

Charitable Giving After Katrina: A First Look at Using Lottery-Type Games in Online Panel Research

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INTRODUCTION

The use of online panel research has created unique opportunities in many different areas of research. As this mode of research is still in its infancy, researchers are finding new ways to take advantage of the benefits offered by this mode of research by updating established experimental designs.

In this paper, we contribute to the literature by focusing on the lottery-type game methodology of a unique online panel study. In June 2006, researchers affiliated with the National Bureau of Economic Research (NBER) and Knowledge Networks conducted an online panel study investigating people's attitudes and behaviors towards charitable donations to victims of Hurricane Katrina. As this paper will focus on the methodology behind the project, a complete report of the study's findings from the NBER investigators (Fong & Luttmer, 2008) is available upon request.

One benefit of online panel research is that it can allow for relatively inexpensive data collection from a nationally-representative sample. A common limitation of previous studies on charitable behavior is that they often lacked external validity, being conducted with smaller, demographically limited samples. To address the issue of representativeness, we conducted a lottery-type game experiment using KnowledgePanelSM, a national online research panel. The sample for this study consisted of nationally representative adults with an oversample of African-Americans.

A second benefit of our design was the ability to increase generalizability. While interesting, self-reported donating behaviors in hypothetical situations inherently warrant some skepticism. In online panel research, social desirability, or the tendency of respondents to answer in a way that will be viewed favorably by others (e.g., the interviewer or researchers) can be minimized to allow for a more accurate examination of attitudes and behaviors (Tourangeau, Rips, & Rasinski, 2000; Dennis, Chatt, Motta-Stanko, & Pulliam, 2005).

It could also be argued that social desirability is further reduced in online panel research because panelists have established a relationship with the online panel company (see Ridgley,

2007 for a detailed description of the relationship between Knowledge Networks and its panelists). Because of the trust inherent in being an online panel participant, members may be more likely to disclose information that reflects their true attitudes and behaviors than would solicited respondents. In our lottery-type game experiment, members of KnowledgePanelSM were asked to allocate donations to real charities in areas affected by Hurricane Katrina, with 10% of them having the donations actually fulfilled on their behalf.

The remainder of the paper is divided into three parts:

- First, we will describe the study design, detailing the questionnaire context and lottery-type game that was presented to participants.
- Next, we will provide a summary of donations made and a brief overview of demographic characteristics related to donating behavior.
- Finally, we will discuss the fulfillment of these incentives with the selected charities and reactions to the survey from KnowledgePanelSM members.

PARTICIPANTS

Participants consisted of adult members of KnowledgePanelSM, the RDD-recruited Internet panel managed by Knowledge Networks. Members of KnowledgePanelSM are asked to participate in approximately three surveys per month using either a home-based computer connected to the Internet or a web appliance provided by Knowledge Networks. As compensation for participating on the panel, members with existing internet access are enrolled in a loyalty program and receive points for each survey completed, redeemable for goods or cash, while members without existing internet access receive a web appliance and Internet access from Knowledge Networks.

The project was conducted in four phases, three pilot tests and the main study, which was divided into three versions:

1. A full survey for African-American and non-African-American participants
2. A version in which no lottery was presented
3. A version in which participants were specifically told that race was being studied.

Each subsample was mutually exclusive. Participants in each subsample were selected on the basis of having not completed any previous phase of this project or any other Knowledge Networks study about Hurricane Katrina.

For the remainder of this paper, we will focus on the 1,105 panelists who completed as part of the African-American and non-African-American subsamples, as panelists in these samples completed identical surveys (the No Lottery and Race Salient subsamples are not included because participants completed modified surveys which may affect their giving behavior).

Table 1 shows the weighted demographic characteristics of the 1,105 participants from the African-American and non-African-American subsamples. In summary, the sample was nationally representative with an oversample of African-American panelists.

Table 1

| | | n | % |
|------------------------|-----------------------------|----------|----------|
| Gender | Male | 519 | 47.0% |
| | Female | 586 | 53.0% |
| Age Group | 18-29 | 239 | 21.6% |
| | 30-44 | 307 | 27.8% |
| | 45-59 | 316 | 28.6% |
| | 60+ | 244 | 22.1% |
| Race/Ethnicity | White, non-Hispanic | 688 | 62.3% |
| | Black, non-Hispanic | 246 | 22.2% |
| | Other, non-Hispanic | 55 | 4.9% |
| | Hispanic | 117 | 10.6% |
| Education Level | Less than high school | 168 | 15.2% |
| | High school | 346 | 31.3% |
| | Some college | 316 | 28.6% |
| | Bachelor's degree or higher | 275 | 24.9% |
| Census Region | Northeast | 216 | 19.6% |
| | Midwest | 246 | 22.3% |
| | South | 415 | 37.5% |
| | West | 228 | 20.6% |

STUDY DESIGN

Panelists in the four subsamples selected for this study received an identical email invitation asking them to participate (see below). To avoid introducing bias in the form of self-selection due to the somewhat controversial survey topic, we intentionally did not mention that the survey was about Hurricane Katrina.

Email Subject Line: Issues Facing America

Email Body: We would like to invite you to participate in a study conducted by Carnegie Mellon University and Harvard University. We will be asking questions about issues facing America.

Your opinions are very important to us. Please fill out this survey at your earliest convenience.

Participants first viewed a brief presentation about a small city affected by Hurricane Katrina (Slidell, LA or Biloxi, MS). Photographs and accompanying audio manipulating different variables were presented to see how these variables affected panelists' willingness to donate to the Habitat for Humanity chapter in the selected city. Information manipulated in the photographs and audio files included:

- Race of the victims
- The economic situation of the city
- Political preferences in the city
- Church attendance
- Crime in the city
- Willingness of residents help each other (reciprocity)
- Whether many residents received government cash benefits before Katrina hit

- Whether recipients contributed labor to their homes from Habitat (“sweat equity”)
- Preparedness for hurricanes
- Looting was mentioned in the audio or not

To qualify, the panelist must have reported successfully viewing the photographs and hearing the audio. Those unable to do one or both were not presented with the lottery section of the survey and were routed to a later section of the survey. Approximately 88% of the starting sample qualified for the lottery section based upon this criterion.

Next, panelists were asked to allocate any portion of \$100 to Habitat for Humanity in the city they read about or to keep for themselves. It was explained to panelists that they could divide the amount in any way they saw fit. Appendix A shows selected items for the lottery-type game in more detail.

As mentioned earlier, one critique of studies of this nature is that the self-reported behavior divulged in an interview or survey may not reflect actual behavior. To increase the salience of the experiment, panelists were informed that Knowledge Networks would pay the dollar amounts indicated for one out of every ten participants. A lottery-type game was used to determine the 10% probability of winning. Each panelist was randomly assigned a number from 0 to 9, and informed of this number during the course of the online survey. The winners were those whose number matched the first digit chosen in a pre-specified drawing from the Louisiana State Lottery Pick 3 lottery game. Selecting the winners in this manner allowed panelists to see for themselves if they had won (by checking the Louisiana State Lottery website), eliminating possible ambiguity about how the winners were selected.

As members of KnowledgePanelSM have an ongoing relationship with the company, they likely understood that we would not want to give them surveys in which promises made are subsequently not executed, because this would damage the relationship. Thus, we are confident that the respondents believed the instructions and acted accordingly.

In the remainder of the online survey, panelists were asked about their perceptions of a number of characteristics of Katrina victims who received housing from Habitat in that city and miscellaneous survey questions, including self-reported preferences for government spending on Katrina victims, charity spending on Katrina victims, general attitudes toward government spending, and their own past charitable giving.

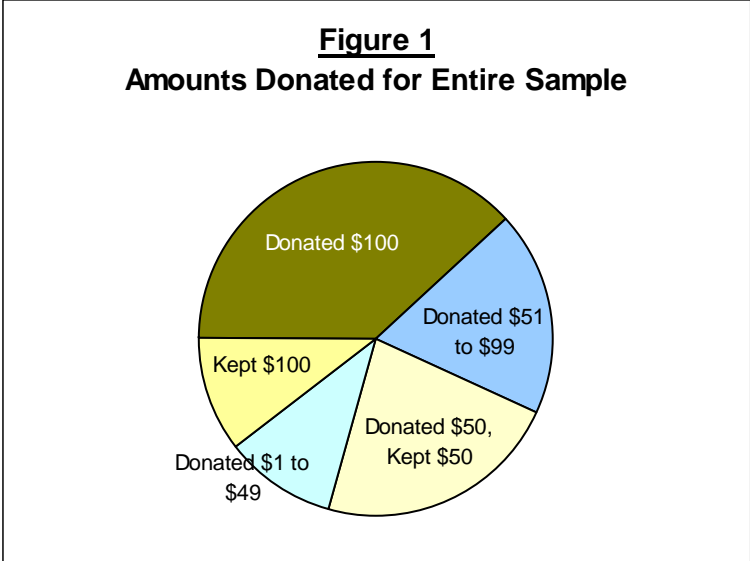
Because the survey was slightly longer than the standard Knowledge Networks survey (approximately 20 minutes median completion time), all panelists received compensation in the form of an entry into a monthly sweepstakes conducted by Knowledge Networks.

DEMOGRAPHICS OF GIVING

The 1,105 panelists in the African-American and non-African-American subsamples donated an average of \$61 to Habitat for Humanity ($SD = \$37$). Figure 1 details the amounts donated.

- 423 panelists (38.4%) donated the entire \$100 to Habitat for Humanity
- 243 panelists (22.0%) donated \$50 to Habitat for Humanity and kept \$50 for themselves
- 116 panelists (10.5%) kept the entire \$100 for themselves

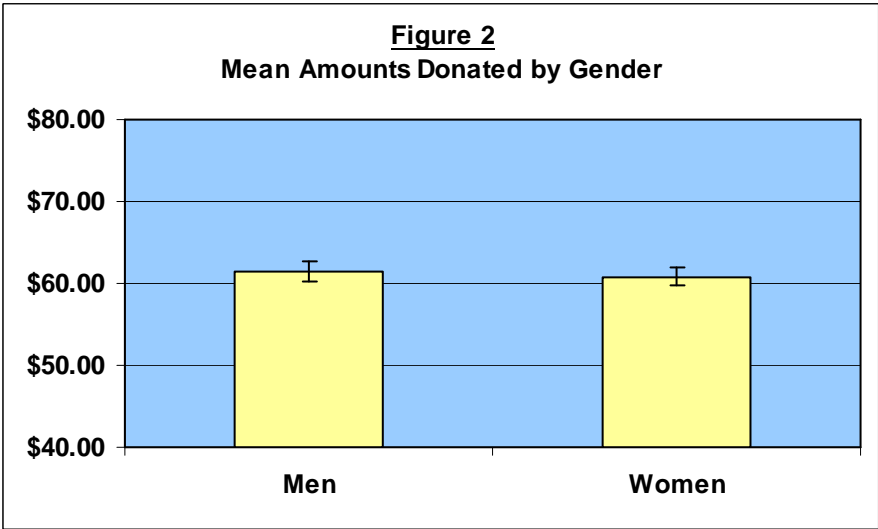
Figure 1
Amounts Donated for Entire Sample



Next, we will provide an overview of demographic characteristics related to donating behavior in our sample. For all demographic comparisons that follow, we conducted univariate ANOVAs.

GENDER

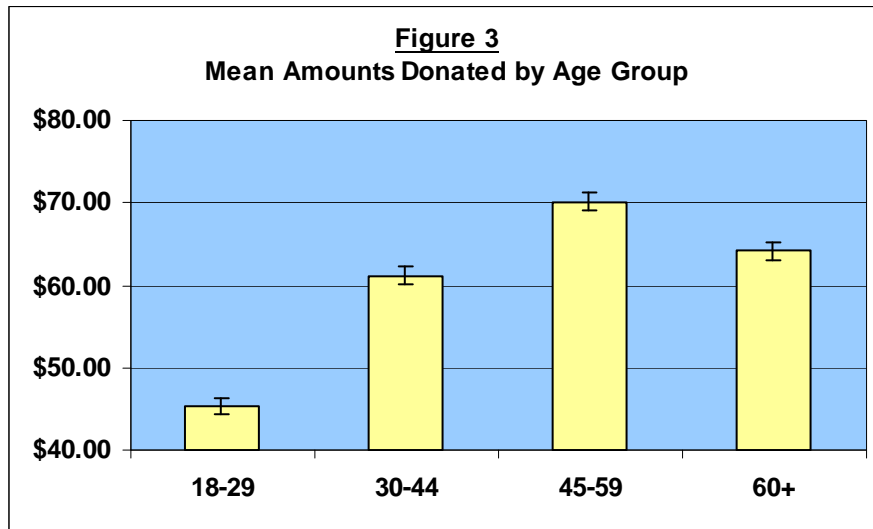
Contrary to findings from previous research in which gender differences in giving were observed (e.g., Andreoni, Brown & Rischall, 2003), men and women in our sample did not differ in terms of how much they gave to Habitat for Humanity at the $p < .05$ level ($M_s = \$61.45$ and $\$60.76$, $SD_s = \$38.00$ and $\$35.91$, respectively). Figure 2 shows the mean amounts donated by gender¹.



¹ Error bars represent the standard error of the mean in all demographic figures.

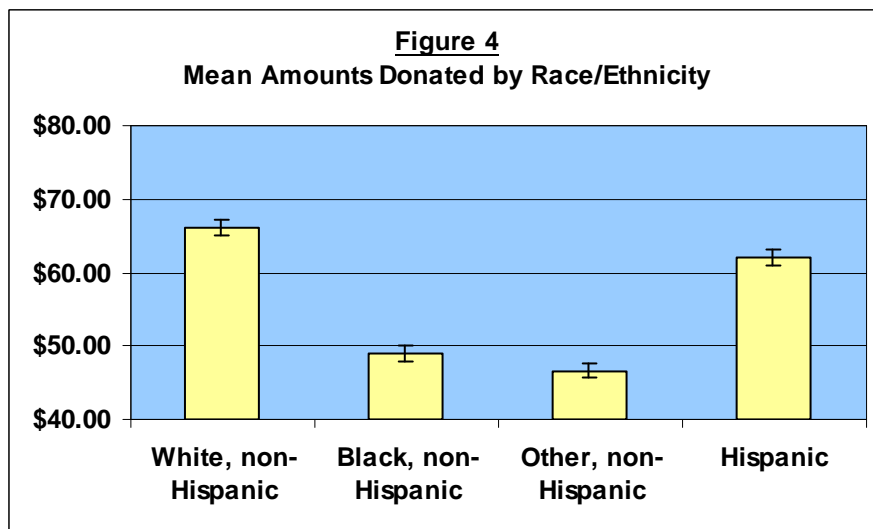
AGE

Age was a significant predictor of donating to Habitat for Humanity at the $p < .001$ level. As shown in Figure 3, younger panelists donated the least ($M = \$45.33$, $SD = \$35.13$). 45-59 year olds donated the most ($M = \$70.14$, $SD = \$35.28$), although they did not differ significantly from 60+ year olds ($M = \$64.19$, $SD = \$35.37$) in their giving behavior. This pattern of findings is not surprising considering the lower incomes of younger people and the 60+ year old group including a number of retirees for whom donation may not be economically feasible.



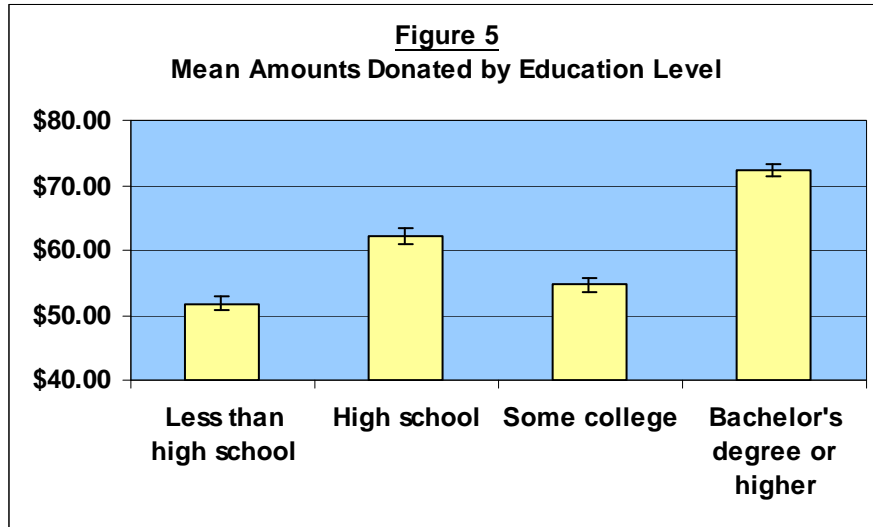
RACE/ETHNICITY

Race and ethnicity differences in giving were observed at the $p < .05$ level. As shown in Figure 4, white and Hispanic panelists ($M_s = \$66.04$ and $\$61.99$, $SD_s = \$37.35$ and $\$35.52$, respectively) donated more than black panelists and panelists of other racial descent ($M_s = \$49.00$ and $\$46.65$, $SD_s = \$33.11$ and $\$35.04$, respectively).



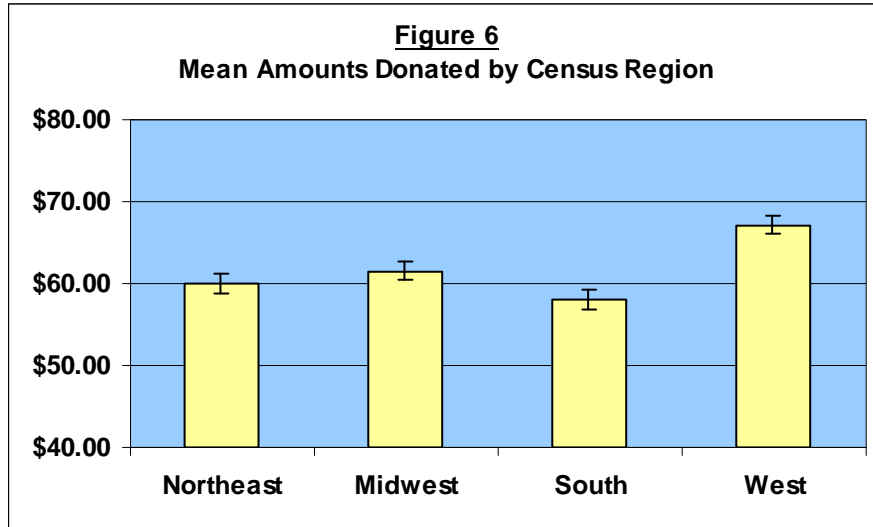
EDUCATION LEVEL

Significant differences in donating behavior were also observed across education levels. As education level is positively correlated with household income, panelists with a bachelor's degree or higher ($M = \$72.33$, $SD = \$34.57$) donated significantly more than less educated panelists. Interestingly, panelists with some college education ($M = \$54.72$, $SD = \$37.23$) donated less money than high school educated panelists did ($M = \$62.17$, $SD = \$37.12$) but not more than panelists with less than a high school education ($M = \$51.80$, $SD = \$34.68$). Figure 5 shows the amounts given by panelists of each education level.



CENSUS REGION

Only one significant difference was observed for giving by Census region. While they did not differ significantly from panelists in the northeast or midwest regions ($M_s = \$60.04$ and $\$61.57$, $SD_s = \$37.77$ and $\$35.27$, respectively), panelists in the west region ($M = \$67.18$, $SD = \$36.91$) gave more than those in the south region ($M = \$58.03$, $SD = \$37.09$), as shown in Figure 6. Panelists in the south region also did not differ significantly from those in the northeast or midwest regions.



INCENTIVE FULFILLMENT

Knowledge Networks Panel Relations staff handled payments to all qualified participants whose lottery number was chosen as the first digit in the Louisiana State Lottery Pick 3 drawing from June 23, 2006. Table 2 shows the results of the lottery and the amounts fulfilled to the winners.

Table 2

| Subsample | Lottery Drawing Date | Winning Lottery Number | # Winners | Amount Paid to Charity | Amount Paid to Participants | Total Amount Paid |
|----------------------|----------------------|------------------------|-----------|------------------------|-----------------------------|-------------------|
| Non-African American | 6/23/2006 | 0 | 87 | \$6,786 | \$1,914 | \$8,700 |
| African-American | 6/23/2006 | 0 | 22 | \$1,415 | \$785 | \$2,200 |

Fulfillment of the incentive amounts consisted of two separate processes:

1. Panelists who elected to keep a portion of the \$100 for themselves were credited with the appropriate amount in the form of bonus points credited to their KnowledgePanelSM accounts.
2. The dollar amounts donated by panelists were paid directly to the local chapters of Habitat for Humanity in Slidell and Biloxi. Knowledge Networks' Panel Relations staff contacted each chapter and arranged the payments, providing the names and contact information of panelists on behalf of whom Knowledge Networks was donating.

Each participant who donated any amount to one of the Habitat for Humanity chapters received a "thank you" letter directly from the charity as proof that Knowledge Networks followed through on its promise to donate the dollar amount they specified.

REACTIONS FROM PANELISTS

At the end of each Knowledge Networks survey, panelists have the opportunity to voice their opinions on any aspect of the survey. Many panelists do so, providing their insight on topics related to the survey topic. In this last section, we present some reactions panelists had to this survey and the unique task in which they were asked to participate.

Panelist comments are divided into two parts: Comments from southern state residents and rationales panelists provided for the amounts they donated.

Comments from southern state residents

Residents of southern states had quite a bit to say about the survey and their experiences with Hurricane Katrina and its aftermath:

- “Hurricane Katrina affected the town where I live, not only during the storm but in the aftermath. We have felt the effects and are continuing to struggle with the extra people that have relocated to our area. Thus, I would like to see more assistant to all 'small towns' not just Slidell.”
- “We had hurricane winds here from the last 3 hurricanes. We were lucky. I went to Pascagoula, Biloxi, Gulfport, and Hattiesburg, MS. Your pictures in this survey don't really describe the destruction that is there. Within the last year I spent 18 days helping people there.”
- “I now live in Texas. I lived in Bay St. Louis, MS for Hurricane Katrina. I saw 80% of our small town devastated and every business there destroyed. I don't believe there was one home in Bay St. Louis that survived Katrina without some destruction. Our home was sold to the church at a \$10,000 reduction in price so the priest in our parish would have a place to live. Fortunately our house was one of few that had no water but just wind damage, which we had repaired quickly and moved out of the hurricane area. We still travel back to Biloxi and the Gulf Coast. Tears come every time we go back. They are trying so hard to rebuild but need so much help. The \$50 which I would keep for myself would be given to our church in Bay St. Louis.”
- “I was a survivor of Hurricane Katrina from New Orleans. I live and work in a non-profit organization in the inner-city of New Orleans, so I see these issues from a different perspective than most Americans. Biloxi was hit hard and has needs as does EVERY town and city effected by Katrina. My decision to give the full \$100 to Habitat in Biloxi was because I don't need those extra points. Although I don't agree with the 'Habitat' way of doing things, they are still helping people who need help.”

Rationales for the amounts donated

Although we did not ask for any justification for how they made their donation decisions, some panelists felt compelled to justify their reasoning:

- “After spending a year abroad, I'm back in the U.S. and seeking a new job. I've curtailed charitable contributions for now. I did not choose to donate the full \$100 because the presentation was particularly effective or because I learned anything from it. I did it

because the \$100 was an unexpected windfall which I don't need and I felt a bit guilty that I HAD curtailed my charitable giving.”

- “As I have already made monetary contributions to hurricane victims, I chose not to contribute further until the actual money is in hand.”
- “I worked in relief efforts in many ways including giving to church organizations, and we are working still to rebuild for anyone in need. The \$50 I kept will go to that and the outcome would be \$100 total going into relief efforts.”
- “My \$85 donation was determined this way:

Tithe (10%) = \$10
Offering = \$5
My Donation = \$85
Total = \$100

I know it doesn't really matter, I just wanted to include you in what my thought process was at the time.”

- “I contributed my entire \$100 to Habitat because I lived in Gulfport during Hurricane Camille in 1969 and I know first hand the devastation people in Mississippi are facing today. Whether they are black or white, the people of Biloxi should at least have a roof over their heads.”

CONCLUSIONS

In the present paper, we outlined the methodology of a study that served as a first step in implementing an established research design, the lottery-type game in an online panel setting. Increasing representativeness and generalizability, we feel this research adds to the literature on charitable behavior.

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APPENDIX A: TEXT OF SELECTED LOTTERY-TYPE GAME QUESTIONS

[DISPLAY]

Decision-making task

Now, you are going to make a decision about assistance to Katrina victims in [TOWN]. Please note that all information we give you is true and all payments will be made exactly as stated. Please think carefully about your decision because one out of every 10 participants in this study will have his or her decision carried out with real money.

[DISPLAY]

We will give \$100 to one out of every 10 participants in this study. We ask you to decide in advance how much of this \$100, if any, you would like to give to the local chapter of Habitat for Humanity in [TOWN]. You can give any amount you wish, including nothing. If you are selected, this \$100 is yours, and you are free to keep or to give away any amount you wish, including nothing. While many people give some away, we expect that most people will keep at least some of this amount for themselves.

If you are randomly selected to receive \$100, we will send the amount that you want to donate, if any, to the local Habitat for Humanity chapter in [TOWN]. The amount that you decide to keep for yourself will be credited to your Knowledge Networks account (you get 1000 bonus points for each dollar you decide to keep).

If you decide to donate money, Habitat for Humanity in [TOWN] will mail you a note to confirm that we sent them exactly the amount you specified.

[DISPLAY]

The random selection works as follows. If the first number of the Pick3 draw of the Louisiana State Lottery on [LOTTERYDATE] is [LOTTERYNUMBER], then we will carry out your decision. Because numbers in the Pick3 game lie between 0 and 9, you have a 1 in 10 chance that we will carry out your decision. If you wish, you will be able to find the winning number on <http://www.louisianalottery.com>. However, this is not necessary. If your number is drawn, we will automatically carry out your decision.

[NUMBER BOX WITH RANGE 0 TO 100, NO BACK]

LOT1. Now, please decide how much of your \$100 you want to give to Habitat for Humanity for Katrina victims in [TOWN] in the event that you are randomly selected to receive \$100.

If the first number of the Pick3 draw on [LOTTERYDATE] is [LOTTERYNUMBER],
I want \$_____ to be sent to Habitat for Humanity to help victims of Hurricane Katrina in
[TOWN].²

[SP]

LOT2. If the first number of the Pick3 draw on [LOTTERYDATE] is [LOTTERYNUMBER], \$[AMOUNT FROM LOT1] will be sent to victims of Hurricane Katrina via Habitat for Humanity in

² This should be a number from 0 to 100. If the answer is not from 0 to 100, give the message: "You have entered an invalid number. Please enter a number from \$0.00 to \$100.00"

[TOWN], and \$[100 - [AMOUNT FROM LOT1]] will be sent to you as a credit of [1000*(100-[AMOUNT FROM LOT1]] bonus points to your Knowledge Networks account.

Is this correct?

Yes 1
No, I would like to change my
answer..... 2

PROMPT ONCE.

SHOW LOT1 AGAIN IF RESPONDENT SELECTS “No” IN LOT2.