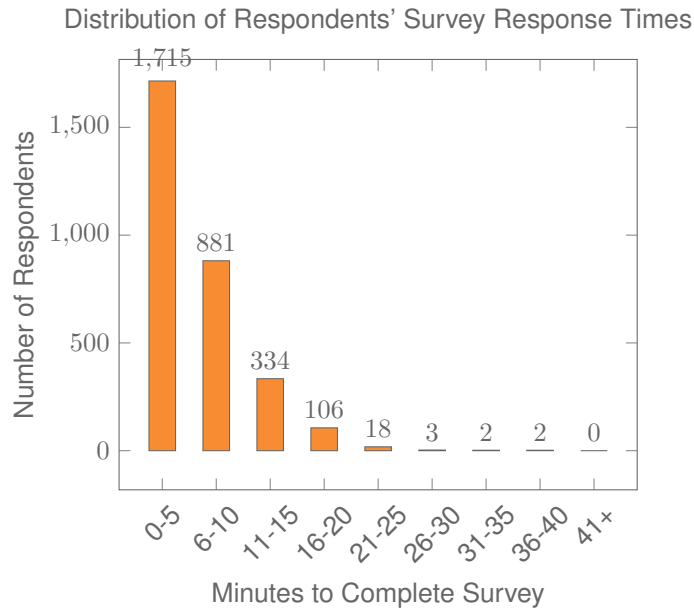
Note: We are unable to provide sample weights for a small number of UAS members (see the Sample and weighting section below for details). If they completed the survey, these members are included in the data set with a weight of zero, but accounted for in the computation of total sample size and survey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

The detailed survey response rate is as follows:

UAS448 - Response Overview	
Size of selected sample	4731
Completed the survey	3039
Started but did not complete the survey	464
Did not start the survey	1228
Response rate	64.24%

2.2 Timings

The survey took respondents an average of 6 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
35. MSG 2025/02

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.
- **hisplativo**: 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 hisplativo, 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.

In addition, data sets created after May 8, 2025 include an urbanicity variable. It is based on panel members' current census tract of residence and the 2010 Rural-Urban Commuting Area (RUCA) codes released by the US Department of Agriculture's Economic Research Service. To preserve confidentiality, the UAS collapses the 10 primary RUCA codes to 4 levels: Metropolitan, Micropolitan, Small/Rural, and Unknown. The Metropolitan level corresponds to primary RUCA codes 1-3, the Micropolitan level corresponds to RUCA codes 4-6, and the Small/Rural UAS classification corresponds to RUCA codes 7-10.

For detailed information and definitions of the 10 primary RUCA codes, please visit the USDA ERS Rural-Urban Commuting Area Codes site. Surveys conducted completely prior to May 8, 2025 will have an urbanicity data set available on request.

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 **Consentsection**

```
IF amount = EMPTY THEN  
| amount := 1  
END OF IF
```

/* 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. Pilot codebook payment was \$3 plus \$3 if listing a friend. For more information about the pilot, please contact us at uas-l@usc.edu. */

```
survey_version := 2
```

cintro1 (Section Consentsection)

We are planning a new study to investigate people's beliefs about different scientific and societal issues (for example, genetically modified foods or childhood vaccines). In this survey, you will read about the study and decide whether you would like to participate, along with a social contact, such as a friend or acquaintance. We think that you will find it interesting and a little different than our usual surveys.

Please take as much time as you need to read about the study and understand it. If you have any questions, please contact the UAS helpdesk to get them answered. You are being invited to take part in this study because you have participated in the UAS previously and you are age 18 or older. This study is funded by the National Science Foundation.

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

cintro2 (Section Consentsection)

Question: What is this study about and what will I be asked to do?

Answer: Your participation will involve answering questions about yourself and your beliefs about societal issues. We will also ask you about the beliefs of one of your social contacts, and other people's beliefs.

If you decide to participate, we will ask you to provide the nick(name) and email address of one of your social contacts who might be interested in joining you in participating in this study. You will then answer some questions about yourself and this contact. The social contact can be a friend, family member, neighbor, colleague, or an acquaintance, but they cannot be a member of UAS and must live in a different household.

Then, in a few days we will send an email to your contact, inviting them to read

about this study. If they agree to join, they will fill out a short survey about their beliefs about different societal issues (the survey will take them about 5 minutes). Your contact will also be asked if they consent to us sharing their answers with you.

If your contact answers the survey, no matter if they consent to share their answers or not, they will receive a \$(random amount()) Amazon gift card as a thank you for their time.

If your contact fills out our survey and consents to us sharing their answers with you, about a week later we will invite you to complete a final 10-minute survey where you will be asked questions about your beliefs about societal issues and about the beliefs of your social contact.

cintro3 (Section Consentsection)

Question: How long will each survey take, and how much will I earn? How much will my social contact earn?

Answer: This survey, including reading this information, will take about 2 minutes or less to read about. If you decide to join the study, there will be a few more questions to answer that will take about another 5 minutes. You will earn \$2 as our thank you for reading about the study whether or not you decide to join. If you do join and answer the additional questions, you will earn an additional \$3 - for a total of \$5.

If one of your social contacts fills out their survey, it will take them about 5 minutes, and they will receive a \$(random amount()) Amazon gift card.

If one of the social contacts you nominated fills out the survey and agrees to let us share their answers, you will be invited to do the final 10-minute survey and you will receive \$7 if you complete it.

cintro4 (Section Consentsection)

Question: What are the risks or discomforts of participating in this survey?

Answer: There are no risks in this research that are greater than those encountered in everyday life. You may experience discomfort with learning about the answers given by your contact, if that information is new to you.

END OF GROUP

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

cintro5 (Section Consentsection)

Question: Are there any benefits involved?

Answer: There are no direct benefits to you. The findings from this project will

provide information on belief formation.

cintro6 (Section Consentsection)

Question: Are my answers private?

Answer: As with all UAS surveys, we protect your privacy by keeping your survey responses confidential. We will not share the answers to your questions with others who may identify you, including the social contacts that you nominate to participate in the study. There is a small risk that people not connected with the study will learn your identity or personal information, but your survey responses are stored separately. We will protect your data just as we protect all UAS data. As described to you when you joined the UAS, we have obtained a Certificate of Confidentiality from the National Institutes of Health that allows us to legally refuse to identify you with your responses, unless you say it is ok. Like all UAS data, your survey answers will be available to researchers who are approved to use the UAS; however, your answers are not connected to any information that would identify who you are.

END OF GROUP

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

cintro7 (Section Consentsection)

Question: What happens if I decide not to participate?

Answer: If you decide NOT to participate in this project, we won't contact you further about this specific project, and nothing will change. We will continue to invite you to complete other UAS surveys!

Your decision is completely voluntary. Even if you say yes now, you can change your mind and stop doing the surveys at any time. Whether or not you participate in this project, we appreciate your continuing to complete our regular UAS surveys. If you choose the alternative not to participate now, it does not affect your ability to participate in future UAS surveys. This research has been reviewed by the Biomedical Research Alliance of New York Institutional Review Board at 516-318-6877. Questions, concerns or complaints about research can be registered with the Biomedical Research Alliance of New York Institutional Review Board at the number above or at www.branyirb.com/concerns-about-research.

cintro8 (Section Consentsection)

Question: What if I have more questions before I decide?

Answer: If you have any questions, call the UAS helpdesk at (855) 872-8673 or send us an email at uashelp@usc.edu.

END OF GROUP

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

consent (consent in section Consentsection)

Would you like to participate in this project?

1 Yes

2 No

3 I have questions

consent_script (Section Consentsection)

Thank you for considering participating in our project! Click (here/here) to download the project information sheet. You can also call the UAS helpdesk at (855) 872-8673 or send us an email at uashelp@usc.edu and we will be happy to answer any questions that you may have, or send you the information sheet via email or U.S. mail.

Once you have decided, you can come back to this page by clicking the link in your email invitation, or in your UAS page. This page will time out if you leave it open, so for the time being you can just close your browser window. Please indicate if you are willing to participate in our project.

END OF GROUP

IF consent = 2 THEN

consent_why (why not consented in section Consentsection)

Thank you for reading about our new study. To help us understand why people prefer not to join, could you tell us briefly why you chose not to participate?

REMINDER: if you wish to contact the person you have in mind to invite before giving us their information, or you need to find their email address, etc. please do the following: Click or tap the "BACK" button, to return to the previous page. This will ensure you can come back to the survey on the page where you fill in their information. Close the survey or leave it open on that page. It may time out after a while. When you are ready to fill in your person's information, Log into your UAS account, and click the UAS448 survey button. You can find the invitation email we sent, and click the link, or log into your UAS account in whatever is your usual way.

STRING

reward := 2

consent_no (Section Consentsection)

Thanks again! We will contact you when there is a new UAS survey to complete.

Please click "Next" to return to your panel member pages.

ELSEIF consent = 1 THEN

reward := 5

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

consent_yes (Section Consentsection)

Please use the form below to invite one of your social contacts, 18 years of age or older, with whom you have communicated with at least briefly in the last few months, either face-to-face or otherwise. The social contact can be a friend, family member, neighbor, colleague, or an acquaintance who does not live in the same household with you.

It is important that your social contact comes from a different household than yours, that is, they live at a different address. If you can, please invite a social contact that does not necessarily share your opinions about science and society.

Enter their email and a name to use so that you will remember who you invited, and so we can contact them - this can be their first name or just a nickname.

After you complete the form below, we will ask you some questions about yourself and this contact.

contact1_email (contact email 1 in section Consentsection)

Contact:
STRING

contact1_name (contact name 1 in section Consentsection)

STRING

consent_yes_after (Section Consentsection)

You can click "Next" now.

NEED MORE TIME? If you wish to contact the person you have in mind first, or find their email address, etc. you can do the following:

If you only need a few minutes you can leave this window open and come back and enter the information later. If you need more than a few minutes close this window now. When you are ready, just log into your UAS account, and click the UAS448 survey button to return this screen, or click on the link in the invitation email we sent. If you do not have any such contacts (or if you are done with entering contact information), just click "Next". Please do not click "Next" if you want to add a contact later, but simply close this window now.

END OF GROUP

IF (friendresult = 1) THEN

consent_yes2_one (Section Consentsection)

Thank you!

We will send an email to the contact you listed and invite them to the study.

If they participate, they will receive an Amazon gift card of \$(random amount()).

Please feel free to also send a private message to your contact to inform them about this study and encourage them to participate, and to watch for our email invitation with the link. If you have provided us with a nickname instead of the real name for your contact, please let them know that we will be using that name in our email when we contact them.

If your contact participates, about a week later we will invite you to complete another 10-minute survey.

ELSEIF (friendresult = 2) THEN

consent_yes2 (Section Consentsection)

Thank you!

We will send an email to the first contact listed and invite them to the study. If the first contact does not reply, we will invite the second one.

The social contact who participates will receive an Amazon gift card of \$(random amount()).

Please feel free to also send a private message to your contacts to inform them about this study and encourage them to participate, and to watch for our email invitation with the link. If you have provided us with a nickname for your contact, please let them know that we will be using that name in our email when we contact them.

If at least one of contacts participates, a couple of weeks later we will invite you to complete a 10-minute survey.

ELSE

consent_whynolist (why not anyone listed in section Consentsection)

Thank you for consenting to join our new study. Just to help us understand, could you tell us briefly why you have not added any friends' contacts at this time? If you need more information about the study, please contact the helpdesk at uashelp.usc.edu.

STRING

consent_yes3 (Section Consentsection)

Thank you for your participation, we will contact you when there is a new UAS survey to complete.

```
| END OF IF  
END OF IF
```

End of section **Consentsection**

```
IF friendresult IN (1,2) THEN
```

```
| Start of section Randomization
```

```
/* Respondents are asked about themselves and their network, and science and  
scientists in random order per variable randomizer_sections with values:
```

- o 1 Respondent and network, then science
- o 2 Science, then respondent and network

```
*/
```

```
IF randomizer_sections = EMPTY THEN
```

```
| randomizer_sections := mt_rand(1,2)
```

```
END OF IF
```

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

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

```
*/
```

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

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

```
END OF IF
```

End of section **Randomization**

```
IF randomizer_sections = 2 THEN
```

```
| Start of section Science
```

```
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**

END OF IF

Start of section **Relationship**

IF (friendresult = 1) THEN

rel_intro2 (relationship with friend in section Relationship)

Now, please think of the contact you entered before, (()).

ELSE

rel_intro (relationship with friend in section Relationship)

Now, please think of the FIRST contact you entered on the previous page, (()).

END OF IF

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

rel003_intro (Section Relationship)

How likely are you and (()) to:

SUBGROUP OF QUESTIONS

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

Work successfully on a project together

1 1 Almost nothing

2 2

3 3

4 4

5 5

6 6

7 7 Quite a lot

rel003b (Have fun together in section Relationship)

Have fun together

1 1 Almost nothing

2 2

3 3

4 4

5 5

6 6

7 7 Quite a lot

rel003c (Bump into each other frequently in section Relationship)

Bump into each other frequently

1 1 Almost nothing

2 2

3 3

4 4

5 5

6 6

7 7 Quite a lot

END OF SUBGROUP

nt004 (how likely friend can help establish connections in section Network)

How likely is it that (()) 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 **Network**

End of section **Network**

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 (()) about climate change, or does (())
  know more than you?
  1 1 I know a lot more
  2 2
  3 3
  4 4
  5 5
  6 6
  7 7 (()) 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 (()) about genetically modified (GM) food,
  or does (()) know more than you?
  1 1 I know a lot more
  2 2
  3 3
  4 4
  5 5
  6 6
  7 7 (()) 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 (()) about **childhood vaccination**, or does (()) know more than you?

1 1 I know a lot more

2 2

3 3

4 4

5 5

6 6

7 7 (()) 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 (()) 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_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 (()) would answer?

1 Very liberal

2 Mostly liberal

3 Somewhat liberal

4 Moderate

5 Somewhat conservative

- 6 Mostly conservative
- 7 Very conservative

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 (()) 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 **Core**

IF randomizer_sections = 1 THEN

Start of section **Science**

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**

END OF IF

sc.intro (Section Science)

Next, we are interested in your views about some science and health issues.

LOOP FROM 1 TO 3

IF randomizer_topics(cnt) = 1 THEN

Start of section **Climate**

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

clim001a (view on climate change in section Climate)

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

clim001c (friend view on climate change in section Climate)

When answering the question '*What comes closer to your view on climate change?*' what do you think (()) would answer?

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

clim004 (scientists view on climate change in section Climate)

When answering the question '*What comes closer to your view on climate change?*' what do you think **most U.S. scientists** would answer?

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 section **Climate**

ELSEIF randomizer_topics(cnt) = 2 THEN

Start of section **Geneticmodified**

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

gm001a (view on genetically modified foods in section Geneticmodified)
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

gm001c (friend view on genetically modified food in section Geneticmodified)
When answering the question '*Do you think it is generally unsafe or safe to eat genetically modified food?*' what do you think (()) would answer?
1 1 Generally unsafe
2 2
3 3
4 4
5 5
6 6
7 7 Generally safe

gm004 (scientists view on genetically modified food in section Geneticmodified)
When answering the question "*Do you think it is generally unsafe or safe to eat genetically modified food?*" what do you think **most U.S. scientists** would answer?
1 1 Generally unsafe
2 2
3 3

4 4
5 5
6 6
7 7 Generally safe

END OF GROUP

End of section **Geneticmodified**

ELSEIF randomizer_topics(cnt) = 3 THEN

Start of section **Childhood**

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

ch001a (view on parents vaccinating children in section Childhood)
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 be vaccinated

ch001c (friend view on child vaccination in section Childhood)
When answering the question '*Thinking about childhood diseases, such as measles, mumps, rubella and polio, , what comes closer to your view?*' what do you think (())
would answer?

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 be vaccinated

ch004 (scientists view on childhood vaccination in section Childhood)
When answering the question "*Thinking about childhood diseases, such as measles, mumps, rubella and polio, what comes closer to your view?*" what do you think **most U.S. scientists** would answer?

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 be vaccinated

END OF GROUP

End of section Childhood

END OF IF

END OF LOOP

END OF IF

```

Start of section **Closing**

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. */