UnderStandingAmericaStudy

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Contents

1 INTRODUCTION

This UAS panel survey, titled "UAS 287: Risk Preferences" presents respondents with a series of choices in which they decide between options that offer different amounts of money with different amounts of risk. This survey is no longer in the field. Respondents were paid $4 to complete the survey.

1.1 Topics

This survey contains questions (among others) on the following topics: Risk Preferences. 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, Task Payment Determined Randomly. 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:

Random selection of active nationally representative respondents.

As such, this survey was made available to 1333 UAS participants. Of those 1333 participants, 1001 completed the survey and are counted as respondents. Of those who are not counted as respondents, 19 started the survey without completing and 313 did not start the survey. The overall response rate was 75.09%.

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:

| UAS287 - Response Overview	
Size of selected sample	1333
Completed the survey	1001
Started but did not complete the survey	19
Did not start the survey	313
Response rate	75.09%

2.2 Timings

The survey took respondents an average of 8 minutes, and the full distribution of survey response times is available in the figure below. Times per question are available upon request.

Distribution of Respondents' Survey Response Times
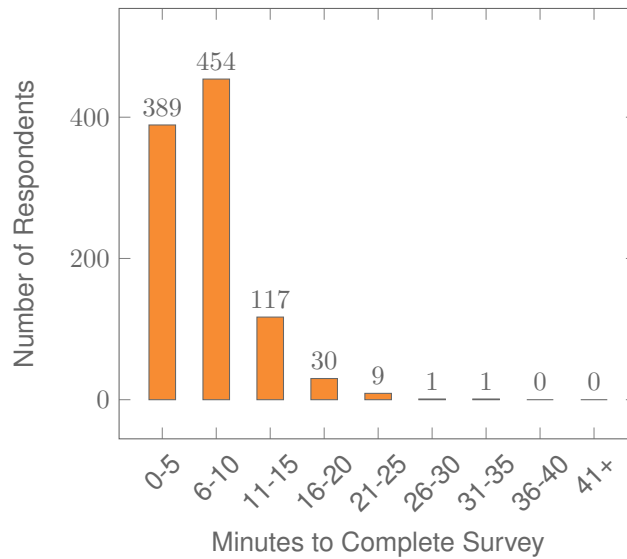
2.3 Sample & Weighting

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 is 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).

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- **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.

- **hisplatino**: 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 hisplatino, 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.

- **lf_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, lf_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 Micropolitian 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.

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7 SURVEY WITH ROUTING

pref_intro (Section Preferences)
In this experiment, we are interested in learning about how you evaluate risk.

To better understand how you evaluate risk, we will present you with a series of choices. In each choice, you will decide between options that offer different amounts of money with different amounts of risk. **Your payment for this study will depend on the decisions that you make**.

/* Respondents in this survey are presented with a series of choices. The overall explanation and stated goal for these choices are randomly configured in accordance with the following three variables:

○ treatment: indicates the overall treatment group of the respondent. It takes one of three values determining the explanation that is presented:

– 1 Control: the control group is presented with the following explanation (expl001): "Some participants find it helpful to set goals for themselves when completing these tasks. We would like for you to view earning at least a $GOAL bonus as your goal. Some participants find it helpful to compare their performance against averages. As you complete this task, we would like for you to imagine that you are part of a group of participants who earned an average bonus of $OTHERSAVG.

In the choice screen they won't see any header.

– 2 Goal: the goal group is presented with the following explanation (expl002): "Some participants find it helpful to set goals for themselves when completing these tasks. We would like for you to view earning at least a $GOAL bonus as your goal. Some participants find it helpful to compare their performance against averages. As you complete this task, we would like for you to imagine that you are part of a group of participants who earned an average bonus of $OTHERSAVG. We will remind you of your goal when you are making your decisions."

In the choice screen they will see the header 'Your goals'.

– 3 Average: the average savings group is presented with the following explanation (expl003): "Some participants find it helpful to compare their performance against averages. As you complete this task, we would like for you to imagine that you are part of a group of participants who earned an average bonus of $OTHERSAVG. Some participants find it helpful to set goals for themselves when completing these tasks. We would like for you to view earning at least a $GOAL bonus as your goal. We will remind you of the average earnings when

you are making your decisions."

In the choice screen they will see the header 'Average savings'.

○ goal: the target earnings that respondents are presented with as the goal for them to achieve. The random goals are generated in order to arrive at a distribution with a mean of 3.4 and a variance of 0.7; and they are presented with a two decimal accuracy.

○ othersavg: the average earnings that respondents are told that others achieved. The random goals are generated in order to arrive at a distribution with a mean of 3.4 and a variance of 0.7; and they are presented with a two decimal accuracy.

*/

```
IF treatment = EMPTY THEN
  treatment := mt_rand(1,3)
  explanation_option_order := mt_rand(1,2)
  goal_original := stats_rand_gen_normal(3.4, sqrt(0.7))

  IF goal_original
  | goal := number_format(0.01, 2)
  ELSE
  | goal := number_format(goal_original, 2)
  END OF IF

  othersavg_original := stats_rand_gen_normal(3.4, sqrt(0.7))

  IF othersavg_original
  | othersavg := number_format(0.01, 2)
  ELSE
  | othersavg := number_format(othersavg_original, 2)
  END OF IF
END OF IF
```

/* Respondents are presented with an explanation of the decision screen used within the survey. The choices are displayed randomly per variable explanation_option_order with values:

○ 1 Safe on the left, then risky on the right

○ 2 Risky on the left, then safe on the right

*/

IF explanation_option_order = 1 THEN

pref_intro2 (Section Preferences)
We will present you with a series of choices between a sure option and a risky option.
You will be asked to report which of the two options you would prefer to take.

Decisions will be presented with screens like this:

Figure 1: *Example of explanation with order of guaranteed, then risky choice*

We will present you with a series of choices between a sure option and a risky option. You will be asked to report which of the two options you would prefer to take.

Decisions will be presented with screens like this:

Option A	Option B	
A 100% chance of	A 50% chance of	A 50% chance of
$3.55	**$2.15**	**$4.95**

To help you think about the risk involved with each option, it is helpful to imagine we were flipping a fair coin. This coin would have a 50-50 chance of showing heads or tails. In this example, if you chose Option A, you would get $3.55 if the coin came up heads *or* if it came up tails - that means you would get $3.55 with 100% certainty. If you chose Option B, you would get $2.15 if the coin came up heads (a 50% chance) and you would get $4.95 if the coin came up tails (a 50% chance).

If this example were a real choice in this experiment, you would select the option you prefer by clicking on it.

example1 (Section Preferences)

pref_intro2_end (Section Preferences)
To help you think about the risk involved with each option, it is helpful to imagine we were flipping a fair coin. This coin would have a 50-50 chance of showing heads or tails. In this example, if you chose Option A, you would get $3.55 if the coin came up heads *or* if it came up tails - that means you would get $3.55 with 100% certainty. If you chose Option B, you would get $2.15 if the coin came up heads (a 50% chance) and you would get $4.95 if the coin came up tails (a 50% chance).

If this example were a real choice in this experiment, you would select the option you prefer by clicking on it.

END OF GROUP

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

pref_intro2_risky (Section Preferences)
We will present you with a series of choices between a sure option and a risky option. You will be asked to report which of the two options you would prefer to take.

Decisions will be presented with screens like this:

example1 (Section Preferences)

pref_intro2_risky_end (Section Preferences)
To help you think about the risk involved with each option, it is helpful to imagine we were flipping a fair coin. This coin would have a 50-50 chance of showing heads or tails. In this example, if you chose Option A, you would get $2.15 if the coin came up heads (a 50% chance) and you would get $4.95 if the coin came up tails (a 50% chance). If you chose Option B, you would get $3.55 if the coin came up heads *or* if it came up tails - that means you would get $3.55 with 100% certainty.

If this example were a real choice in this experiment, you would select the option you prefer by clicking on it.

END OF GROUP
END OF IF

pref_intro3 (Section Preferences)
You will face 20 decisions that look like the example you just considered. One of these decisions will be randomly selected to be the decision that "counts." At the end of this experiment, we will tell you which of the 20 decisions was selected. If you chose the sure option, that amount will be your bonus for taking the survey. If you chose the risky option, we will flip a (virtual) coin that determines which of the two possible outcomes occurs, and that amount will be your bonus for taking the survey. Your final payment for the full study will be the $4 fixed payment, plus whatever bonus you earn.

Since you do not know which of the 20 decisions is the decision that "counts," it is in your best interest to carefully consider each choice.

Fill code of question FLOption executed

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

IF explanation_option_order = 1 THEN

pref_check_intro (Section Preferences)
We would like to be sure that you understand the consequences of decisions in this experiment. Please examine the example below, and then answer the comprehension test questions.

example2 (Section Preferences)

pf001 (comprehension question 1 in section Preferences)
If you chose to take Option (A), how much money could you get? Please select all possible options.
1 $3.70
2 $2.30
3 $5.10

pf002 (comprehension question 2 in section Preferences)
If you chose to take Option (B), how much money could you get? Please select all possible options.
1 $3.70
2 $2.30
3 $5.10

pf003 (how decisions affect payment in section Preferences)
In this study, how do these decisions affect your payment?
1 All decisions are hypothetical; choosing option A or B does not affect my payment
2 One randomly selected decision will be chosen to "count," and money from my chosen option in that round will determine my bonus
3 Every decision made in this study "counts," and the money made from each of my chosen options will be added to my bonus

Figure 2: *Respondent being asked to answer comprehension questions in the safe, then risky order*

We would like to be sure that you understand the consequences of decisions in this experiment. Please examine the example below, and then answer the comprehension test questions.

Option A	Option B	
A 100% chance of	A 50% chance of	A 50% chance of
$3.70	$2.30	$5.10

If you chose to take Option A, how much money could you get? Please select all possible options.

☐ $3.70

☐ $2.30

☐ $5.10

If you chose to take Option B, how much money could you get? Please select all possible options.

☐ $3.70

☐ $2.30

☐ $5.10

In this study, how do these decisions affect your payment?

○ All decisions are hypothetical; choosing option A or B does not affect my payment

○ One randomly selected decision will be chosen to "count," and money from my chosen option in that round will determine my bonus

○ Every decision made in this study "counts," and the money made from each of my chosen options will be added to my bonus

ELSE

pref_check_intro_risky (Section Preferences)
We would like to be sure that you understand the consequences of decisions in this experiment. Please examine the example below, and then answer the comprehension test questions.

example2 (Section Preferences)

pf002 (comprehension question 2 in section Preferences)
If you chose to take Option (B), how much money could you get? Please select all possible options.
1 $3.70
2 $2.30
3 $5.10

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pf001 (comprehension question 1 in section Preferences)
If you chose to take Option (A), how much money could you get? Please select all possible options.
1 $3.70
2 $2.30
3 $5.10

pf003 (how decisions affect payment in section Preferences)
In this study, how do these decisions affect your payment?
1 All decisions are hypothetical; choosing option A or B does not affect my payment
2 One randomly selected decision will be chosen to "count," and money from my chosen option in that round will determine my bonus
3 Every decision made in this study "counts," and the money made from each of my chosen options will be added to my bonus

END OF IF

END OF GROUP

Fill code of question FL_pf001 executed
Fill code of question FL_pf002 executed
Fill code of question FL_pf003 executed
pf001_dummy := pf001
pf002_dummy := pf002
pf003_dummy := pf003

IF not(1 IN pf001) OR (1 IN pf001 AND cardinal(pf001) > 1) THEN
 GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

check_incorrect (Section Preferences)
There were errors in your answers on the previous slide, please review the correct answers below.

IF explanation_option_order = 1 THEN

pf001_dummy (comprehension question 1 in section Preferences)
If you chose to take Option (A), how much money could you get? Please select all possible options.
1 $3.70 ()
2 $2.30 ()
3 $5.10 ()

pf002_dummy (comprehension question 2 in section Preferences)
If you chose to take Option (B), how much money could you get? Please select all

23

possible options.
1 $3.70 ()
2 $2.30 ()
3 $5.10 ()

pf003_dummy (dummy how decisions affect payment in section Preferences)
In this study, how do these decisions affect your payment?
1 All decisions are hypothetical; choosing option A or B does not affect my payment ()
2 One randomly selected decision will be chosen to "count," and money from my chosen option in that round will determine my bonus ()
3 Every decision made in this study "counts," and the money made from each of my chosen options will be added to my bonus ()

ELSE

pf002_dummy (comprehension question 2 in section Preferences)
If you chose to take Option (B), how much money could you get? Please select all possible options.
1 $3.70 ()
2 $2.30 ()
3 $5.10 ()

pf001_dummy (comprehension question 1 in section Preferences)
If you chose to take Option (A), how much money could you get? Please select all possible options.
1 $3.70 ()
2 $2.30 ()
3 $5.10 ()

pf003_dummy (dummy how decisions affect payment in section Preferences)
In this study, how do these decisions affect your payment?
1 All decisions are hypothetical; choosing option A or B does not affect my payment ()
2 One randomly selected decision will be chosen to "count," and money from my chosen option in that round will determine my bonus ()
3 Every decision made in this study "counts," and the money made from each of my chosen options will be added to my bonus ()

END OF IF

END OF GROUP
ELSEIF 1 IN pf002 OR not(2 IN pf002 AND 3 IN pf002) THEN
GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

check_incorrect (Section Preferences)
There were errors in your answers on the previous slide, please review the correct answers below.

IF explanation_option_order = 1 THEN

pf001_dummy (comprehension question 1 in section Preferences)
If you chose to take Option (A), how much money could you get? Please select all possible options.
1 $3.70 ()
2 $2.30 ()
3 $5.10 ()

pf002_dummy (comprehension question 2 in section Preferences)
If you chose to take Option (B), how much money could you get? Please select all possible options.
1 $3.70 ()
2 $2.30 ()
3 $5.10 ()

pf003_dummy (dummy how decisions affect payment in section Preferences)
In this study, how do these decisions affect your payment?
1 All decisions are hypothetical; choosing option A or B does not affect my payment ()
2 One randomly selected decision will be chosen to "count," and money from my chosen option in that round will determine my bonus ()
3 Every decision made in this study "counts," and the money made from each of my chosen options will be added to my bonus ()

Figure 3: *Respondent being shown the correct and incorrect answers to the comprehension questions in the safe, then risky order*

There were errors in your answers on the previous slide, please review the correct answers below.

If you chose to take Option A, how much money could you get? Please select all possible options.

- [ ] $3.70 🟢
- [x] $2.30 🔴
- [ ] $5.10

If you chose to take Option B, how much money could you get? Please select all possible options.

- [x] $3.70 🔴
- [ ] $2.30 🟢
- [ ] $5.10 🟢

In this study, how do these decisions affect your payment?

- ◉ All decisions are hypothetical; choosing option A or B does not affect my payment 🔴
- ○ One randomly selected decision will be chosen to "count," and money from my chosen option in that round will determine my bonus 🟢
- ○ Every decision made in this study "counts," and the money made from each of my chosen options will be added to my bonus

ELSE

pf002_dummy (comprehension question 2 in section Preferences)
If you chose to take Option (B), how much money could you get? Please select all possible options.
1 $3.70 ()
2 $2.30 ()
3 $5.10 ()

pf001_dummy (comprehension question 1 in section Preferences)
If you chose to take Option (A), how much money could you get? Please select all possible options.
1 $3.70 ()
2 $2.30 ()
3 $5.10 ()

pf003_dummy (dummy how decisions affect payment in section Preferences)
In this study, how do these decisions affect your payment?
1 All decisions are hypothetical; choosing option A or B does not affect my payment ()
2 One randomly selected decision will be chosen to "count," and money from my chosen option in that round will determine my bonus ()
3 Every decision made in this study "counts," and the money made from each of my chosen options will be added to my bonus ()

END OF GROUP

ELSEIF pf003 != 2 THEN

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

check_incorrect (Section Preferences)
There were errors in your answers on the previous slide, please review the correct answers below.

IF explanation_option_order = 1 THEN

pf001_dummy (comprehension question 1 in section Preferences)
If you chose to take Option (A), how much money could you get? Please select all possible options.
1 $3.70 ()
2 $2.30 ()
3 $5.10 ()

pf002_dummy (comprehension question 2 in section Preferences)
If you chose to take Option (B), how much money could you get? Please select all possible options.
1 $3.70 ()
2 $2.30 ()
3 $5.10 ()

pf003_dummy (dummy how decisions affect payment in section Preferences)
In this study, how do these decisions affect your payment?
1 All decisions are hypothetical; choosing option A or B does not affect my payment ()
2 One randomly selected decision will be chosen to "count," and money from my chosen option in that round will determine my bonus ()
3 Every decision made in this study "counts," and the money made from each of my chosen options will be added to my bonus ()

ELSE

pf002_dummy (comprehension question 2 in section Preferences)
If you chose to take Option (B), how much money could you get? Please select all possible options.
1 $3.70 ()
2 $2.30 ()
3 $5.10 ()

pf001_dummy (comprehension question 1 in section Preferences)
If you chose to take Option (A), how much money could you get? Please select all

possible options.
1 $3.70 ()
2 $2.30 ()
3 $5.10 ()

pf003_dummy (dummy how decisions affect payment in section Preferences)
In this study, how do these decisions affect your payment?
1 All decisions are hypothetical; choosing option A or B does not affect my payment ()
2 One randomly selected decision will be chosen to "count," and money from my chosen option in that round will determine my bonus ()
3 Every decision made in this study "counts," and the money made from each of my chosen options will be added to my bonus ()

END OF IF

END OF GROUP

ELSE

check_correct (Section Preferences)
Great! You answered all comprehension questions correctly.

END OF IF

IF treatment = 1 THEN

expl001 (control explanation in section Preferences)
Congratulations! You have successfully passed the training module of this study.

Starting on the next screen, you will face the series of choices that were just described. To decide which option to choose, participants sometimes find it useful to use benchmarks for their earnings.Some participants find it helpful to set goals for themselves when completing these tasks. We would like for you to view earning at least a $(random goal()) bonus as your goal.Some participants find it helpful to compare their performance against averages. As you complete this task, we would like for you to imagine that you are part of a group of participants who earned an average bonus of $(random other savings()).

ELSEIF treatment = 2 THEN

expl002 (goal explanation in section Preferences)
Congratulations! You have successfully passed the training module of this study.

Starting on the next screen, you will face the series of choices that were just described. To decide which option to choose, participants sometimes find it useful to use benchmarks for their earnings. Some participants find it helpful to set goals for themselves when completing these tasks. We would like for you to view earning at least a $(random goal()) bonus as your goal.Some participants find it helpful to compare their performance against averages. As you complete this task, we would like for you to imagine that you are part of a group of participants who earned an average bonus of

$(random other savings()).We will remind you of your goal when you are making your decisions.

ELSEIF treatment = 3 THEN

expl003 (savings explanation in section Preferences)
Congratulations! You have successfully passed the training module of this study.

Starting on the next screen, you will face the series of choices that were just described. To decide which option to choose, participants sometimes find it useful to use benchmarks for their earnings. Some participants find it helpful to compare their performance against averages. As you complete this task, we would like for you to imagine that you are part of a group of participants who earned an average bonus of $(random other savings()).Some participants find it helpful to set goals for themselves when completing these tasks. We would like for you to view earning at least a $(random goal()) bonus as your goal.We will remind you of the average earnings when you are making your decisions.

END OF IF

/* In each of the 20 choices the amounts that are presented for the sure, risky heads, and risky tails outcomes are randomized per these variables:

○ A variables: these represent the 'sure' amount respondents can receive which are random variations of a base amount of $3.40. Their adjustments are generated to result in a random distribution with mean 0 and variance of .25 and are captured in the delta variables.

○ B variables: these represent the 'risky' amount respondents can receive if heads comes up. The base amounts for these are:

  – Choice 1-4: $2.00
  – Choice 5-8: $2.25
  – Choice 9-12: $2.45
  – Choice 13-16: $2.30
  – Choice 17-20: $2.50

  Their adjustments are generated to result in a random distribution with mean 0 and variance of .25 and are captured in the delta variables.

○ C variables: these represent the 'risky' amount respondents can receive if tails comes up. The base amounts for these are:

  – Choice 1-4: $4.80
  – Choice 5-8: $4.65
  – Choice 9-12: $4.65
  – Choice 13-16: $4.90

```
IF sizeof(delta) = 0 THEN
  LOOP FROM 1 TO 20

    IF option_order(cnt) = EMPTY THEN

      option_order(cnt) := mt_rand(1,2)

    END OF IF

    delta(cnt) := stats_rand_gen_normal(0, sqrt(0.25))

    IF cnt < 5 THEN

      A_original(cnt) := 3.40 + delta(cnt)

      IF (A_original(cnt)

        A(cnt) := 0.01

      ELSE

        A(cnt) := A_original(cnt)

      END OF IF

      B_original(cnt) := 2.00 + delta(cnt)

      IF (B_original(cnt)

        B(cnt) := 0.01

      ELSE

        B(cnt) := B_original(cnt)

      END OF IF

      C_original(cnt) := 4.80 + delta(cnt)
```

IF (C_original(cnt)

| C(cnt) := 0.01

ELSE

| C(cnt) := C_original(cnt)

END OF IF

ELSEIF cnt < 9 THEN

A_original(cnt) := 3.40 + delta(cnt)

IF (A_original(cnt)

| A(cnt) := 0.01

ELSE

| A(cnt) := A_original(cnt)

END OF IF

B_original(cnt) := 2.25 + delta(cnt)

IF (B_original(cnt)

| B(cnt) := 0.01

ELSE

| B(cnt) := B_original(cnt)

END OF IF

C_original(cnt) := 4.65 + delta(cnt)

IF (C_original(cnt)

| C(cnt) := 0.01

ELSE

```
          │   C(cnt) := C_original(cnt)

          │ END OF IF

ELSEIF cnt < 13 THEN

      │ A_original(cnt) := 3.40 + delta(cnt)

      │ IF (A_original(cnt)

      │   │ A(cnt) := 0.01

      │ ELSE

      │   │ A(cnt) := A_original(cnt)

      │ END OF IF

      │ B_original(cnt) := 2.45 + delta(cnt)

      │ IF (B_original(cnt)

      │   │ B(cnt) := 0.01

      │ ELSE

      │   │ B(cnt) := B_original(cnt)

      │ END OF IF

      │ C_original(cnt) := 4.65 + delta(cnt)

      │ IF (C_original(cnt)

      │   │ C(cnt) := 0.01

      │ ELSE

      │   │ C(cnt) := C_original(cnt)

      │ END OF IF

ELSEIF cnt < 17 THEN
```

```
A_original(cnt) := 3.4 + delta(cnt)

IF (A_original(cnt)

  | A(cnt) := 0.01

ELSE

  | A(cnt) := A_original(cnt)

END OF IF

B_original(cnt) := 2.30 + delta(cnt)

IF (B_original(cnt)

  | B(cnt) := 0.01

ELSE

  | B(cnt) := B_original(cnt)

END OF IF

C_original(cnt) := 4.90 + delta(cnt)

IF (C_original(cnt)

  | C(cnt) := 0.01

ELSE

  | C(cnt) := C_original(cnt)

END OF IF

ELSEIF cnt < 21 THEN

  A_original(cnt) := 3.4 + delta(cnt)

  IF (A_original(cnt)

    | A(cnt) := 0.01
```

```
        ELSE
        │ A(cnt) := A_original(cnt)
        END OF IF

        B_original(cnt) := 2.50 + delta(cnt)

        IF (B_original(cnt)
        │ B(cnt) := 0.01
        ELSE
        │ B(cnt) := B_original(cnt)
        END OF IF

        C_original(cnt) := 4.50 + delta(cnt)

        IF (C_original(cnt)
        │ C(cnt) := 0.01
        ELSE
        │ C(cnt) := C_original(cnt)
        END OF IF

      END OF IF

    END OF LOOP
END OF IF
```

/* The order in which the choices are presented is randomized per the choice_order variables. For example, if choice_order_1_ equals 4, the fourth choice as configured was presented first. The values for this choice are always stored in A_4_, B_4_, and C_4_, that is, independent of its position in the order of choices. Similarly, the respondent's answer is always stored in choice_result_4_.

Within each choice the order in which the safe versus risky option is shown is randomized per the option_order variables with values:

  ○ 1 Safe on the left, then risky on the right

IF sizeof(choice_order) = 0 THEN
  choice_order := shuffleArray(array(1 →1, 2 →2, 3 →3, 4 →4, 5 →5, 6 →6, 7 →7, 8 →8, 9 →9, 10 →10, 11 →11, 12 →12, 13 →13, 14 →14, 15 →15, 16 →16, 17 →17, 18 →18, 19 →19, 20 →20))
END OF IF

LOOP FROM 1 TO 20

  currentA := A(choice_order(choice_cnt))
  currentB := B(choice_order(choice_cnt))
  currentC := C(choice_order(choice_cnt))
  currentOrder := option_order(choice_order(choice_cnt))

  choice (choice made in section Preferences)

Figure 4: Respondent being shown a scenario in the treatment with a header for average earnings to answer comprehension questions in the safe, then risky order

Average earnings: $3.29

Option A	Option B	
A 100% chance of	A 50% chance of	A 50% chance of
$2.65	**$1.55**	**$4.15**

Choice 1: Please select an option by clicking on it.

  choice_result(choice_order(choice_cnt)) := choice(choice_order(choice_cnt))

END OF LOOP

done (Section Preferences)
Thank you for completing these questions. We will now randomly select one of your twenty

decisions in order to determine your final bonus.

extra_reward := 0

/* After respondents have completed their 20 choices one choice is randomly selected to be the one that "counts" for their extra payment per variable selected_choice. Based on the selected choice it is determined which option the respondent selected (variable selected_option) and the order in which the options in that choice were presented (variable selected_option_order). If the safe option was chosen, the reward is calculated as the amount that could be won if that happened. If the risky option was chosen, a coin flip is simulated per variable selected_flip with values:

    ○ 1 Heads

    ○ 2 Tails

The final reward is then set in variable extra_reward.*/

IF selected_choice = EMPTY THEN
  selected_choice := mt_rand(1,20)
END OF IF

selected_option := choice_result(choice_order(selected_choice))
selected_option_order := option_order(choice_order(selected_choice))
Fill code of question FLSelected executed

IF selected_option = 1 THEN
  extra_reward := number_format(A(choice_order(selected_choice)),2)

  GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

    chosenoption (choice made in section Preferences)

    result_sure (Section Preferences)
    Above is the decision that was chosen to "count." You selected **(())**.

    We have added **$(extra reward())** to your bonus.

  END OF GROUP
ELSE
 IF selected_flip = EMPTY THEN
  selected_flip := mt_rand(1,2)
 END OF IF

 IF selected_flip = 1 THEN

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extra_reward := number_format(B(choice_order(selected_choice)),2)
ELSE
extra_reward := number_format(C(choice_order(selected_choice)),2)
END OF IF

GROUP OF QUESTIONS PRESENTED ON THE SAME SCREEN

chosenoption (choice made in section Preferences)

result_flip (Section Preferences)
Above is the decision that was chosen to "count." You selected **(())**.

We simulated a coin flip, and it came up **(selected coin flip result())**. We have added **$(extra reward())** to your bonus.

END OF GROUP
END OF IF

End of section **Preferences**

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

IF extra_reward > 0 THEN
dummy := doPayout(extra_reward)
END OF IF

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. */