Giving, Taking, and Taking Aversion in Dictator Games

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Abstract

We design and conduct an experiment to determine whether charitable donors are averse to taking and to measure the strength of the aversion, if it exists. We find that aversion to taking is prevalent and strong. Most subjects are averse to taking, as they are willing to sacrifice on average over 25% of their endowment to avoid taking.

Keywords: Dictator Game; Impure Altruism; Taking; Equivalent Variation
JEL Classifications: C91, D01, D64, H30, H41

1. Introduction

When two people engage in an exchange the net gain to each person is the difference between what the person gains and what he or she gives up. For example, when someone buys an apple, the net gain is the difference between the value of the apple received and the price paid. The net gain to the seller is the difference between the price received and the cost incurred; however, not all transactions are exchanges. In some transactions an individual takes from another person without returning any compensation. When taking occurs, the gain to one party is the other party's loss. In this paper we study attitudes towards taking.

Opportunities to take exist in many forms. For example, when a thief steals another person's property, the thief takes the property and the owner loses it without compensation. A similar example is extortion. When a corrupt policeman stops a tourist, accuses the tourist of speeding even though he (and the tourist) knows the tourist was not speeding, and tells the tourist that the charge can be dropped for an on-the-spot payment, the policeman is taking from the tourist. The policeman acquires the payment and the tourist suffers the loss without receiving anything in return. A third example is price discrimination. A firm takes the additional profit generated when price discrimination converts consumer surplus to profit. The consumers, whose prices increase, lose surplus and output and acquire nothing in return. A final example is the dictator game with the option to take. By taking, the dictator increases his/her payoff at the recipient's expense.

Taking observed in dictator games is usually incomplete. Bardsley (2008), List (2007), and Korenok, Millner, and Razzolini (2014) all find that dictators typically do not take the maximum amount possible. Bardsley reports that a minority of dictators take the maximum amount when taking is allowed. The percentage of maximum takers ranges from just below 50% to just below 35%. Moreover, a substantial number of subjects do not take when facing both the option to take and to give. List reports that 79% of dictators do not take when the option to take $1 exists, and 40% of dictators do not take when the maximum amount to take is $5. Korenok, Millner, and Razzolini confront dictators with a variety of taking and giving options. They find that the percentage of dictators who do not take, when facing both options, ranges from 13% to 51% and that the percentage of dictators who take the maximum amount allowed ranges from 35% to 56%.

Why don't we observe more taking? Perhaps people have an inherent aversion to taking. In order to investigate whether individuals are averse to taking and the strength of the aversion, if it exists, we design and conduct an experiment to determine whether subjects are averse to taking and, if so, how much they are willing to sacrifice to avoid taking. We find that most subjects are averse to taking and that they are on average willing to sacrifice over 25% of their endowment to avoid taking. These findings indicate that aversion to taking is prevalent and strong.

2. Experimental Design and Procedures

The purpose of the experiment is to learn more about dictators' preferences for taking. The experiment consists of three phases.

Phase One

       In Phase One, we offer a dictator the choice between a Give-only game and a Take-only game. This choice is shown as Decision 1 in Tables 1 and 2. In the Give-only game, the dictator has a $20 endowment, can give but cannot take, and the recipient has no endowment. In the Take-only game the dictator has no endowment, can take but cannot give, and the recipient has a $20 endowment. The two games have the same payoff possibilities: the payoff to dictators is bound by $0 and $20, and the sum of the payoffs to both players is $20. Choosing the Give-only game implies that the dictator prefers giving to taking and is, therefore, averse to taking. Under standard assumptions about preferences, this choice reveals that the dictator's utility in the Give-only game is higher than the utility in the Take-only game.

Predictions

       In what follows, we examine the predictions according to three commonly used types of preferences: selfish, purely altruistic, and impurely altruistic. Selfish dictators care only about their own payoff. Purely altruistic dictators care about both payoffs, their own and the recipient's. Impurely altruistic dictators' utility functions typically contain three arguments, the two payoffs and the amount donated. The amount donated in our experiment is either the amount passed in the Give-only game or the amount not taken in the Take-only game, both being equivalent sources of warm glow. We also examine the predictions if the utility function includes the amount given and the amount not taken as separate arguments. This allows the warm glow from giving to differ from the warm glow from not taking.

      Previous theoretical results give no clear predictions about dictators' choices. First, if dictators are selfish, they should be indifferent between the two games. In both regimes, they can attain the same maximum payoff of $20. Second, if dictators are purely altruistic, they again should be indifferent. Any payoff split between the dictator and the recipient in the Give-only game can also be attained in the Take-only game. For example, a dictator may wish to give the recipient $5 in the Give-only game and keep $15 for himself. The same payoffs can be attained in the Take-only game by taking $15 and letting the recipient keep $5. Third, if dictators are impurely altruistic, the predictions differ. If dictators enjoyed equally passing and not taking, then again they should be indifferent. Any payoff split in the Give-only game can be replicated in the Take-only game by making the amount passed equal to the amount not taken. On the other hand, when the warm glows from passing and from not taking differ, the theory gives little guidance as to whether a dictator achieves higher utility in the Give-only or the Take-only game.

       Thus, alternative preference models either suggest that no difference exists between the two games or fail to predict a particular direction for the choices in Phase One. Our goal for Phase One is, therefore, not to test a theory but to produce stylized facts about preferences for taking versus giving.

Table 1: Possible settings when the dictator chooses Give-only in Decision 1.

Decision	Endowment in the Give-only setting		Endowment in the Take-only setting
1	$20	vs	$20
2	$19	vs	$20
3	$18	vs	$20
4	$17	vs	$20
5	$16	vs	$20
6	$15	vs	$20
7	$14	vs	$20

8	$13	vs	$20
9	$12	vs	$20
10	$11	vs	$20
11	$10	vs	$20

Table 2: Possible settings when the dictator chooses Take-only in Decision 1

Decision	Endowment in the Give-only setting		Endowment in the Take-only setting
1	$20	vs	$20
2	$20	vs	$19
3	$20	vs	$18
4	$20	vs	$17
5	$20	vs	$16
6	$20	vs	$15
7	$20	vs	$14
8	$20	vs	$13
9	$20	vs	$12
10	$20	vs	$11
11	$20	vs	$10

Phase Two

Dictators' choices in Phase One suggest that utility is higher in one game than in the other, but, we do not know how much higher. Phase Two quantifies dictators' aversion to taking or giving. In Phase Two, dictators are offered ten additional choices between pairs of Give-only and Take-only games depending on their choice in Phase One.

Taking Aversion

If a dictator chooses the Give-only game in Phase One, in Phase Two he/she is offered ten additional choices between a Give-only game with decreasing endowments and the Take-only game with $20 endowment. Decision 2 in Table 1, for example, offers a choice between a Give-only game with $19 endowment and the Take-only game with $20. Decision 3 in Table 1 offers a choice between a Give-only game with $18 endowment and the Take-only game with $20. This continues until the Give-only game with $10 endowment is reached.

The sequence of choices in Phases One and Two implicitly implements the following procedure. We begin by asking whether a dictator prefers giving or taking. If a dictator prefers giving, we take away $1 from his/her endowment and ask if he/she still prefers giving. If he/she still prefers giving, we take away another $1 and ask again. We continue reducing the dictator's endowment until he/she switches to the Take-only game or his/her endowment is reduced all the way to $10. The endowment the dictator is willing to forego quantifies taking aversion.

Taking aversion is the utility loss suffered when the dictator moves from the Give-only game with $20 endowment to the Take-only game with $20 endowment. The utility from the Give-only game, right before the switch, is approximately equal to the utility from the Take-only game with $20 endowment. Thus, the difference in endowments between Decision 1 and the decision right before the switch quantifies the utility loss that dictators experience when moving from the Give-only to the Take-

only regime. In other words, this difference shows how much endowment needs to be taken away from a dictator in the Give-only game to make him/her as miserable as he/she is in the Take-only game.

Consider, for example, a dictator who prefers the Give-only games with endowments of $20, $19 and $18 and switches to the Take-only game when the endowment is reduced to $17. These choices reveal that the dictator is willing to give up $2 of endowment to avoid taking but not $3. This means that his/her taking aversion is at least $2. If a dictator who prefers the Give-only game switches in Decision 2 to the Take-only game, we conclude that his/her taking aversion is $0. In other words, the dictator has similar utilities in the two games.

The dollar amount of endowment that dictators are willing to sacrifice to stay in the Give-only game is similar to the equivalent variation in a standard consumer problem. In the consumer problem, the equivalent variation quantifies the change in utility between two regimes, usually involving two different prices. The equivalent variation is the change in income, holding price constant, required to reach the same level of utility attained under the price in the new regime. In our case, we measure the endowment change in the Give-only regime that would give a dictator the same level of utility as that attained in the Take-only regime.

Giving Aversion

If a dictator chooses the Take-only game with $20 endowment in Phase One, in Phase Two he/she is offered ten additional choices between a Take-only game with decreasing endowments and a Give-only game with $20 endowment. Decision 2 in Table 2 offers a choice between a Take-only game with $19 endowment and a Give-only game with $20. Decision 3 in Table 2 offers a choice between a Take-only game with $18 endowment and a Give-only game with $20. This continues until the Take-only game with $10 endowment is reached. The difference in endowments between Decision 1 and the decision right before the switch quantifies giving aversion. The difference measures how much endowment must be taken away from a dictator in the Take-only game with $20 endowment to make him/her as miserable as he/she is in the Give-only game with $20 endowment.

Predictions

We noted earlier that dictators should be indifferent between the two games in Phase One when they are selfish, purely altruistic, or impurely altruistic with equal warm glows from giving and from not taking. Indifference between the games in Phase One implies that dictators should always choose the game with the higher endowment in Phase Two. Therefore, dictators with these three types of preferences should choose only games with the $20 endowment and the equivalent variation should be zero.

The equivalent variation should differ from zero when dictators are impurely altruistic and the warm glows from giving and from not taking differ. If the warm glow from giving exceeds sufficiently the warm glow from not taking, then the dictator should choose the Give-only game in Phase One and forego some endowment before switching to the Take-only game in Phase Two. Such an outcome reveals that the dictator prefers giving to not taking or, equivalently, has aversion to taking relative to giving. Similarly, if the warm glow from not taking exceeds sufficiently the warm glow from giving, then the dictator should choose the Take-only game in Phase One and forego some endowment before switching to the Give-only game in Phase Two. Such an outcome reveals that the dictator is averse to giving.

Phase Three

The experiment concludes by having the dictators make an allocation decision for each of the 11 chosen games and then selecting one game at random to determine the final payoffs to the dictators and the recipients. Having the payoffs depend on the preferences expressed creates an incentive for the dictators to express their preferences accurately. The allocation decisions also provide a basis for comparing the results in this experiment with results reported in the literature.

Predictions

When dictators are selfish, purely altruistic, or impurely altruistic and the warm glows from giving and not taking are equal, they should make allocation decisions only in games with $20 endowment since they are indifferent between Give-only and Take-only games. Selfish dictators should give $0 and take $20, maximizing their payoff at $20 in both regimes. Dictators who have either purely altruistic or impurely altruistic preferences with equal warm glows, should choose the same payoffs in both regimes.

When dictators are impurely altruistic and the warm glows from giving and from not taking differ, the payoffs in the Give-only and Take-only games when the endowment is $20 may differ.

Experimental Procedures

The experiment was conducted in five sessions in the Experimental Laboratory for Economics and Business Research at Virginia Commonwealth University during the spring of 2014. A total of 121 subjects participated in the experiment. Upon arrival, subjects were randomly seated at computer terminals and given a set of instructions, which were later read aloud by the experimenter. Instructions are provided in the Appendix. Throughout the session, communication between subjects was prohibited and all information and choices were transmitted through computers using the program z-Tree (Fischbacher, 2007).

First, each participant selected one recipient from a list of ten charities. Next, in Phase One, the computer presented to each subject the first decision: the choice between the Give-only and the Take-only games, both with $20 endowment. In Phase Two, the computer presented ten additional decisions: Decisions 2 to 11 in Table 1 to those dictators who chose the Give-only game in Decision 1 and Decisions 2 to 11 from Table 2 to those dictators who chose the Take-only game in Decision 1. A dictator is allowed to switch the regime only once. After he/she chooses the Take-only game, in Table 1 he/she cannot switch back to the Give-only game. Similarly, in Table 2, a dictator cannot switch back to the Take-only game after choosing a Give-only game.

In Phase Three, the computer presented the subjects with the 11 games selected in Phases One and Two, and the subjects determined how much to give or to take in each game. The computer then randomly selected one of the 11 choices for payment and transmitted the outcome to the dictator. After, the participants recorded the selected decision and the payoffs on their own personal record sheet and completed a questionnaire; they proceeded to be paid privately by an assistant not involved with the experiment. Average earnings for the students were $17, which included a $5 participation fee. Average earnings for the charities were $6.74.

3. Results

Table 3 contains a summary of the data. In Phase One, 104 subjects chose the Give-only game and 17 chose the Take-only game. In Phase Two, Decisions 2 to 11, 32 subjects never switched from the Give-only to the Take-only game in spite of the reduced endowment and eight subjects never switched from the Take-only to the Give-only game.

We classify as selfish those dictators who always choose a $20 payoff and never accept a reduction in endowment. Nine subjects who chose the Give-only game in Phase One were selfish and no subject who chose the Take-only game in Phase One was selfish. Interestingly, five dictators who always chose the Take-only game demonstrated contradictory behavior. On one hand, they appeared to be nearly selfish by taking all, or all but $1, from the charity's endowment in all 11 decisions.[1] On the other hand, they hurt themselves by losing $10 of endowment instead of switching to the Give-only game with $20 endowment and giving nothing. Similarly, two dictators always chose the Give-only game but passed $0 or only $1, in all 11 decisions.

We present below the three main findings of the experiment.

Finding 1: *Our results are consistent with previous results.*
   a) *Allocations in the Give-only game with $20 endowment are similar to the allocations previously reported in standard dictator games.*
   b) *Our results are consistent with Korenok, Millner and Razzolini's (2014) results that giving is not equivalent to not taking. The charity's final allocation is higher in the Take-only treatment with $20 endowment as compared to the Give-only treatment with the same endowment.*

The Give-only game in Decision 1 is a standard dictator game: the dictator receives an endowment, is allowed to give but not to take, and the recipient receives no endowment. Almost all of the participants, 113 out of 121, made an allocation decision for this game: 104 subjects chose the standard game in Phase One and nine subjects chose it in Phase Two (see Table 3, Line 4). Many experimental studies (for a meta-study, see Engle 2011) report that in a standard dictator game, on average, 70% of dictators choose to give and the average gift is about 25% of the dictator's endowment. In our experiment, in the Give-only decision with $20 endowment, 86.7% of dictators gave a positive amount and the average gift across all dictators was $5.71, about 28.58% of the dictator's endowment (see Table 3, Line 6). We attribute the somewhat higher percentage of givers to the fact that dictators give to a charity of their choice instead of giving to other participants in the experiment. This is consistent with Eckel and Grossman's (1996) original study of the effect of using charities as recipients in dictator games.

Table 3: Summary of Experimental Results

	Chose Give-only in Phase One	Chose Take-only in Phase One	All dictators
1. Number of subjects	104	17	121
2. Number of selfish subjects	9	0	9
3. Number of subjects who never switch	32	8	40
4. Number of subjects in standard dictator game - Give-only game with $20 endowment	104	9	113

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[1] One additional dictator took all in the first 10 decisions and nothing in the eleventh. Three dictators switched at decision 10. One of these took all but $1 in all 10 taking decisions.

5. Number of subjects in both Give-only game with $20 endowment and Take-only game with $20 endowment	72	9	81
6. Mean recipient payoff in standard dictator game with $20 endowment	5.76	5.22	5.71
Excluding Selfish Dictators			
7. Number of subjects	95	17	112
8. Mean recipient payoff in the Give-only game with $20 endowment	6.31	5.22	6.21
9. Mean recipient payoff in the Take-only game with $20 endowment	10.58	5.18	9.43
10. Mean Equivalent Variation	6.23	-7.52	-
11. Mean dictator payoff in last Give-only game chosen in Phase Two	11.11	-	-

Korenok, Millner and Razzolini (2014) compare the recipients' payoffs in the Give- and Take-only games when the endowment is $20. In the present experiment, 81 subjects (69%) made allocation decisions in these two games. These two decisions are payoff equivalent: any payoff split that the dictator wants to achieve in the Give-only game can be achieved in the Take-only game. In both decisions, the dictator's and the recipient's possible payoffs range between $0 and $20, and the sum of the payoffs is always $20.

Korenok, Millner, Razzolini (2014) report that on average the recipient's payoff increased to $8.36 in the Take-only game from $5.37 in the Give-only game. In the present experiment, the recipients' average payoff increased to $9.43 in the Take-only game from $6.21 in the Give-only game (see Table 3, lines 8 and 9). Both comparisons exclude selfish dictators who consistently maximized their own payoff. Again, we attribute the slightly higher payoffs to the recipients to the fact that recipients were actual charities rather than other participants in the laboratory. Still, as in Korenok, Millner and Razzolini (2014), the recipient receives more money in the Take-only game than in the Give-only game.

Having established consistency of our results, we now proceed to our main question: Are dictators averse to taking? The answer is yes – the majority of dictators do not like taking and the aversion is strong.

Finding 2: *Most dictators are averse to taking.*
   a) *When given a choice between a Give-only game with $20 endowment and a Take-only game with the same endowment, 86% of dictators choose the Give-only game;*
   b) *Dictators sacrifice approximately one- third of their endowment to avoid the Take-only game;*
   c) *Dictators sacrifice approximately one-fifth of their final payoff to avoid the Take-only game.*

First, 86% of the participants, 104 out of 121, chose the Give-only game in Phase One, when given the choice between a Give-only and a Take-only game (see Table 3, Line 1). Using a binomial test, we reject the null hypothesis of indifference between the two games at the 5% significance level.[2]

The second result that supports the finding that dictators have an aversion to taking is that participants are willing to sacrifice a substantial portion of their endowment to remain in the Give-only setting in Phase Two. As noted above, when a dictator chooses the Give-only game in Phase One, the endowment the dictator is willing to forego in Phase Two quantifies taking aversion. We use the difference between the dictator's endowment in the last Give-only game chosen and $20 to measure the aversion to taking; this difference is the lower bound on how much endowment the dictator is willing to sacrifice in order to keep playing the Give-only game. The 95 non-selfish dictators who chose the giving game in Phase One were willing to sacrifice, on average, $6.23 to remain in the Give-only game (see Table 3, Line 10). In other words, the mean Equivalent Variation of the utility loss suffered when the endowment is $20 and the regime changes from giving to taking is $6.23, just over 30% of the original endowment.

The third piece of evidence that people are averse to taking is that the 95 non-selfish dictators who choose the giving game in Phase One are willing to sacrifice on average $2.58 of their own final payoff to remain in the Give-only game. Since dictators made allocation decisions for all 11 chosen games, we measured their payoff sacrifice as the difference between the payoff in the last giving game selected in Phase Two and the payoff in the giving game in Phase One where the endowment was $20. The average dictator payoff in the Give-only game in Phase One is $13.69 (=$20-$6.31. See Table 3, Line 8). The average dictator payoff in the last giving game selected in Phase Two is $11.11 (see Table 3, Line 11). Thus, dictators, on average, sacrifice $2.58 of payoff, or about one-fifth of the average payoff of a Give-only game with $20 endowment. Comparing the endowment sacrifice of $6.23 to the payoff sacrifice of $2.58 reveals that the recipients bear more than one-half of the reduction in endowment. Dictators bear about 40% of the reduction in endowment, while recipients bear the remaining 60%.

Next we compare individual dictators' choices to predictions of the three commonly used types of preferences: selfish, purely altruistic, and impurely altruistic.

Finding 3: Most dictators' choices are inconsistent with preferences that are selfish, purely altruistic, or impurely altruistic with equal warm glows from giving and not taking.
  a. 101 out of 121 dictators reveal an equivalent variation different from zero;
  b. Of the remaining 20 dictators, 6 fail to equate payoffs in the Give-only and Take-only games.

Earlier we predicted dictators' choices based on preferences that are selfish, purely altruistic, and impurely altruistic with equal warm glows from giving and not taking. Dictators' observed choices are consistent with each of these preferences only when both the equivalent variation is zero and the choices in Phase Three lead to the same payoffs in the Give-only and Take-only regimes. Only 20 dictators have equivalent variations equal to zero and 14 of these 20 dictators make allocation decisions that equate their payoffs in the two regimes. As noted above, nine of these 14 dictators are selfish and make their payoff $20 in both regimes. An additional five make choices that equate their payoffs in the two regimes, while ending up with less than $20.

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[2] To account for a left-side bias, for 32 subjects, the screen display reversed the order in which the two choices were presented in Phase One, with the Take-only option listed first. There was no statistical significant difference in the subjects' behavior, so the data were pooled together.

The remaining 107 out of 121 dictators make choices that are inconsistent with preferences that are selfish, purely altruistic, or impurely altruistic with equal warm glows from giving and not taking. 101 dictators indicate a willingness to forego endowment to remain in the regime they chose in Phase One and six, while not willing to forego endowment, do not equate payoffs in the Give-only and Take-only games.

To conclude, our results strongly suggest that a realistic utility function should not equate warm glow from giving to warm glow from not taking or, to put it differently, it should allow for taking aversion.

4. Discussion

We find that aversion to taking is prevalent and strong. A large majority of dictators express a preference to play a Give-only game over a Take-only game when the payoff possibilities are equal. When we exclude selfish dictators, we find that dictators are willing to sacrifice 30% of a $20 endowment to play a Give-only game instead of a Take-only game.

The fact that charities fare better in terms of final payoff when the dictator allocation is framed as taking from the charity's endowment rather than as giving from his/her own endowment, may suggest that framing charitable contribution as taking could potentially lead to higher donations. However, another implication of our findings is that aversion to taking may discourage potential donors from participating in campaigns when donations are framed as taking rather than giving. Consider, for example, a campaign that lists a suggested donation. Donors who want to contribute less may view the smaller contribution as taking from the charity. In that case, they may avoid the campaign completely.

The implications may extend beyond dictator games and charitable contributions because opportunities to take abound in society. Casual observation suggests that taking does not always occur when the option exists. Many people do not steal even when they have the opportunity to do so without detection. To the contrary, strangers often return lost items to their owners. Corruption levels vary and are low in many countries and cultures. We speculate that taking aversion may account for some of these observations, and that taking aversion limits the extent of corruption and theft. These issues are, of course, beyond the scope of the present paper. They do, however, suggest that a better understanding of other-regarding preferences and taking aversion may provide insights into questions that extend beyond dictator games and charitable giving.

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Appendix

INSTRUCTIONS

Please fill in the date, your social security or student ID number, your name, and your address on the top portion of the receipt while you wait for everyone to find a seat. Doing so reduces the time spend processing payments at the end of the experiment. The University requires receipts for accounting purposes. The monitor in the room does not collect or see them. You give them to an assistant sitting outside of the room when you leave to collect your payment for today's experiment.

You may read the following instructions silently after you complete the top portion of the receipt. The monitor reads them aloud after everyone is seated.

Welcome
The purpose of this experiment is to study decision-making related to economic situations. A research foundation has provided the funds for this experiment. We estimate that you will complete the experiment within one hour.

During the experiment you make decisions related to economic situations at your computer terminals. You will receive a $5 show-up fee. You may also earn additional money depending on the decisions that you and the other participants make.

Please raise your hand at any point if you have any questions about the instructions or if you wish to cease your participation. You may cease participation at any point; if you do you will receive the $5 show-up fee but will not receive any additional compensation.

Minimum age
Please visit the monitor if you are 17 years old or younger. Research protocols at VCU require participants to be at least 18 years old.

Anonymity
You participation will be anonymous. No one, including the researchers, will be able to identify your decisions once the experiment is completed. At the end of the experiment you are paid privately and in cash. In order to keep your decisions private, *please do not reveal your choices to any other participant.*

Risks, benefits, and cost
Participation in this experiment does not impose any risks in addition to those you encounter in your day-to-day activities. The primary benefit of the study is to advance our understanding of decision-making in economic settings. You may gain some educational benefit. The only cost to you of participation is your time.

Materials
You should have:
1. a piece of paper with a 5-digit code and
2. instructions
3. Survey

The 5-digit code is a unique identifier and helps preserve the anonymity of your decisions. It allows the monitors in the room to match you with your earnings without learning your name.

Charity
In today's experiment you will be paired with a charity of your own choosing selected from the list of ten different charities listed below. Your decisions today will determine whether and how much money you earn and whether and how much money a charity receives. When the experiment begins the computer asks you to indicate your choice of charity. You must select only one charity.

American Cancer Society Provides many services to cancer patients and their families such as information, medical equipment, transportation to treatment locations, and a support system.
American Red Cross Offers blood donation information and services, disaster relief, many helpful educational classes, as well as HIV/AIDS support groups.
Big Brothers Big Sisters Provides one-to-one mentoring for youth and children residing in a one parent family for the purpose of creating confident and competent young adults.
Sierra Club Protect and preserves environmentally sensitive areas.
Doctors Without Borders Doctors and nurses volunteer to provide urgent medical care to some 70 countries to civilian victims of war and disasters regardless of race, religion, or politics.
YMCA Provides parents visitation monitoring services and physical fitness services.
Feed the Children Provides food, clothing, medical care, education and emergency relief to children in the United States and overseas since 1979.
Safe Harbor Shelter Provides safe shelter to battered women and their children, as well as food and clothing, assistance with legal, medical and financial problems, and information/support groups in Richmond, VA.
Oxfam America Invests privately raised funds and technical expertise in local organizations around the world that hold promise in their efforts to help poor move out of poverty: committed to long term relationships in search of lasting solutions to hunger, poverty, and social inequities.
National Public Radio Non-profit media organization that reports on the environment, health, education, international news, and much more, each and every day.

After selecting a charity, you will make a series of decisions. At the conclusion of the experiment, the computer will pick one decision at random. The choice you make in this decision determines the charity's and your earnings. Since the computer may select any decision, you should make each choice carefully.

Decisions
You will make decisions in three phases.

Phase 1: In Phase 1 the computer shows you Decision 1 with two options:

Option A: You have $20 and you may give some to charity.
Option B: The charity has $20 and you may take some from charity.

You will choose which of the two options you prefer. How you choose between Option A and Option B is entirely a question of personal preference—there is no right or wrong answer.

Phase 2: In Phase 2 the computer presents you with ten more decisions that are similar to Decision 1 and you choose whether you prefer option A or option B.

Again, how you choose between Option A and Option B is a question of personal preference—there is no right or wrong answer. The only restriction on your choices occurs if you choose Option B. If at some point you choose Option B, then, in all subsequent decisions you must keep choosing Option B. The reason is that, in subsequent decisions, Option B becomes relatively more attractive.

Phase 3: In Phase 3 you choose how much you actually want to give or to take in each of the options you chose earlier. On the computer screen you will see a table with two columns. The first column shows the options you have selected in Phase 2. In the second column, you will enter the amount to give or to take for each decision. How much you give or take is a question of personal preference—there is no right or wrong answer. The only restriction on your choices occurs if you choose Option B more than once in Phase 2. If you chose Option B more than once, you must enter the same amount for each decision where you chose Option B. The reason is that the Option B is always the same.

Earnings
After you complete Phase 3, the computer randomly selects one of the 11 decisions from Phase 3 to implement for payment. The decision you made there determines your earnings. If the computer selects a decision in which you choose to give, you earn the amount of money you had less what you gave and the charity receives what you gave to it. If the computer selects a decision in which you choose to take, you earn what you took and the charity receives whatever it had less what you took.

ID
The computer will ask to enter your 5-digit ID at the beginning of the experiment.

Payment to charity
At the end of the experiment, the experimenter will calculate the total amount received by each charity and will proceed to go online on each charity's website to make a credit card payment for the

corresponding amount. Anyone who wishes to observe the payment is welcome stay at the conclusion of the experiment.

Please raise your hand if you have a question. We will now proceed to two Practice Scenarios.

Practice

Practice Scenario 1. Consider the following hypothetical scenario. You have chosen:

Option A: You have $3 and you may give some to charity.
In Phase 3 you will see the following:

Option Chosen	GIVE $
You have $3. How much do you want to give to the charity?	

What is the most you could give?
What is the least you could give?

The following shows four possible amounts you could give. Compute in each case the amount of money that you will earn and that the charity will receive.

Option Chosen	GIVE $	You earn $	Charity receives $
You have $3. How much do you want to give to the charity?	3		
You have $3. How much do you want to give to the charity?	2		
You have $3. How much do you want to give to the charity?	1		
You have $3. How much do you want to give to the charity?	0		

Practice Scenario 2. Consider the following hypothetical scenario. You have chosen:

Option A: The charity has $3 and you may take some from charity.
In Phase 3 you will see the following:

Option Chosen	TAKE $
Charity has $3. How much do you want to take from the charity?	

What is the most you could take?
What is the least you could take?

The following table shows four possible amounts you could take. Compute in each case the amount of money that you will earn and that the charity will receive.

Option Chosen	TAKE $	You earn $	Charity receives $
Charity has $3. How much do you want to take from the charity?	3		
Charity has $3. How much do you want to take from the charity?	2		
Charity has $3. How much do you want to take from the charity?	1		
Charity has $3. How much do you want to take from the charity?	0		

We now begin the experiment.