# Appendix: The Privacy Elasticity of Behavior: Conceptualization and Application 

Inbal Dekel Rachel Cummings Ori Heffetz Katrina Ligett

## A Details of the Experimental Design

## Public-good game:

A public-good game is a standard experimental setting in which we can create sensitive data from behavior in the lab. This setting seems appealing, as exposing real sensitive data from everyday life may be unethical, and randomly generating synthetic personal data would give subjects no reason to value privacy. Moreover, as long as true allocations are not revealed, a public-good game allows subjects to hide in the crowd to a greater extent than does, e.g., a dictator game (in which the receiver would always know the amount contributed). Thus, we let subjects play a public-good game where a noisy version of their allocation is announced to the other subjects.

## Tasks:

The game consists of seven tasks that differ in the noise parameter of the announcement. The seven noise parameters were chosen to reflect a wide variety of privacy guarantees, ranging from full privacy to no privacy ${ }^{1}$ Considering intermediate noise parameters complements the economic literature, which has focused primarily on the extremes.

The order of tasks in each session is randomly determined. To prevent learning and reciprocity, subjects do not receive any feedback between tasks (thus the game can be seen as a one-shot game). At the end of the game, one task is randomly chosen to determine payments and announcements. This makes it worthwhile for subjects to complete each task as though it will actually be chosen, while allowing us to increase the possible payoffs in each

[^0]task.

## Details of the environment:

Subjects play all tasks with the same group, consisting of all 7 other subjects in their session. All group members play in front of computers located in the same computer lab. Announcements are made at the end of the experiment by displaying a noisy version of each subject's allocation decision in the chosen task on everyone's screen; we call this the announced allocation. Additionally, an experimenter reads each subject's announced allocation aloud while this subject stands up and faces the other subjects.

These experimental details draw from two experimental studies that manipulate subjects' privacy in a public-good game. In both of these studies, subjects' identities along with their contribution amounts, are either revealed to their group members or not. In the first study, conducted by Rege and Telle (2004), subjects play a one-shot game with a group consisting of all nine other subjects in their session, who are all seated in the same room. Subjects' identification is carried out by asking each subject to come forward, and in front of everyone else, to count the money she contributed and write that amount on a blackboard. In the second study, conducted by Andreoni and Petrie (2004), each subject plays 40 rounds with a group of five subjects, whose composition changes after every eight rounds. All 20 subjects in a session are seated in the same computer lab. Subjects' identification is carried out by displaying their photos and contribution amounts on the screens of all of their group members at the end of each round.

Presumably, having to face your group members while an announcement is made about your allocation is more embarrassing than having your photo displayed on their screens (especially if you have made a low contribution and there is a high chance of announcing your selected allocation). This assumption seems to be supported by the data, as the effect of identification on contribution found by Rege and Telle (2004) is larger than that found by Andreoni and Petrie (2004).

For this reason we chose to ask subjects to stand up and face other subjects while an announcement is made about their allocation ${ }^{2}$ To facilitate this we invite all subjects in a

[^1]session to a lab, where they can see each other, and assign them to the same group, so that the announcements will only be made in front of other group members (in addition to the experimenter). Furthermore, we chose to have subjects participate on computers as it makes it easier to keep records of subjects' decisions, to check comprehension in real time, and to determine the noisy announced allocations.

## Announcements:

Announcements are determined as follows:
In each task of each session, each subject faces a probability $(1-p) \in\{0,0.05,0.25,0.5$, $0.75,0.95,1\}$ that her selected allocation in this task will be announced (in case this task is chosen at the end of the experiment), and a probability $p$ that a uniformly randomly selected whole-numbered division of the $\$ 10$ will be announced instead. The probability $p$ changes from task to task, and it is the same for all subjects in the session.

To promote subjects' understanding of the probabilities and of randomness, a virtual roulette wheel and a virtual die are used as randomization devices. Thus, subjects' announced allocations are determined as follows:

- Given $p=0$ :

Each subject's selected allocation is announced.

- Given $p=1$ :

Each subject is asked to roll a virtual 11-sided die numbered $0-10$. The result of this die roll is the subject's announced allocation to the group account.

## - Given $p \in\{0.05,0.25,0.5,0.75,0.95\}$ :

Each subject is asked to spin a virtual roulette wheel, whose pockets are numbered from 1 to 20 . If the spin result is less than or equal to $(1-p) \cdot 20$ then the subject's selected allocation is announced. Otherwise, a random allocation is announced ${ }_{\square}^{3}$ in
beginning of the experiment.
${ }^{3}$ To further promote understanding of the probabilities, two rows of circled integers are displayed on subjects' screens alongside the roulette. The first row, that relates to the probability of announcing a subject's selected allocation, contains blue circled numbers that go from 1 to $(1-p) \cdot 20$. The second row, that relates to the probability of announcing a random allocation, contains red circled numbers that go from $(1-p) \cdot 20+1$ to 20 . The style of these circled numbers matches that of the numbers on the roulette.
which case the subject is asked to roll a virtual 11 -sided die numbered $0-10$. The result of this die roll is the subject's announced allocation to the group account.

## Simulated announcements:

In order to allow subjects to gain experience with the randomization devices (i.e., the roulette and the die) and with the announcement procedure, there is a simulated announcement in each of the first two tasks before subjects make their actual decisions in those tasks. Having two simulated announcements increases the likelihood that subjects will get experience with both the roulette and the die, while keeping the experiment from being too long. In each simulated announcement, a random division of the $\$ 10$ is selected for each subject. Each subject is asked to imagine that this division is her selected allocation in the simulated announcement. Each subject faces the same probability $p$ as in the current task. Subjects are then asked to follow through the procedure depicted above to determine their simulated announced allocation (i.e., spin a roulette and/or roll a die). After everyone's simulated announced allocation has been determined, all of the announced allocations are displayed on everyone's screen, and subjects are asked to stand up one at a time while an experimenter reads their simulated announced allocation aloud. Hypothetical allocations in the simulated announcements have no effect on subjects' actual earnings, and this is emphasized to subjects.

## Internal and external returns:

To estimate the price elasticity of contributions, while also allowing for a clean estimation of the effect of altruism on contributions, we follow Goeree, Holt and Laury (2002) and slightly modify the standard setup of a public-good game. In a standard public-good game, the monetary return from contribution is the same for the contributor and for all other group members. In such a setup, a change in the common return has two effects, as it changes the net cost of contributing and the monetary benefit to others at the same time.

To avoid this confound, our game separates the monetary return into an 'internal return' for the contributor and a possibly different 'external return' for all other group members. A change in the external return changes only the monetary benefit to others, without affecting the net cost of contributing (and vice versa for a change in the internal return). As it is
enough to vary one of the returns while keeping the other one constant, we chose to keep the internal return constant at 0.3 , and to randomly change the external return from session to session so that it would either be 0.3 or 0.5 . In each session, the external return is the same for all subjects across all tasks. Given a group size of 8 , these returns retain the basic social dilemma structure of the standard public-good game, since the following hold:
(a) The monetary worth of a dollar kept (which is $\$ 1$ ) is greater than the individual's internal return from a dollar contributed. Thus, the dominant strategy for a selfish participant given full privacy is to contribute nothing.
(b) The total return to group members from a dollar contributed (which is: \$(internal return $+(8-1) \cdot$ external return $))$ is greater than the monetary worth of a dollar kept. Thus, full contribution by all maximizes group earnings.

## Instructions:

Instead of providing subjects with instructions regarding all tasks at the beginning of the experiment, we provide them with instructions regarding each task separately at the beginning of that task. In addition, we give subjects a brief introduction at the beginning of the experiment, and also a short explanation at the end about the chosen task and the way announcements are determined.

We give subjects separate instructions regarding each task for a few reasons. First, it helps to simplify the instructions and to promote understanding. Second, it allows us to highlight the probability in each task before decisions are made, and thus ensure that subjects indeed pay attention to the probabilities. Third, it makes subjects' decisions in the first task independent of the probabilities in the other tasks. That is, it prevents subjects from adjusting their allocations in the first task, thinking that they should respond differently to different probabilities. Thus, it allows us to focus on subjects' allocations in the first task as in a between-subjects design. Moreover, comparing subjects' decisions in the first task to their decisions in all other tasks enables us to examine whether there has been some degree of learning, even though subjects do not receive any feedback between tasks.

Instructions are based on a few sources. First, they are adapted from Andreoni and Bernheim (2009) to suit a public-good game (rather than a dictator game), suit the way in
which announcements are determined and their meaning, and to suit having separate and shorter instructions for each task. The second source is Goeree, Holt and Laury (2002), especially the explanations of how payments are determined. The third source is Rege and Telle (2004), especially stressing to subjects that they would maximize their own payment by not contributing but that the group as a whole would benefit from contributions, and their first four examples that further emphasize this point. The final source is Andreoni and Petrie (2004), especially the introduction and decision screens.

## Comprehension check:

In addition to providing subjects with a separate set of instructions in each task, a separate comprehension check is conducted in each task right before subjects make their allocation decisions. Conducting a separate comprehension check in each task enables us to make sure that subjects pay attention to the probability of announcing each subject's true allocation (in case this task is chosen at the end of the experiment) and its meaning. Each comprehension check consists of up to six different comprehension questions. Each subject is allowed three attempts to answer each comprehension question in each round before feedback with the correct answer appears on the screen.

The first two questions are inspired by Goeree, Holt and Laury (2002) and they are designed to ensure that subjects understand how payments are calculated. These questions only appear in the first task. The next two questions are designed to ensure that subjects understand what the roulette and die results mean, and more generally that they understand the content of the announcements. Question 3 only appears in tasks in which $p$ is not 0 or 1 , and Question 4 only appears in tasks in which $p$ is not 1 . Question 5 is designed to ensure that subjects pay attention to the probability in the task. This question does not appear in the first task if the probability in that task is either 0 or 1 . Question 6 is designed to ensure that subjects understand how payments are determined. This question only appears in tasks in which $p$ is not $1 .{ }^{4}$

## Survey:

[^2]At the end of the experiment, subjects are asked to answer a brief survey that consists of some standard psychological questionnaires and a number of demographic and attitudinal questions, as well as questions about their reasoning during the experiment. The first questionnaire that subjects are asked to answer is the "Big Five" personality traits questionnaire (John and Srivastava, 1999). 5 The second questionnaire is the Brief Fear of Negative Evaluation (BFNE) Scale, which was found in the literature to be highly correlated with the full-length Fear of Negative Evaluation Scale (Leary, 1983). ${ }^{6}$ The third questionnaire is the Compassionate Love For Strangers-Humanity (CLSH) Scale (Sprecher and Fehr, 2005), $7^{7}$ The fourth questionnaire is the Privacy Orientation Scale (Baruh and Cemalcılar, 2014) $\mathbf{B}^{8}$ Subjects are also asked about their gender, origin, year born, education level, and major, as well as their economic, social, and political attitudes, their comments about the experiment, the way they decided to allocate the money, and what they think the experiment is about.

[^3]
## B Additional Tables and Figures

Table B1: Privacy and Price Elasticities (Dep. Var.: $\log (1+$ amount contributed) $)$, by Round

|  | All | First | Second | Third | Fourth | Fifth | Sixth | Seventh |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Privacy: $\epsilon$ | 0.07 | 0.06 | 0.04 | 0.09 | 0.10 | 0.07 | 0.07 | 0.09 |
|  | $(0.01)$ | $(0.03)$ | $(0.02)$ | $(0.03)$ | $(0.04)$ | $(0.03)$ | $(0.02)$ | $(0.03)$ |
| $\epsilon=\infty$ | 0.41 | 0.44 | 0.16 | 0.47 | 0.38 | 0.41 | 0.44 | 0.62 |
|  | $(0.05)$ | $(0.13)$ | $(0.22)$ | $(0.15)$ | $(0.14)$ | $(0.14)$ | $(0.15)$ | $(0.12)$ |
| $\log$ (Price) | -0.21 | -0.09 | -0.31 | -0.27 | -0.23 | -0.26 | -0.12 | -0.17 |
|  | $(0.13)$ | $(0.15)$ | $(0.16)$ | $(0.18)$ | $(0.21)$ | $(0.17)$ | $(0.18)$ | $(0.19)$ |
| Constant | 0.29 | 1.43 | -0.58 | -0.47 | 0.10 | 0.45 | 0.34 | 0.99 |
|  | $(0.48)$ | $(0.67)$ | $(0.55)$ | $(0.61)$ | $(0.52)$ | $(0.83)$ | $(0.53)$ | $(0.73)$ |
| Psychological measures | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Demographic controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| $N$ observations | 2,296 | 328 | 328 | 328 | 328 | 328 | 328 | 328 |
| $N$ sessions | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 |
| $R^{2}$ | 0.19 | 0.23 | 0.21 | 0.21 | 0.28 | 0.23 | 0.23 | 0.21 |

OLS regressions. Dependent variable: $\log$ (amount contributed +1 ). Standard errors in parentheses, clustered at the session level. Psychological measures: normalized items from the Big Five Personality Traits questionnaire (John and Srivastava, 1999), Brief Fear of Negative Evaluation Scale (Leary, 1983), Compassionate Love For Strangers-Humanity Scale (Sprecher and Fehr 2005), and Privacy Orientation Scale (Baruh and Cemalcılar 2014). Demographic controls: age, gender, Hispanic origin or descent, race, education, economic and social attitudes, and political affiliation. Missing demographic data is represented by dummy variables.

Table B2: Elasticity Estimates

| Study | $N$ | Type | Description | Elasticity |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Rebate | Matching | Income | Privacy |
| Peloza and Steel | $\begin{aligned} & 1,418,212 \\ & \text { (69 stud- } \\ & \text { ies) } \end{aligned}$ | Taxfiler/survey data | Review arti$\mathrm{cle}^{a}$ | $\begin{aligned} & -1.44 \\ & \text { (S.D. }= \\ & 1.21)^{b} \\ & -1.11^{c} \end{aligned}$ |  |  |  |
| Goeree, Holt and <br> Laury (2002) | 320 | Lab | Public-good contributions | $\begin{gathered} -0.34 \\ (0.10)^{d, e} \end{gathered}$ |  |  |  |
| Eckel and <br> Grossman $(2003)$ | 2,016 | Lab | Charitable contributions | $\begin{gathered} -0.34 \\ (0.19) \end{gathered}$ | $\begin{aligned} & -1.07 \\ & (0.18) \end{aligned}$ | $\begin{gathered} 0.82 \\ (0.07) \end{gathered}$ |  |
| $\begin{aligned} & \hline \text { Eckel and } \\ & \hline \text { Grossman } 2006 \\ & \hline \end{aligned}$ | 1,080 | Lab | Charitable contributions | $\begin{gathered} -1.49 \\ (0.24) \end{gathered}$ | $\begin{aligned} & -3.17 \\ & (0.24) \end{aligned}$ | $\begin{gathered} 0.99 \\ (0.17) \end{gathered}$ |  |
| Karlan and List (2007) | 50,083 | Natural field | Charitable contributions |  | -0.23 |  |  |
| Eckel and <br> Grossman (2008), | 7,195 | Natural field | Charitable contributions | $\begin{aligned} & -0.11 \\ & (0.04) \end{aligned}$ | $\begin{aligned} & -1.05 \\ & (0.04) \end{aligned}$ | $\begin{gathered} 0.03 \\ (0.01) \end{gathered}$ |  |
| $\begin{aligned} & \text { Huck and Rasul } \\ & \text { 2011 } \end{aligned}$ | 443 | Natural field | Charitable contributions |  | $\begin{gathered} -0.53 \\ (0.39) \\ \text { to } \\ -1.12 \\ (0.44) \end{gathered}$ |  |  |
| Meer 2014 | 371,701 | Administrative | Crowdfunfing contributions | $\begin{gathered} -0.78 \\ (0.09) \end{gathered}$ |  |  |  |
| Scharf and Smith 2015 | 1,737 | Hypothetical scenario | Charitable contributions | $\begin{gathered} -0.31 \\ (0.05) \end{gathered}$ | $\begin{gathered} -1.20 \\ (0.09) \end{gathered}$ |  |  |
| Eckel and <br> Grossman (2017), | 1,207 | Field | Charitable contributions | $\begin{aligned} & -5.12 \\ & (0.43) \end{aligned}$ | $\begin{aligned} & -5.43 \\ & (0.32) \end{aligned}$ | $\begin{gathered} 0.19 \\ (0.05) \end{gathered}$ |  |
| Gandullia and <br> Lezzi 2018 . | 1,456 1,208 | Lab (online) Lab (online) | Charitable contributions Charitable contributions | $\begin{gathered} -0.22 \\ (0.03) \end{gathered}$ | $\begin{aligned} & -1.14 \\ & (0.05) \end{aligned}$ | $\begin{gathered} 0.60 \\ (0.05) \\ 0.80 \\ (0.08) \end{gathered}$ |  |
| Gandullia 2019, | 3,568 3,480 | Lab (online) Lab (online) | Charitable contributions Charitable contributions | $\begin{aligned} & -0.17 \\ & (0.01) \end{aligned}$ | $\begin{aligned} & -1.15 \\ & (0.03) \end{aligned}$ | $\begin{gathered} 0.60 \\ (0.03) \\ 0.77 \\ (0.04) \end{gathered}$ |  |
| This paper | 2,296 | Lab | Public-good contributions | $\begin{gathered} -0.23 \\ (0.07)^{e} \end{gathered}$ |  |  | $\begin{gathered} 0.07 \\ (0.01) \end{gathered}$ |

Standard errors in parantheses unless otherwise stated. The literature distinguishes between prices arising from equivalent rebate and matching subsidies. A rebate rate $b$ is equivalent to a matching rate $m=\frac{b}{(1-b)}$.
${ }^{a}$ Response to changes in tax deductability of charitable contributions.
${ }^{b}$ Weighted mean across all studies.
${ }^{c}$ Weighted mean once outliers are removed.
${ }^{d}$ This elasticity is based on our own calculations and is not reported by the authors.
${ }^{e}$ We define price in Goeree, Holt and Laurys 2002 and our data as follows: $(1-$ internal return $) /((N-$ 1) $\times$ external return), where $N$ is the group size. We then calculate price elasticities as the difference in $\log$ contributions at the two price extremes, divided by the difference in $\log$ prices.

Figure B1: Variants of Figure 1 by External Return, Demographics, and Psych. Measures


Notes: Capped ranges: $\pm$ standard error. Number of participants in each category, by panel (unless split by median): (a) 168 External Return $=0.3$, 160 External Return $=0.5$; (b) 114 Male, 212 Female ( 2 Other dropped); (c) 131 White, 32 Black, 138 Asian (1 Native American and 21 Other dropped); (d) 33 Hispanic, 290 non-Hispanic ( 5 missing responses dropped); (g) 160 Democrat, 20 Republican, 61 Independent, 27 Moderate (8 Other and 51 "None of the above" dropped).

Figure B1: Variants of Figure 1 by External Return, Demographics, and Psych. Measures Cont.


Notes: Capped ranges: $\pm$ standard error.

Figure B2: Individuals' Contributions by $\epsilon$

(a) Sessions 1-11

Notes: Each mini-graph represents a single respondent's seven contribution amounts, corresponding with the seven privacy conditions. Respondent number is indicated at the top of the mini-graph. Each row of graphs corresponds with a single session. Session number is indicated at the left of each row, with italicized font indicating a high-external-return session.

Figure B2: Individuals' Contributions by $\epsilon$ - Cont.

(b) Sessions 12-22

Notes: Each mini-graph represents a single respondent's seven contribution amounts, corresponding with the seven privacy conditions. Respondent number is indicated at the top of the mini-graph. Each row of graphs corresponds with a single session. Session number is indicated at the left of each row, with italicized font indicating a high-external-return session.

Figure B2: Individuals' Contributions by $\epsilon$ - Cont.

(c) Sessions 23-33

Notes: Each mini-graph represents a single respondent's seven contribution amounts, corresponding with the seven privacy conditions. Respondent number is indicated at the top of the mini-graph. Each row of graphs corresponds with a single session. Session number is indicated at the left of each row, with italicized font indicating a high-external-return session.

Figure B2: Individuals' Contributions by $\epsilon-$ Cont.

(d) Sessions 34-41

Notes: Each mini-graph represents a single respondent's seven contribution amounts, corresponding with the seven privacy conditions. Respondent number is indicated at the top of the mini-graph. Each row of graphs corresponds with a single session. Session number is indicated at the left of each row, with italicized font indicating a high-external-return session.

## C Screenshots

Introduction

Welcome and thank you for participating. Just for agreeing to participate you will automatically be given $\$ 10.00$ as a "thank you" payment. Anything else you earn today will be in addition to this.

Your name will never be recorded in this study. Instead, you will be known by your Identification Number that appears above.
In this experiment you will be asked to complete seven experimental tasks. In each task you will be assigned to the same group, consisting of all 8 participants in this room. Your earnings in each task will depend on your own decision, as well as on the decisions of all 7 other participants. After all tasks are completed, one of the tasks will be randomly chosen. You will only be paid for the chosen task. It makes good sense, therefore, to complete each task as though it will actually be chosen. Further instructions will be provided at the beginning of each task.

Before we proceed, we will take a few minutes to introduce you to your group members. We will first ask Number 1 to stand and say to everyone "Hello. I am Number 1." We'll then ask Number 2 to do similarly, and will repeat this for everyone.

Begin now with Number 1.
Please wait until all introductions are done.


## Instructions

You have been given $\$ 10.00$ to divide between a personal account and a group account. Note that only whole-dollar divisions are allowed. Every dollar you allocate to your personal account will earn you one dollar. However, every dollar allocated to the group account (either by you or by any other group member) will earn $\$ 0.30$ for the subject who allocated it, and $\$ 0.50$ for each of the other group members.

Therefore, your earnings from this task will be:

The number of dollars you allocate to your personal account
$+$
0.3 times the number of dollars you allocate to the group account
$+$
0.5 times the number of dollars all 7 other group members allocate to the group account.

Note that regardless of what the other group members choose to do, the more you allocate to your personal account, the greater will be your earnings from this task. However, the group as a whole will benefit from every dollar allocated to the group account.

Example: Suppose each group member allocated $\$ 0.00$ to their personal account and $\$ 10.00$ to the group account. Then each group member would earn $(\$ 0.00+(0.3 * \$ 10.00)+(0.5 * 7 * \$ 10.00)=) \$ 38.00$.

Example: Suppose each group member allocated $\$ 10.00$ to their personal account and $\$ 0.00$ to the group account. Then each group member would only earn $(\$ 10.00+(0.3 * \$ 0.00)+(0.5 * 7 * \$ 0.00)=) \$ 10.00$.

Example: Suppose each of the other group members allocated all $\$ 10.00$ to the group account, while you allocated all $\$ 10.00$ to your personal account. Then you would earn $(\$ 10.00+(0.3 * \$ 0.00)+(0.5 * 7 * \$ 10.00)=) \$ 45.00$, while each of the other group members would earn $(0+(0.3 * \$ 10.00)+(0.5 * 6 * \$ 10.00)=) \$ 33.00$.

Example: Suppose each of the other group members allocated all $\$ 10.00$ to their personal account, while you allocated all $\$ 10.00$ to the group account. Then you would earn $(0+(0.3 * \$ 10.00)+(0.5 * 7 * 0)=) \$ 3.00$, while each of the other group members would earn $(\$ 10.00+(0.3 * 0)+(0.5 * \$ 10.00)=) \$ 15.00$.

Example: Suppose you allocated $\$ 8.00$ to your personal account and $\$ 2.00$ to the group account, and all 7 other group members allocated a total of $\$ 47.00$ to the group account. Then you would earn $(\$ 8.00+(0.3 * \$ 2.00)+(0.5 * \$ 47.00)=) \$ 32.10$.

Example: Suppose you allocated $\$ 1.00$ to your personal account and $\$ 9.00$ to the group account, and all 7 other group members allocated a total of $\$ 36.00$ to the group account. Then you would earn $(\$ 1.00+(0.3 * \$ 9.00)+(0.5 * \$ 36.00)=) \$ 21.70$.

| INTRODUCTION | TASK 1 <br> INSTRUCTIONS SIMULATED ANNOUNCEMENT INSTRUCTIONS COMPREHENSION CHECK DECISION | TASK 2 <br> INSTRUCTIONS SIMULATED ANNOUNCEMENT INSTRUCTIONS COMPREHENSION CHECK DECISION | TASK 3 <br> INSTRUCTIONS <br> COMPREHENSION CHECK <br> DECISION | TASK 4 <br> INSTRUCTIONS <br> COMPREHENSION CHECK <br> DECISION |
| :---: | :---: | :---: | :---: | :---: |
| TASK 5 | TASK 6 | TASK 7 | CHOOSING A TASK | SURVEY |
| INSTRUCTIONS COMPREHENSION CHECK DECISION | INSTRUCTIONS COMPREHENSION CHECK DECISION | INSTRUCTIONS COMPREHENSION CHECK DECISION |  |  |

Next

## Instructions

## Announcements

You will make your allocation decision in private, and will receive no feedback until the very end of the experiment. After you have completed all of the tasks, one of the tasks will be randomly chosen. If Task 1 is chosen, then an announcement will be made about each group member's Selected Allocation in this task. This announcement may or may not be the same as the group member's Selected Allocation, and will be determined as follows:

Each of you will be asked to spin a virtual roulette wheel like this:


- If your spin result is one of the following:
(1) 2 ( 4 5 6 ( 7 ( 10
then your Selected Allocation will be announced.
- However, if your spin result is one of the following:


## (1)(1) (B) (1) (B) (1) (1) (1) 1 (2)

then a random allocation will be announced instead of your Selected Allocation. This random allocation will be determined by asking you to roll a virtual 11 -sided die numbered $0-10$. Nobody but you will see that a die is being rolled, or its result. The result of this die roll will be your Announced Allocation to the group account. For example, if the result of the die roll is 5, then your Announced Allocation to the group account will be $\$ 5.00$.

Therefore, if this task is chosen at the end of the experiment:

- Everyone in this room will know the Announced Allocation of each group member.
- No one will be told whether this Announced Allocation is the Selected Allocation decision or a random one
- Payments will be assigned according to each member's Selected Allocation, not the Announced Allocation.
- Everyone in this room will know his/her payment only after leaving the experiment.

Announcements will be made at the end of the experiment by displaying on everyone's screen something similar to this:

Chosen task: 1

Odds of announcing Selected Allocation: 10 in 20 (50\%)
Odds of announcing random allocation: 10 in 20 (50\%)

| Subject | Personal account | Group account |
| :--- | :---: | :---: |
| Subject 1 | $\$ 2.00$ | $\$ 8.00$ |
| Subject 2 | $\$ 9.00$ | $\$ 1.00$ |
| Subject 3 | $\$ 5.00$ | $\$ 5.00$ |
| Subject 4 | $\$ 6.00$ | $\$ 4.00$ |
| Subject 5 | ...and so forth. |  |

We will also read each subject's Announced Allocation out loud, and ask you each to stand up and face the other subjects while an announcement is made about your Announced Allocation.


## Simulated Announcement

To make sure everyone understands how the announcements will be determined if Task 1 is chosen, we will now run a simulation. In the simulation, instead of allowing each person to choose his or her Selected Allocation, a random division of the $\$ 10.00$ will be selected for each of you. We will ask you to imagine that this is your Selected Allocation in the simulated announcement.

Simulated announcements will then be determined as explained before. That is:

- You will be asked to spin a virtual roulette wheel.
- The spin result will determine whether your Selected Allocation will be announced or whether a random allocation will be announced, in which case you will be asked to roll a virtual 11-sided die that will determine your Announced Allocation to the group account.
- The Announced Allocations will then be displayed on everyone's screen.
- We will read each subject's Announced Allocation aloud while this subject stands up and faces the other subjects.

After the simulation, you will be asked to answer a series of comprehension questions, and then you will be asked to make your decision for this task.

Keep in mind that the allocations in this simulation are imaginary and will thus have no effect on your actual earnings from this task.

| INTRODUCTION | TASK 1 <br> INSTRUCTIONS SIMULATED ANNOUNCEMENT INSTRUCTIONS COMPREHENSION CHECK DECISION | TASK 2 <br> INSTRUCTIONS SIMULATED ANNOUNCEMENT INSTRUCTIONS COMPREHENSION CHECK DECISION | TASK 3 <br> INSTRUCTIONS <br> COMPREHENSION CHECK <br> DECISION | TASK 4 <br> INSTRUCTIONS <br> COMPREHENSION CHECK <br> DECISION |
| :---: | :---: | :---: | :---: | :---: |
| TASK 5 | TASK 6 | TASK 7 | CHOOSING A TASK | SURVEY |
| INSTRUCTIONS <br> COMPREHENSION CHECK <br> DECISION | INSTRUCTIONS COMPREHENSION CHECK DECISION | INSTRUCTIONS <br> COMPREHENSION CHECK <br> DECISION |  |  |

## Simulated Announcement

Imagine that in this simulated task your Selected Allocation was to allocate $\$ 4.00$ to your personal account and $\$ 6.00$ to the group account. Imagine further that we are now at the end of the experiment and this task is chosen.

To determine whether your simulated Selected Allocation will be announced or whether a random allocation will be announced in this simulated announcement, please spin the following roulette wheel by clicking the button "Click To Spin".


Keep in mind that the allocations in this simulation are imaginary and will thus have no effect on your actual earnings from this task.


## Simulated Announcement

To determine the random allocation that will be announced, please roll the following 11-sided die by clicking the button "Click To Roll".

Remember that the result of this die roll will be your Announced Allocation to the group account. For example, if the result of the die roll is 5 , then your Announced Allocation to the group account will be $\$ 5.00$.


## Click To Roll

Keep in mind that the allocations in this simulation are imaginary and will thus have no effect on your actual earnings from this task.

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## Simulated Announcement

Your simulated Selected Allocation was to allocate $\$ 4.00$ to your personal account and $\$ 6.00$ to the group account.

Your simulated Announced Allocation will be $\$ 2.00$ to your personal account and $\$ 8.00$ to the group account.

Keep in mind that the allocations in this simulation are imaginary and will thus have no effect on your actual earnings from this task.

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Simulated Announcement

Chosen task: 1
Odds of announcing Selected Allocation: 10 in 20 (50\%)
Odds of announcing random allocation: 10 in 20 (50\%)

| Subject | Personal account | Group account |
| :--- | :---: | :---: |
| Subject 1 | $\$ 2.00$ | $\$ 8.00$ |
| Subject 2 | $\$ 6.00$ | $\$ 4.00$ |
| Subject 3 | $\$ 10.00$ | $\$ 0.00$ |
| Subject 4 | $\$ 8.00$ | $\$ 2.00$ |
| Subject 5 | $\$ 0.00$ | $\$ 10.00$ |
| Subject 6 | $\$ 5.00$ | $\$ 5.00$ |
| Subject 7 | $\$ 7.00$ | $\$ 3.00$ |
| Subject 8 | $\$ 2.00$ | $\$ 8.00$ |

Keep in mind that the allocations in this simulation are imaginary and will thus have no effect on your actual earnings from this task.


## End of Simulation; Start of Actual Task.

## Next

Recall the instructions and announcement procedure for Task 1.

## Announcements

You will make your allocation decision in private, and will receive no feedback until the very end of the experiment. After you have completed all of the tasks, one of the tasks will be randomly chosen. If Task 1 is chosen, then an announcement will be made about each group member's Selected Allocation in this task. This announcement may or may not be the same as the group member's Selected Allocation, and will be determined as follows:

Each of you will be asked to spin a virtual roulette wheel like this:


- If your spin result is one of the following:

0000000000
then your Selected Allocation will be announced.

- However, if your spin result is one of the following:


## 

then a random allocation will be announced instead of your Selected Allocation. This random allocation will be determined by asking you to roll a virtual 11 -sided die numbered $0-10$. Nobody but you will see that a die is being rolled, or its result. The result of this die roll will be your Announced Allocation to the group account. For example, if the result of the die roll is 5 , then your Announced Allocation to the group account will be $\$ 5.00$.

Therefore, if this task is chosen at the end of the experiment:

- Everyone in this room will know the Announced Allocation of each group member.
- No one will be told whether this Announced Allocation is the Selected Allocation decision or a random one.
- Payments will be assigned according to each member's Selected Allocation, not the Announced Allocation.
- Everyone in this room will know his/her payment only after leaving the experiment.

Announcements will be made at the end of the experiment by displaying on everyone's screen something similar to this:

Chosen task: 1
Odds of announcing Selected Allocation: 10 in 20 (50\%)
Odds of announcing random allocation: 10 in 20 (50\%)

| Subject | Personal account | Group account |
| :--- | :---: | :---: |
| Subject 1 | $\$ 2.00$ | $\$ 8.00$ |
| Subject 2 | $\$ 9.00$ | $\$ 1.00$ |
| Subject 3 | $\$ 5.00$ | $\$ 5.00$ |
| Subject 4 | $\$ 6.00$ | $\$ 4.00$ |
| Subject 5 | ...and so forth. |  |

We will also read each subject's Announced Allocation out loud, and ask you each to stand up and face the other subjects while an announcement is made about your Announced Allocation.


## Comprehension Check

Suppose you allocated $\$ 3.00$ to your personal account and $\$ 7.00$ to the group account, and all other group members allocated a total of $\$ 24.00$ to the group account. How much would you earn if this task is chosen at the end of the experiment (in addition to the $\$ 10.00$ show-up payment)?
\$


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Task 1

## Comprehension Check

```
$6.00 is incorrect.
```

The question was: Suppose you allocated $\$ 3.00$ to your personal account and $\$ 7.00$ to the group account, and all other group members allocated a total of $\$ 24.00$ to the group account. How much would you earn if this task is chosen at the end of the experiment (in addition to the $\$ 10.00$ show-up payment)?

The correct answer is: $\quad \$ 17.10$.

Explanation: If this task is chosen at the end of the experiment, then your earnings would be:
The number of dollars you allocate to your personal account
$+$
0.3 times the number of dollars you allocate to the group account
$+$
0.5 times the number of dollars all 7 other group members allocate to the group account.

Therefore, you would earn: $(\$ 3.00+0.3$ * $\$ 7.00+0.5$ * $\$ 24.00=) \$ 17.10$.


## Comprehension Check

Suppose you allocated $\$ 6.00$ to your personal account and $\$ 4.00$ to the group account, and all other group members allocated a total of $\$ 43.00$ to the group account. How much would you earn if this task is chosen at the end of the experiment (in addition to the $\$ 10.00$ show-up payment)?
\$


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Task 1

## Comprehension Check

Correct!
The question was:

The correct answer is:

Explanation:
If this task is chosen at the end of the experiment, then your earnings would be:
The number of dollars you allocate to your personal account
$+$
0.3 times the number of dollars you allocate to the group account $+$
0.5 times the number of dollars all 7 other group members allocate to the group account.

Therefore, you would earn: $(\$ 6.00+0.3 * \$ 4.00+0.5 * \$ 43.00=) \$ 28.70$.


## Comprehension Check

Imagine that you allocated $\$ 5.00$ to the group account, that the current task is chosen at the end of the experiment, and that your spin result is 8 .
(a) What would be your Announced Allocation to the group account?
© $\$ 8.00$
$\$ 2.00$
It could be any whole-dollar amount from $\$ 0.00$ to $\$ 10.00$, depending on the result of an 11-sided die roll
$\$ 5.00$
(b) How much of your endowment would actually be allocated to the group account?
$\$ 5.00$
It could be any whole-dollar amount from $\$ 0.00$ to $\$ 10.00$, depending on the result of an 11 -sided die roll
$\$ 8.00$
$\$ 2.00$
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Next

## Comprehension Check

```
Correct answers!
```


## The question was:

The correct answers are:

Explanation:

Imagine that you allocated $\$ 5.00$ to the group account, that the current task is chosen at the end of the experiment, and that your spin result is 8 .
(a) What would be your Announced Allocation to the group account?
(b) How much of your endowment would actually be allocated to the group account?
(a) $\$ 5.00$.
(b) $\$ 5.00$.

If this this task is chosen at the end of the experiment, then your Announced Allocation will be determined as follows:

You will be asked to spin a virtual roulette wheel, such as the one you have seen in the simulation round.

- If your spin result is one of the following:

then your Selected Allocation will be announced.
- However, if your spin result is one of the following:


## (11) (12) 13 (14) 15 (16) 17 (18) 19

then a random allocation will be announced instead of you your Selected Allocation. This random allocation will be determined by asking you to roll a virtual 11 -sided die numbered 0-10. The result of this die roll will be your Announced Allocation to the group account.

If your spin result were 8 , then your Selected Allocation would be announced. Therefore, your Announced Allocation to the group account would be $\$ 5.00$ if this were the amount you had chosen to allocate to the group account.

In addition, your Selected Allocation will determine how much of your endowment would actually be allocated to the group account. Therefore, if you chose to allocate $\$ 5.00$ of your endowment to the group account, then this is the amount that truly would be allocated to the group account.


## Comprehension Check

Imagine that you allocated $\$ 5.00$ to the group account, that the current task is chosen at the end of the experiment, that your spin result is 12, and that the result of your die roll is 2 .
(a) What would be your Announced Allocation to the group account?

It could be any whole-dollar amount from $\$ 0.00$ to $\$ 10.00$, depending on the result of an 11 -sided die roll
$\$ 2.00$
$\$ 8.00$
$\$ 5.00$
(b) How much of your endowment would actually be allocated to the group account?
$\$ 8.00$
It could be any whole-dollar amount from $\$ 0.00$ to $\$ 10.00$, depending on the result of an 11 -sided die roll
$\$ 5.00$
$\$ 2.00$

Click here to see the instructions again


Next

## Comprehension Check

```
Correct answers!
```

The question was:

The correct answers are:

Imagine that you allocated $\$ 5.00$ to the group account, that the current task is chosen at the end of the experiment, that your spin result is 12, and that the result of your die roll is 2.
(a) What would be your Announced Allocation to the group account?
(b) How much of your endowment would actually be allocated to the group account?
(a) $\$ 2.00$.
(b) $\$ 5.00$.

Explanation:
If this this task is chosen at the end of the experiment, then your Announced Allocation will be determined as follows:

You will be asked to spin a virtual roulette wheel, such as the one you have seen in the simulation round.

- If your spin result is one of the following:


## 0000000000

then your Selected Allocation will be announced.

- However, if your spin result is one of the following:


## 

then a random allocation will be announced instead of you your Selected Allocation. This random allocation will be determined by asking you to roll a virtual 11 -sided die numbered 0-10. The result of this die roll will be your Announced Allocation to the group account.

If your spin result were 12, a random allocation would be announced instead of your Selected Allocation. If the result of your die roll were 2, your Announced Allocation to the group account would be $\$ 2.00$.

However, your Selected Allocation will determine how much of your endowment would actually be allocated to the group account. Therefore, if you chose to allocate $\$ 5.00$ of your endowment to the group account, then this is the amount that truly would be allocated to the group account.


## Comprehension Check

Imagine that the current task is chosen at the end of the experiment. What would be the probability that we announce a group member's random allocation?

$0 \%$ chance of random allocation

Click here to see the instructions again


## Task 1

## Comprehension Check

$25 \%$ is incorrect.
The question was: Imagine that the current task is chosen at the end of the experiment. What would be the probability that we announce a group member's random allocation?

The correct answer is:
50\%.


## Comprehension Check

Imagine that the current task is chosen at the end of the experiment. How would everyone's payment be determined (in addition to the $\$ 10.00$ show-up payment)?

Based on each group member's Announced Allocation
Everyone would receive $\$ 10.00$

- Based on each group member's Selected Allocation
- At random

Click here to see the instructions again


## Task 1

## Comprehension Check

## Correct!

The question was:
Imagine that the current task is chosen at the end of the experiment. How would everyone's payment be determined (in addition to the $\$ 10.00$ show-up payment)?

The correct answer is: Based on each group member's Selected Allocation.

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## Your Decision

You will now make your decision for Task 1. If this task is the one that is chosen at random at the end of the experiment, then these decisions will be used to determine your payment.

Given a $50 \%$ chance that your Selected Allocation will be announced, and a $50 \%$ chance that a random allocation will be announced, how would you like to divide your $\$ 10.00$ between the two accounts?

Dollars in personal account:
\$ - Each dollar earns $\$ 1.00$ for you and $\$ 0.00$ for each of the other group members

Dollars in group account:
\$

- Each dollar earns $\$ 0.30$ for you and $\$ 0.50$ for each of the other group members

Note that the amounts you enter must be whole numbers that sum to $\$ 10.00$.


You have now completed Task 1. We now move on to Task 2.

## Instructions

## Announcements

This task will be much the same as the previous task, except that the odds of announcing a group member's Selected Allocation (if this task is selected at the end of the experiment), will be the following:

Odds of announcing Selected Allocation: 1 in $20(5 \%)$
Odds of announcing random allocation: 19 in $20(95 \%)$
The announcements will be determined as follows:
Each of you will be asked to spin a virtual roulette wheel, such as the one you have seen.

- If your spin result is:

1
then your Selected Allocation will be announced.

- However, if your spin result is one of the following:


## $\begin{array}{lllllllllllllllllllll}2 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19 & 20\end{array}$

then a random allocation will be announced instead of your Selected Allocation. This random allocation will be determined by asking you to roll a virtual 11 -sided die numbered $0-10$. Nobody but you will see that a die is being rolled, or its result. The result of this die roll will be your Announced Allocation to the group account. For example, if the result of the die roll is 5 , then your Announced Allocation to the group account will be $\$ 5.00$.


$$
\vdots
$$

And so forth.

## Choosing a Task

We will now choose one of the 7 tasks at random, and use only that task to determine all participants' payments and announcements. After the announcements have been made, we will ask you to complete a survey. After everyone has finished answering this survey, we will hand out the payments, and you will be free to leave.

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Next

The chosen task is 2. Therefore, the following holds:

Odds of announcing Selected Allocation: 1 in 20 (5\%)
Odds of announcing random allocation: 19 in 20 (95\%)
In this task you chose to allocate $\$ 5.00$ to your personal account and $\$ 5.00$ to the group account.
To determine whether your Selected Allocation will be announced or whether a random allocation will be announced, please spin the following roulette wheel by clicking the button "Click To Spin".

If your spin result is:
(1)
then your Selected Allocation will be announced.

However, if your spin result is one of the following:

then a random allocation will be announced instead of you your Selected Allocation.


Click To Spin


To determine the random allocation that will be announced, please roll the following 11-sided die by clicking the button "Click To Roll".

The result of this die roll will be your announced allocation to the group account. For example, if the result of the die roll is 5 , then your announced allocation to the group account will be $\$ 5.00$.


Click To Roll


## Your Announced Allocation

Your Selected Allocation in Task 2 was to allocate $\$ 5.00$ to your personal account and $\$ 5.00$ to the group account.

Your Announced Allocation will be $\$ 4.00$ to your personal account and $\$ 6.00$ to the group account.

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Chosen Task: 2
Odds of announcing Selected Allocation: 1 in 20 (5\%)
Odds of announcing random allocation: 19 in 20 (95\%)

| Subject | Personal account | Group account |
| :--- | :---: | :---: |
| Subject 1 | $\$ 4.00$ | $\$ 6.00$ |
| Subject 2 | $\$ 3.00$ | $\$ 7.00$ |
| Subject 3 | $\$ 9.00$ | $\$ 1.00$ |
| Subject 4 | $\$ 2.00$ | $\$ 8.00$ |
| Subject 5 | $\$ 6.00$ | $\$ 4.00$ |
| Subject 6 | $\$ 3.00$ | $\$ 7.00$ |
| Subject 7 | $\$ 3.00$ | $\$ 7.00$ |
| Subject 8 | $\$ 7.00$ | $\$ 3.00$ |



We are almost done with the experiment. On the next few screens, for statisticalanalysis purposes, we are going to ask you questions about yourself. Please answer each question as best you can.

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement.

## I See Myself as Someone Who..

|  | Disagree strongly | Disagree a little | Neither agree nor disagree | Agree a little | Agree strongly |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Is talkative | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 2. Tends to find fault with others | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 3. Does a thorough job | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 4. Is depressed, blue | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 5. Is original, comes up with new ideas | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 6. Is reserved | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 7. Is helpful and unselfish with others | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 8. Can be somewhat careless | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 9. Is relaxed, handles stress well | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 10. Is curious about many different things | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 11. Is full of energy | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ |
| 12. Starts quarrels with others | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 13. Is a reliable worker | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ |
| 14. Can be tense | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 15. Is ingenious, a deep thinker | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 16. Generates a lot of enthusiasm | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 17. Has a forgiving nature | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 18. Tends to be disorganized | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 19. Worries a lot | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 20. Has an active imagination | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 21. Tends to be quiet | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 22. Is generally trusting | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 23. Tends to be lazy | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 24. Is emotionally stable, not easily upset | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ |


| 25. Is inventive | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 26. Has an assertive personality | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 27. Can be cold and aloof | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 28. Perseveres until the task is finished | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 29. Can be moody | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 30. Values artistic, aesthetic experiences | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 31. Is sometimes shy, inhibited | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 32. Is considerate and kind to almost everyone | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 33. Does things efficiently | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 34. Remains calm in tense situations | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 35. Prefers work that is routine | $\bigcirc$ | O | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 36. Is outgoing, sociable | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 37. Is sometimes rude to others | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 38. Makes plans and follows through with them | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 39. Gets nervous easily | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 40. Likes to reflect, play with ideas | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 41. Has few artistic interests | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 42. Likes to cooperate with others | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 43. Is easily distracted | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 44. Is sophisticated in art, music, or literature | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |


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Read each of the following statements carefully and indicate how characteristic it is of you.

|  | Not at all characteristic of me | Slightly characteristic of me | Moderately characteristic of me | Very characteristic of me | Extremely characteristic of me |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. I worry about what other people will think of me even when I know it doesn't make any difference. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 2. I am unconcerned even if I know people are forming an unfavorable impression of me. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 3. I am frequently afraid of other people noticing my shortcomings. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 4. I rarely worry about what kind of impression I am making on someone. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 5. I am afraid that others will not approve of me. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 6. I am afraid that people will find fault with me. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 7. Other people's opinions of me do not bother me. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 8. When I am talking to someone, I worry about what they may be thinking about me. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 9. I am usually worried about what kind of impression I make. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 10. If I know someone is judging me, it has little effect on me. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 11. Sometimes I think I am too concerned with what other people think of me. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 12. I often worry that I will say or do the wrong things. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |


| INTRODUCTION | TASK 1 | TASK 2 | TASK 3 | TASK 4 |
| :---: | :---: | :---: | :---: | :---: |
|  | INSTRUCTIONS <br> SIMULATED ANNOUNCEMENT <br> INSTRUCTIONS <br> COMPREHENSION CHECK <br> DECISION | INSTRUCTIONS <br> SIMULATED ANNOUNCEMENT <br> INSTRUCTIONS <br> COMPREHENSION CHECK <br> DECISION | INSTRUCTIONS COMPREHENSION CHECK DECISION | INSTRUCTIONS COMPREHENSION CHECK DECISION |
| TASK 5 | TASK 6 | TASK 7 | CHOOSING A TASK | SURVE |
| INSTRUCTIONS COMPREHENSION CHECK DECISION | INSTRUCTIONS COMPREHENSION CHECK DECISION | INSTRUCTIONS COMPREHENSION CHECK DECISION |  |  |

Please state the extent to which each of the following statements is true of you.

| Not at all <br> true of me | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very true of |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| me |  |  |  |  |  |  |  |  |

1. When I see people I do not know feeling sad, I feel a need to reach out to them.
2. I spend a lot of time concerned about the well-being of humankind.
3. When I hear about someone (a stranger) going through a difficult time, I feel a great deal of compassion for him or her.
4. It is easy for me to feel the pain (and joy) experienced by others, even though I do not know them.
5. If I encounter a stranger who needs help, I would do almost anything I could to help him or her.
6. I feel considerable compassionate love for people from everywhere.
7. I would rather suffer myself than see someone else (a stranger) suffer.
8. If given the opportunity, I am willing to sacrifice in order to let the people from other places who are less fortunate achieve their goals.
9. I tend to feel compassion for people even though I do not know them.
10. One of the activities that provides me with the most meaning to my life is helping others in the world who need help.
11. I would rather engage in actions that help others, even though they are strangers, than engage in actions that would help me.
12. I often have tender feelings toward people (strangers) when they seem to be in need.
13. I feel a selfless caring for most of mankind.
14. I accept others whom I do not know even when they do things I think are wrong.
15. If a person (a stranger) is troubled, I usually feel extreme tenderness and caring.
16. I try to understand rather than judge people who are strangers to me.
17. I try to put myself in a stranger's shoes when he or she is in trouble.
18. I feel happy when I see that others (strangers) are happy.
19. Those whom I encounter through my work and public life can assume that I will be there if they need me.
20. I want to spend time with people I don't know well so that I can help enrich their lives.
21. I very much wish to be kind and good to fellow human beings.

| INTRODUCTION | TASK 1 <br> INSTRUCTIONS <br> SIMULATED ANNOUNCEMENT INSTRUCTIONS COMPREHENSION CHECK DECISION | TASK 2 <br> INSTRUCTIONS SIMULATED ANNOUNCEMENT INSTRUCTIONS COMPREHENSION CHECK DECISION | TASK 3 <br> INSTRUCTIONS <br> COMPREHENSION CHECK DECISION | TASK 4 <br> INSTRUCTIONS <br> COMPREHENSION CHECK DECISION |
| :---: | :---: | :---: | :---: | :---: |
| TASK 5 | TASK 6 | TASK 7 | CHOOSING A TASK | SURVE |
| INSTRUCTIONS COMPREHENSION CHECK DECISION | INSTRUCTIONS COMPREHENSION CHECK DECISION | INSTRUCTIONS COMPREHENSION CHECK DECISION |  |  |

Next

Please state the extent to which you agree or disagree with each of the following statements.

What is your gender?
Female
Male
Other
Are you of Hispanic origin or descent?
Yes
No
What race do you consider yourself?
Black/African American
Asian or Pacific Islander
American Indian/Native American
Other race (please specify)
$\square$

In what year were you born?
$\square$

What is the highest level of education you have completed?
O Middle school or less
Some high school
High school diploma

- GED (HS Equivalent)

Some college, but did not finish

- Two-year college degree/Associate degree/A.A./A.S.

Four-year college degree/B.A./B.S.
Some graduate school
Master's degree (MA/MS/MBA/MFA/MDiv)
Advanced degree (PhD/MD/JD)

What is your major?
$\square$

[^4]- Very liberal
- Liberal

Slightly liberal
Moderate
Slightly conservative
Conservative
Very conservative

Thinking about social issues, which of the following best describes your attitudes?

- Very liberal
- Liberal

Slightly liberal

- Moderate

Slightly conservative
Conservative
Very conservative

Do you consider yourself a...

- Republican
- Democrat

Independent
Moderate
Other
None of the above

Do you have any comments about the experiment? Please provide them in the text box below. We would love to hear any feedback, suggestions, and thoughts you may have.
$\square$

We are particularly curious to know: How did you decide how to allocate the money?


What do you think the experiment is about?


| INTRODUCTION | TASK 1 <br> INSTRUCTIONS <br> SIMUI ATED ANNOUNCEMENT INSTRUCTIONS COMPREHENSION CHECK DECISION | TASK 2 <br> NSTRUCTIONS <br> SMMU ITED ANNOUNCEMENT INSTRUCTIONS COMPREHENSION CHECK DECISION | TASK 3 <br> INSTRUCTIONS COMPREHENSION CHECK DECISION | TASK 4 <br> instructions COMPREHENSION CHECK DECISION |
| :---: | :---: | :---: | :---: | :---: |
| TASK 5 <br> instructions COMPREHENSION CHECK DECISION | TASK 6 <br> INSTRUCTIONS COMPREHENSION CHECK DECISION | TASK 7 <br> INSTRUCTIONS COMPPEHENSION CHECK DECISION | CHOOSING A TASK | URVEY |

# Thank you for participating! 

Please remain seated until we call you by your Identification Number.

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[^0]:    ${ }^{1}$ For more information on the noise parameters, see the subsection titled "Announcements."

[^1]:    ${ }^{2}$ Subjects are also asked to stand up and introduce themselves by their identification numbers at the

[^2]:    ${ }^{4}$ For examples of the comprehension questions and possible feedback, see screenshots on pages 27,37

[^3]:    ${ }^{5}$ For the Big Five personality questionnaire, see screenshot on page 44. Items in this questionnaire are rated from 1 (disagree strongly) to 5 (agree strongly). Then, personality traits scores are calculated by the following formulas:
    Extroversion: Q1 + (6-Q6) + Q11 + Q16 + (6-Q21) + Q26 + (6-Q31) + Q36;
    Agreeableness: $(6-\mathrm{Q} 2)+\mathrm{Q} 7+(6-\mathrm{Q} 12)+\mathrm{Q} 17+\mathrm{Q} 22+(6-\mathrm{Q} 27)+\mathrm{Q} 32+(6-\mathrm{Q} 37)+\mathrm{Q} 42$;
    Conscientiousness: Q3 + (6-Q8) + Q13 + (6-Q18) + (6-Q23) + Q28 + Q33 + Q38 + (6-Q43);
    Neuroticism: Q4 + (6-Q9) +Q14 + Q19 + (6-Q24) + Q29 + (6-Q34) + Q39;
    Openness: Q5 + Q10 + Q15 + Q20 + Q25 + Q30 + (6-Q35) + Q40 + (6-Q41) + Q44.
    ${ }^{6}$ For the BFNE questionnaire, see screenshot on page 46 Items in this questionnaire are rated from 1 (not at all characteristic of me) to 5 (extremely characteristic of me). Then, the score is calculated by the following formula:
    $\mathrm{Q} 1+(6-\mathrm{Q} 2)+\mathrm{Q} 3+(6-\mathrm{Q} 4)+\mathrm{Q} 5+\mathrm{Q} 6+(6-\mathrm{Q} 7)+\mathrm{Q} 8+\mathrm{Q} 9+(6-\mathrm{Q} 10)+\mathrm{Q} 11+\mathrm{Q} 12$.
    ${ }^{7}$ For the CLSH questionnaire, see screenshot on page 47. Items in this questionnaire are rated from 1
    (not at all true of me) to 7 (very true of me). Then, an average score is calculated for all 21 items.
    ${ }^{8}$ For the Privacy Orientation questionnaire, see screenshot on page 49. Items in this questionnaire are rated from 1 (strongly disagree) to 5 (strongly agree). Then, scores on privacy dimensions are calculated by the following formulas:
    Privacy as a Right: Q1 + Q2 + Q3;
    Concern about Own Privacy: Q4 + Q5 + Q6 + Q7;
    Other-Contingent Privacy: Q8 + Q9 + Q10 + Q11;
    Concern about Others Privacy: Q12 + Q13 + Q14 + Q15 + Q16.

[^4]:    Thinking about economic issues, which of the following best describes your attitudes?

