PRELIMINARY AND INCOMPLETE

Race and Giving to Hurricane Katrina Victims: Experimental Evidence*

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Abstract

We investigate individual motives for giving to the needy using a large randomized experiment. In the experiment, respondents from the general population had an opportunity to give to victims of a natural disaster – namely, Hurricane Katrina. Respondents first saw a small presentation about Katrina victims in a small city. By either showing pictures with predominantly black or predominantly white victims, we manipulated respondents' perceptions of the race of the victims in that city. We used accompanying audio information to manipulate perceptions of the income and worthiness of the victims. Respondents then decided how to split $100 between themselves and the Katrina victims. The income of the victims had a highly significant effect on giving; respondents gave more when they believed the victims to be poorer. Surprisingly, race had virtually no effect on giving, even though it had a highly significant effect on beliefs about the racial composition of the victims. Similarly, information about the worthiness of the victims affected beliefs but not giving.

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1. Introduction

On August 29, 2006, Hurricane Katrina made landfall in southwest Louisiana. It was the costliest hurricane in U.S. history, causing an estimated $75 billion of damage (Richard D. Knabb et al., 2005). Low-income and black communities were especially hard hit by the hurricane. Among the public, there were widespread beliefs that relief efforts were slow and inadequate and many alleged that the nation would have responded more strongly if Katrina's victims had not come to a large extent from minority groups and economically disadvantaged backgrounds.[1] However, there is little scientific evidence on the role of race in determining responses to Hurricane Katrina. More generally, despite the huge volume of research on the related fields of social preferences, determinants of governmental redistribution, and determinants of private charity, we still know too little about individual motives for actual redistribution to the needy in a broadly representative sample. Much of what we know comes from survey data containing self-reported preferences for redistribution, or self-reported political identification. However, while interesting, self-reported preferences inherently warrant some skepticism. Another common limitation of these studies is that they often lack exogenous variation. To address these issues, a handful of studies have been conducted on the determinants of giving to real charities and real poor people in experiments.[2] However, these studies have obvious limitations as well. Chief among them is the fact that they typically are not conducted on broadly representative samples.

We try to address these limitations with a behavioral experiment in a natural redistributive setting using respondents who are broadly representative of the general population. We examine the roles of racial bias and other factors on giving to victims of a natural disaster, namely Hurricane Katrina. In the experiment, respondents decide how they will split $100 between themselves and the local chapters of Habitat for Humanity in a small city that was heavily affected by Hurricane Katrina. Each respondent has a 10% chance that his or her decision will be implemented. Thus, though we do not phrase it this way towards respondents, respondents effectively play a dictator game against the local Habitat for Humanity chapter. The experiment and an accompanying survey are administered by Knowledge Networks, a private firm that

[1] According to a Gallup Poll collected from September 8-11, 2005, 60% of blacks and 12% of whites believed that the government's response was slow because many of the victims were black.
[2] See, for instance, Eckel and Grossman (1996), Small and Loewenstein (2003), Breman (2006) and Fong (2006).

maintains a nationally representative sample of respondents who complete surveys and experiments by web TVs or PCs with Internet connections.

We experimentally manipulate race by showing respondents photographs of African American and Caucasian residents of the affected city. We show high fractions of African Americans in some treatment conditions and low fractions in others. We also experimentally manipulate the perceived income of recipients by telling randomly selected respondents true information about the median income of the city and how it compares to other cities. The experiment also manipulates the perceived moral worthiness of the recipients. Respondents then play the dictator game. We measure respondents' beliefs about the city and the recipients of its Habitat for Humanity chapter to examine the extent to which respondents' beliefs responded to our experimental manipulations. Finally, we ask a number of survey questions that measure, among other things, attitudinal support for public assistance to Katrina victims and various control variables.

We find highly significant effects of race, income and worthiness manipulations on beliefs about the race, income and worthiness of the recipients of Habitat for Humanity in the city in question. However, despite this, only income has a significant effect on giving: respondents are more generous when Katrina victims are perceived to be poorer. Perhaps surprisingly, race and worthiness of recipients do not significantly affect giving. Nor do they affect attitudinal support for government assistance to Katrina victims. Thus, our study suggests that to the extent that the private responses to Hurricane Katrina were slow and inadequate, race was unlikely the reason. To the extent the public response was slow and inadequate, this did not appear to be driven by victims' race reducing the pressure of the public on the government to act. One possible reason for these findings may be that the extreme and exogenous nature of Katrina made victims sufficiently "morally worthy", so that only their level of need – as signaled by their income – mattered. This interpretation is consistent with arguments made by others that racial discrimination is due not to a Becker-style (1971) taste for discrimination but to stereotypes about pertinent characteristics of other ethnic or racial groups (Chaim Fershtman and Uri Gneezy, 2001, Martin Gilens, 1999). For example, there is suggestive non-causal evidence that racial discrimination in support for welfare on the part of whites is mediated by beliefs that blacks are lazier than whites. In this scenario, if perceptions of moral worthiness do not govern generosity to disaster victims, then neither will the race of recipients.

In addition to extending our knowledge about individual motives for redistribution to the poor and needy, this paper contributes to the literature on the determinants of charitable giving. In particular, it belongs to a burgeoning set of broadly representative behavioral experiments on charitable giving to various causes such as university fundraisers and public radio. Some of the findings from these studies are that donors are sensitive to price (Catherine Eckel and Phillip Grossman, 2006, Dean Karlan and John A List, 2006), to expectations about the giving of other donors (Rachel Croson and Jen Shang, 2005, Bruno S. Frey and Stephan Meier, 2004), to the mechanism used to elicit giving (Craig Landry et al., 2006), and to gifts from the solicitor (Armin Falk, 2004). We show that in addition to these factors, donors are sensitive to the level of need of the recipients. In the context of giving to poor people, we find that individuals give significantly more when they believe that the recipients are poorer.

The rest of the paper is organized as follows. Section 2 summarizes some of the existing evidence on racial biases in redistributive settings. Section 3 presents the design of our study. Section 4 presents the results. Section 5 discusses a possible interpretation of the results and concludes.

2. Background

2.1 Prior Findings

Racial bias has been documented in a variety of economic settings using a variety of methods.[3] In the context of generosity from the relatively well-off to the relatively needy, much of the evidence of racial bias concerns public redistribution. These studies typically examine either self-reported preferences for public redistribution or actual government spending. A recent study found racial bias in attitudinal support for government aid to Katrina victims (Shanto Iyengar and

[3] In addition to racial bias in the contexts discussed in this paper, is has been documented in a variety of other economic settings. See, for instance, Munnell et al. (1996) and Cutler, Glaeser and Vigdor (1999) on housing market discrimination, and Bertrand and Mullainathan (2004) and Altonji and Blank (1999) on labor market discrimination. In the political process, racial heterogeneity has been linked to riots (DiPasquale and Glaeser, 1998), lower participation in social activities (Alesina and La Ferrara, 1999) and lower levels of trust (Alesina and La Ferrara, 2001). Individuals also prefer to form racially homogenous political jurisdictions (Alesina, Baqir and Hoxby 2000). In laboratory experiments, racial and ethnic biases have been found in several trust games. In addition to those cited above, see Glaeser et al. (2000). In ultimatum games, Eckel and Grossman (2001) find that blacks are significantly more egalitarian than whites, with significantly higher offers and rejection rates. However, their study focuses on gender and was not designed to test for discrimination between racial groups.

Richard Morin, 2006). This study presented each subject with a Katrina related story, accompanied by a headshot of a victim. The stories and headshots were fake but were presented as if they were real. The photos varied by various characteristics including race and gender. The researchers also varied skin tone by doctoring the photos so that for each photo, there was a light skinned and a dark skinned version. The preferred duration of support was significantly longer – by about a month – when a hypothetical white victim was shown as opposed to a black victim. However, the level of monthly support did not differ significantly by the race of the hypothetical victim. The researchers also report that skin tone affects attitudinal support for governmental redistribution to Katrina victims. Since the media will generally portray disaster victims in the context of disaster damage or disaster relief rather than as headshots devoid of context, it is not clear to which extent these results are externally valid.

Regarding attitudes to more general redistribution, a large number of studies have noted that race has a large and significant effect on attitudinal support for redistribution in the United States, with blacks showing more support than whites. However, this could be due to the correlation between race and income, which is notoriously poorly measured. Deeper analyses of attitudinal data show some interesting patterns. First, there is evidence that attitudinal support for welfare is lower among people who live in areas where welfare recipients are more likely to be of a different race (Erzo Luttmer, 2001).[4] This effect is attributed to racial group loyalty. Second, there is some evidence that racial bias in support for redistribution may be mediated by beliefs about the moral worthiness of blacks. More specifically, in a sample of white respondents, opposition to welfare is explained by the belief that blacks are lazy (Martin Gilens, 1999). However, it is not clear that the causation runs from beliefs to opposition to welfare. It seems quite plausible that these beliefs merely rationalize the attitudes to redistribution.

In a study on actual redistributive expenditures, Alberto Alesina, Reza Baqir and William Easterly (1999) find that ethnically homogeneous cities and counties spend more on social services and productive public goods. Another study found that AFDC payments were lower in states that had a higher fraction of black people (Alberto Alesina et al., 2001). However, as the authors acknowledge, this could be due to lower incomes in states with higher fractions of black

[4] See also Lee and Roemer (2006). They argue that racism can lower support for redistribution for two reasons: 1) voters may prefer less redistribution because it benefits other races and 2) voters may want redistribution but may vote for a party that opposes it because of that party's position on racial issues.

people. Although they control for median income of the states, this may not adequately capture the effects of lower incomes on funding for welfare.

Behavioral evidence on racial bias in redistribution yields more subtle but intriguing results. Two different studies – in Israel and South Africa – conducted both trust games and dictator games between people of different racial or ethnic groups who differed in socioeconomic status or SES (Justine Burns, 2004, 2006, Chaim Fershtman and Uri Gneezy, 2001).[5] In Israel, the groups were Ashkenazic and Eastern Jews. In South Africa, the groups were whites, blacks and people of mixed race. In the trust games, neither the low or high SES ethnic or racial group trusted the lower SES group as much as the higher SES group. When the same researchers conducted dictator games in the same subject populations, the bias either disappeared (in Israel) or switched directions (in South Africa) so that recipients from the lower SES racial group actually received more than recipients from the higher SES group. A third study in Belgium conducted trust games between Turkish and Belgian self-employed businessmen who did not differ substantially according to their socioeconomic status (Jan Bouckaert and Geert Dhaene, 2004). This study found no ethnic bias in the trust game.

2.2. Interpretation of Prior Findings

One interpretation of the results from the behavioral experiments cited above is that racial discrimination is driven not by a taste for discrimination as defined by Becker (1971) but rather by racial stereotypes which would lead one to mistrust members of other racial groups. This mistrust may lead people to discriminate in the trust game where trust is an issue but not in the dictator game where trust is not an issue (Chaim Fershtman and Uri Gneezy, 2001). This interpretation could also explain the results in the Belgian trust game conducted by Bouckaert and Dhaene (2004), because different ethnic groups may be more likely to trust each other when their social distance is smaller. Bouckaert and Dhaene (2004) argue that their experiment may

[5] A trust game is a two-player game in which the first player is given a sum of money, and may send any fraction of it, from zero to 100 percent, to the second player, keeping the rest for herself. The amount sent by the first player is multiplied (often by three) before it reaches the second player. The second player then decides how to divide the amount he received between the two players. The dictator game is a two-player game in which the first player is given a sum of money, and may send from zero to 100 percent, to the second player, keeping the rest for herself. The second player has an empty action set so the game ends there with each player earning the amount allocated by the first player.

have achieved lower social distance between the groups by using groups that differed only by ethnicity and not by profession or socioeconomic status.

Racial discrimination in attitudinal support for redistribution may also be driven by racial stereotypes (Martin Gilens, 1999). There is abundant evidence from attitudinal surveys, randomized survey experiments, and behavioral experiments that people give more money and support more government aid to potential recipients when they believe the recipients are "morally worthy", e.g., if recipients are perceived as industrious rather than lazy.[6] Gilens (1999) argues that racial bias (on the part of whites) in attitudes to welfare is mediated by beliefs that blacks are lazier than whites.

Finally, racial group loyalty may also be conditioned on beliefs about ingroup and outgroup members. Social psychologists have argued that ingroup members tend to believe that outgroup members have volitional control over their own bad outcomes – i.e. they are personally responsible for their bad outcomes – but not over their good outcomes – i.e. they cannot be credited for doing things right because they are just recipients of good luck (Marilynn B. Brewer and Norman Miller, 1996).

What all of these interpretations have in common is that unconditional motives, such as a Becker-style taste for discrimination, are insufficient to explain the evidence. Instead, racial or ethnic bias and group loyalty are conditioned on beliefs about pertinent characteristics of other racial or ethnic groups, or of members of outgroups more generally.

One possibility is that these beliefs about other racial groups matter because of reciprocity. Ethnic stereotypes may affect behavior in trust games but not in dictator games because the stereotypes affect the subjective likelihood that members of other races will reciprocate in the trust game. In contrast, in the dictator game, there is no opportunity to reciprocate or defect on a kind offer, so stereotypes that affect the likelihood of reciprocation may not be pertinent. Racial bias and group loyalty in the context of attitudinal support for redistribution might also be driven by reciprocity. If social psychologists are correct, then ingroup members may attribute the poverty of outgroup members to laziness rather than bad luck, but make the reverse attribution for ingroup members. Accepting assistance without trying hard to make it on one's own is a form of defection that can be punished by withholding assistance. Such punishment is a form of *generalized reciprocity*, which is reciprocity that may involve rewards or punishments to third

[6] See Christina Fong, Samuel Bowles and Herbert Gintis (2006) for a review.

parties: player A may reward or punish player B for his or her kind or unkind treatment of player C.

This interpretation is supported by careful work showing that group loyalty in "minimal group" experiments is driven by expectations of rewards from other group members (Toshio Yamagishi et al., 1999). Minimal group experiments assign subjects to groups based on trivial (minimal) factors. Subjects are then asked to divide payoffs between members of their own group (the ingroup) and members of the other group (the outgroup). The startling finding from these experiments is that people allocate more to ingroup members even though the group assignments are based on trivial factors. Many have argued that social categorization into groups is by itself sufficient to elicit this effect.[7] However, Yamagishi and colleagues (1999) point out that each group member's payoff is determined by someone else in his or her own group. When they change this feature of the experiments by setting the payoff exogenously for the subjects who allocate money between ingroup and outgroup members, group loyalty no longer occurs. That is, group loyalty appears to be conditioned on expectations of payments from other ingroup members. Yamagishi et al. (1999) attribute this to generalized reciprocity. More recently, generalized reciprocity among randomly assigned groups has been documented in a more natural setting – namely, among randomly assigned platoons in the Swiss army (Lorenze Goette et al., 2006). This body of research suggests that racial or other group stereotypes that affect the degree of trust in other groups may affect redistributive behavior through generalized reciprocity.

2.3. Limitations of Prior Research

Each of the studies reviewed in Section 2.1 has one or two of four important qualities. These qualities are: broad representation of the general population, dependent variables that are elicited in a context-rich natural setting, exogenous variation of race or ethnicity, and measurement of actual redistributive behavior rather than just attitudes or self-reported behavior. While we have learned a great deal from this prior research, each study lacks two or three of these qualities. Therefore, without further study, we cannot predict what role race may have played in the aftermath of Hurricane Katrina, or when and why it matters in redistributive behavior more generally. We attempt to help fill this knowledge gap with our broadly representative

[7] Tajfel, Billig, Bundy and Flament (1971) designed the minimal group experiment to argue this point.

randomized behavioral experiment on the role of race in giving to the needy in a natural redistributive setting.

3. Description of the Experiment

3.1. Knowledge Network and its Respondent Pool

The experiment was conducted through Knowledge Networks, a commercial survey and marketing research firm, founded by two Stanford political science professors. Knowledge Networks maintains a panel of respondents that it recruits through random-digit-dialing. These respondents agree to take a 15-20 minute survey once a week via the Internet using a PC or WebTV in exchange for free Internet and WebTV access. In addition, the panelists often receive incentive payments and rewards through a loyalty program. Knowledge Networks collects basic demographic characteristics for all its panelists, and its panelists are roughly representative of the whole U.S. population in terms of these characteristics. In addition to demographic characteristics, Knowledge Networks already collects certain additional characteristics (such as political attitudes and media exposure), which means that we did not to need to collect this information as part of our survey instrument.

3.2. Survey Instrument

We contracted with Knowledge Networks to administer our survey instrument to a sample of their panelists. Our main survey instrument, attached in full in Appendix A, consists of four parts. First, we show a brief presentation about a small city (Slidell, LA or Biloxi, MS) that was hit by Katrina. We experimentally manipulate the pictures and the accompanying audio of the presentation, as detailed below. Second, we measure generosity toward Katrina victims by asking the panelists how they would like to split a $100 between themselves and the charity Habitat for Humanity in the city about which they saw the presentation. This decision is implemented for 10% of the respondents. Third, we ask respondents about their perceptions of a number of other characteristics of Katrina victims who receive housing from Habitat in that city. In the fourth part, we ask miscellaneous survey questions. These include self-reported

preferences for government spending on Katrina victims in the city in question, charity spending on Katrina victims in that city, general attitudes toward government spending, and own past charitable giving. We do not mention race in the survey until the end of the fourth section, when we ask about their perception of the racial composition of Habitat for Humanity recipients in the relevant city and the racial composition of all residents in that city. These questions are followed by questions about how much contact they have with friends of different racial groups and their perception of the economic opportunities of African Americans relative to others in America.

While most respondents took the main survey instrument described above, we had a fraction of respondents take one of two alternative versions of the instrument: a "race-salient" instrument that states at the outset that the study is about race, and a "full-stakes" instrument in which all respondents play the $100 dictator game with certainty instead of having just a 10% chance of playing the game.

3.3. Randomized Manipulations

All instruments contain twelve randomly assigned experimental manipulations: two picture manipulations, nine audio manipulations, and which city was shown. The manipulations are described in detail below.

3.3.1. Photo Manipulations

Our instrument begins with a slide show of eight photos of actual people in the city after the hurricane. Many photos showed devastation caused by Katrina, such as extensive flooding or demolished housing. Others showed residents receiving in-kind aid. The slide show is accompanied by an audio story about the city's residents and Habitat for Humanity.

We manipulate race by using photos of mostly white residents in one treatment condition and photos of mostly black residents in the other.[8] We match the gender, age and number of people shown, as well as the background and the emotional connotation of the photos as closely as

[8] We did not use pictures exclusively of one race in order to reduce the chance that respondents would infer that our study is about race. Of the eight pictures, six pictures show Katrina victims of the race corresponding to the manipulation, but the third picture shows a Katrina victim of the other race and the sixth picture shows both black and white Katrina victims. Thus, roughly 80% of the people shown in the pictures were of the race corresponding to the manipulation.

possible. We also "blur" the people in the photos so that their race shows through but their attractiveness and other features are obscured.[9]

To estimate the effect of race while controlling for the effect of the backgrounds shown in the photos, we obscure the race of the people in half of the photos by filling in their images with blue coloring so they appear as solid blue shapes.

Together, these two manipulations – the race of the people in the picture and whether the people are "blurred" or "blued" – yield four different types of pictures. Each respondent is randomized into one of the resulting four cells:

A. ("black pictures & blur") Mostly black pictures, race shown but face is anonymized
B. ("white pictures & blur") Mostly white pictures, race shown but face is anonymized
C. ("black pictures & blue") Mostly black pictures, race concealed by solid blue shape
D. ("white pictures & blue") Mostly white pictures, race concealed by solid blue shape.

An example of these types of pictures is shown in figure 1. These four types of pictures allow us to use a difference-in-differences design to estimate the effect of the race of the people shown in the pictures on outcome variables, such as the amount given to Habitat for Humanity. We calculate average giving in each cell and estimate racial bias as the difference in giving to black and white recipients when the race can be seen (A-B) minus this difference when the race cannot be determined (C-D). This yields: (A-B)-(C-D). Alternatively, we can perform conceptually the same estimation in a regression framework, which will allow us to control for the other experimental manipulations and for respondent characteristics (such as income, regions, etc). Since experimental conditions are randomly assigned, these controls are not expected to substantially affect the estimated effect of recipient race, but it may make the estimate more precise. In the regression framework the effect of race is measured by the coefficient on the interaction term *Black pictures*×*Blur*.

3.3.2. Audio Manipulations

[9] We do this by reducing the resolution of the people in the picture (by pixilating the images of people).

If we find an effect of the picture manipulation on giving, we want to be able to determine whether such an effect is a direct effect of race or an indirect effect that operates through other characteristics of recipients that are associated with race. For example, suppose we find that respondents give more when they see black pictures. This could be a direct effect (respondents are more generous towards black victims per se) or an indirect effect: respondents may think that recipients are poorer if they perceive the fraction black to be higher, and give more because of the perceived lower income, not because of race per se. To judge the importance of such indirect effects, we need to be able to estimate the effect of such characteristics on giving.

We varied the audio text going with the pictures along eight characteristics that we judged to be (i) plausibly correlated in the public's mind with the racial composition of the city and (ii) likely determinants of generosity. These audio manipulations are: 1. The economic situation of the city, 2. Political preferences in the city, 3. Whether many residents attend church, 4. Whether many residents are law-abiding, 5. Whether residents help each other (reciprocity), 6. Whether many residents received government cash benefits before Katrina hit (rather than working), 7. Whether recipients had to contribute labor to their home from Habitat ("sweat equity"), 8. Whether residents took reasonable precautions against hurricanes. In addition, we varied the audio along a ninth dimension: Whether looting was mentioned in the audio text or not. We did this to see whether mentioning a charged topic such as looting would bring out racial biases in giving.

In addition to being able to determine whether any effect of race runs through any of these other characteristics of Katrina victims, the direct effect of these characteristics on giving is also of independent interest. Finally, it allows us to test for group loyalty: do respondents give more when recipients share certain characteristics (such as political orientation) with them.

We took care never to provide incorrect information. Instead by selectively providing or omitting certain information, we tried to influence respondents' perceptions of the city and of Katrina victims who receive housing from Habitat for Humanity in that city. Appendix table A.2 spells out the exact variations in the audio text that correspond to these nine manipulations as well as their corresponding perception questions.

3.3.3. Assignment of Manipulations

To maximize the statistical power of a manipulation, we want it to be applied in half the cases and be orthogonal to the other manipulations. Moreover, we ideally would want it to be orthogonal to interactions of the other manipulations. Independently randomizing each manipulation with probability one half will, *in expectation*, achieve these goals. However, due to sampling variation, randomization will not exactly achieve this goal. Instead, we created an experimental design in which manipulations are *exactly* applied in half the cases, and in which each manipulation is *exactly* orthogonal to each other manipulation. Observations were randomly (and without replacement) assigned to one of the combinations of manipulations in the design. Details of the construction of the design file are given in Appendix B. While the design file achieves exact orthogonalization, the manipulations in our sample are not exactly orthogonal because some of the respondents, who "used up" a manipulation combination from the design file, dropped out of our sample because they said that they did not hear the audio going with the presentation.

3.4. Measure of Giving to Katrina Victims.

We measure respondents' generosity towards Katrina victims in the city in question by asking them how they would like to split $100 between themselves and Habitat for Humanity in that city. Because we want to ensure that the answer can be interpreted as a revealed preference measure, we implement the decision for 10% of the respondents. To credibly convey that each respondent has a 10% chance of getting his or her decision implemented, we assign to each respondent a random number between 0 and 9, and tell respondents that their decision will be implemented if their number is equal to the first digit of the Pick3 game of the Louisiana State Lottery on a future date (June 23, 2006). To further make it clear that their decision can have real consequences, we also tell them that if their number equals the lottery number, Habitat will send them a note acknowledging how much they gave. See Appendix A for the exact wording.

Knowledge Networks has an ongoing relationship with its panelists. The respondents therefore likely understand that Knowledge Networks does not give them surveys in which promises are made that are subsequently not carried out, because this would damage this relationship. We are therefore reasonably confident that the respondents believed our instructions and acted accordingly.

4. Results

We fielded the three surveys from June 6-19, 2006 and received 1530 completed surveys. Of these, 182 respondents reported that they could not hear the audio component of the slide show. We did not administer the giving and perceptions parts of the survey to these respondents, and we do not use their data in this paper. This leaves 1348 surveys that contain all four parts. The main instrument was completed by 1,105 respondents, of which 248 are African American. The median completion time was 22 minutes. These respondents are roughly nationally representative except for an intentional oversampling of black respondents. We weight our results to correct for this oversampling. The race-salient and full-stakes instruments were only administered to non-black respondents and are thus roughly representative of the non-black population. The race-salient instrument was completed by 119 respondents and the full-stakes instrument by 124 respondents.

4.1. Effects of Experimental Manipulations on Perceptions

Before analyzing the effect of the experimental manipulations on various outcome variables, we examine the effect of the manipulations on respondents' perceptions of Habitat for Humanity recipients. If a manipulation fails to influence perceptions, then little inference can be drawn from any lack of an effect of that manipulation on an outcome variable, such as giving.[10] We first examine the effects of the picture manipulations and discuss the effects of the audio manipulations later below.

Table 1a shows the effect of the picture manipulations on the perceived percentage of Habitat for Humanity recipients that are black. In the column named "blur" the people in the pictures are blurred, allowing their race to show. Respondents who see pictures with black victims, on average, estimate that 55.7% of Habitat recipients are black, while those seeing pictures with white victims estimate that 46.0% are black. Thus, in the blur condition, the effect of the picture manipulation on the perceived fraction black is 9.6 percentage points, and highly statistically

[10] On the other hand, even if a manipulation fails to affect perceptions, it could conceivably affect an outcome variable through a subconscious mechanism.

significant. In the "blue" condition, all individuals in the pictures are rendered solid blue. As a result, the type of picture should not affect respondents' estimates of the racial composition of Habitat recipients, unless the background of the picture contained cues about race. In the "blue" version of the pictures with black victims, respondents on average believe 50.1% of victims are black. The corresponding figure is 48.7% for the "blue" version of the pictures with white victims. The difference is a statistically insignificant 1.5 percentage points. The resulting difference-in-differences (DD) estimate of the picture manipulation for the whole sample is thus 8.1 percentage points, which is highly statistically significant.

Since all pictures are pictures of actual Katrina victims of the city in question, we use two sets of pictures in our experiment: one set for Slidell and one set for Biloxi. Tables 1b and 1c show the effect of the picture manipulation separately for each city. These tables show that the changes in race perception are almost entirely driven by the Slidell pictures. For Slidell, showing blurred pictures of blacks rather than blurred pictures of whites increases the perceived fraction black by 13.4 percentage points, while the corresponding difference for the blued pictures is –0.1 percentage points. The difference-in-differences estimate of the picture manipulation for Slidell is thus 13.5 percentage points and highly statistically significant. In contrast, for Biloxi, the effect of seeing blurred black rather blurred white pictures is only 5.8 percentage points, though still statistically significant. However, after differencing out the effect of seeing black rather than white pictures in the "blue" version, the net effect of the picture manipulation is just 2.6 percentage points and statistically insignificant. We are very puzzled by the failure of the picture manipulation in Biloxi, particularly because the picture manipulation was statistically significant in both pilot studies with Biloxi, despite the much smaller sample sizes.[11]

Table 2 presents regressions of the perceived percentage of Habitat recipients who are black on the picture manipulations, audio manipulations and demographic controls. In expectation, the manipulations are mutually orthogonal and uncorrelated with demographic characteristics

[11] The first Biloxi pilot was fielded March 28-April 3, 2006. It had slightly different pictures and the corresponding DD estimate on racial perceptions was 21.6% (SE=10.5, N=54). The second Biloxi pilot was fielded April 7-April 13, 2006. It had two versions. In the first version, which was adopted for the main study, respondents saw pictures in which people were predominantly black or white, but which contained one picture with people from both races and one picture with people from the other race group. In the second version, respondents were shown pictures in which people were either all black or all white. The second version thus differs in two pictures from the first version. Combining both versions, the corresponding DD estimate on racial perceptions was 13.9 (SE=7.0, N=141) and just using the first version the estimate was 21.0 (SE=12.2, N=45).

because they were randomly assigned. Thus, we would expect the estimated effect of the picture manipulation on the race perceptions to be close to the DD estimates, which is indeed the case: the coefficient on *Black pictures* × *Blur* corresponds to the DD estimate. As before, it is positive and significant in the overall sample and the Slidell sample, but not in the Biloxi sample. The coefficient on *Blur* shows by how much the perceived fraction black changes when respondents see the blurred rather than the blued version of white pictures. For the overall sample and the Slidell subsample, this estimate is negative as expected. Finally, the estimate on *Black pictures* shows the effect of seeing blued black rather than blued white pictures. These estimates are all insignificant, which means that respondents could not infer much about racial composition from the picture backgrounds.

African Americans are less likely to be Republican. Thus, if respondents are Bayesian, one would expect the audio manipulation that increases the perceived fraction of Republicans in a city to lower the perceived fraction black. This is indeed the case, in both cities and in the overall sample. Similarly, when the audio manipulation suggests the city is relatively economically advantaged, the perceived fraction black decreases. This effect is significant in Slidell and marginally significant in the overall sample. Church attendance is relatively high among African Americans and, consistent with this, respondents perceive the fraction black to be higher when the audio manipulation suggests church attendance is high. Thus, by and large, the audio manipulations move the perceived fraction black in a fashion that is consistent with Bayesian updating. The demographic controls generally have little impact on the perceived fraction black. The only exception is respondent race: African American respondents perceive the fraction black to be about 10 percentage points lower than other respondents.

Since the picture manipulation only clearly works for Slidell, we will focus on the results for Slidell in the remainder of the paper, though we will often show corresponding results for Biloxi and the whole sample for completeness.[12] Table 3 splits out the racial perception regression for

[12] We extensively examined the effect of the picture manipulations on (i) the perceived fraction black, (ii) the perceived fraction white and (iii) the perceived fraction from other racial or ethnic groups (See appendix table A.3). We did this for the whole sample and by city, by respondent race, and by version of the survey instrument. For Slidell, the results consistently indicate that the black picture manipulation reduces the perceived fraction white, increases the perceived fraction black and has little effect on the perceived fraction from other groups. For Biloxi overall, the black picture manipulation significantly reduces the perceived fraction white, though only by 5.5 percentage points. However, non-black respondents perceived the fraction non-black to increase while black respondents perceived the fraction black to increase. As a result, the picture manipulation did not significantly increase the perceived fraction of any group.

Slidell by respondent race. For all the coefficients that are statistically significant in the total Slidell sample, the corresponding coefficients in the subsamples by race have the same sign and roughly the same magnitude. This indicates that black and non-black respondents respond similarly to the audio and picture manipulations in the formation of their perception of the race of Habitat recipients in Slidell.

Table 4 examines how the picture and audio manipulations affect respondents' perceptions of nine other characteristics of the Habitat recipients or the city they live in (see Appendix Table A.2 for precise definitions of these perception questions). The picture manipulation did not affect the perceptions of these other characteristics in either city at the 5% significance level. With three exceptions, each audio manipulation in each city changes the corresponding perception in the expected direction and is statistically significant at the 5% level. For example, saying that Republicans have a solid majority raised the perceived fraction of Habitat recipients that voted for Bush by about 15 percentage points in both cities. In Slidell, saying that the city is relatively economically advantaged raises the perceived median household income of Habitat recipients by 12 thousand dollars a year. The corresponding figure for Biloxi is about 4 thousand dollars. The three cases where an audio manipulation for a city does not work are the sweat equity manipulations in Slidell and in Biloxi, where saying that Habitat for Humanity requires all recipients to put in 300 hours of labor did not affect the perceived willingness of recipients to work hard, and the government assistance manipulation in Biloxi, where saying that postal disruptions caused many people to not receive their government assistance check did not affect the perceived fraction on government assistance.

4.2. Effects of Experimental Manipulations on Giving

Having established that most of the experimental manipulations change the corresponding perceptions (with the notable exception of the picture manipulation for Biloxi), we now examine whether the manipulations influence the amount respondents give to Katrina victims via Habitat for Humanity. After hearing and seeing the slide show, respondents decided how to split $100 between themselves and Habitat for Humanity in the city in question knowing there was a 10% chance that their decision would be implemented. On average, respondents gave $65 to Habitat, with 43% of respondents giving the full hundred dollars, 21% giving half and 8% giving nothing.

Table 5a presents the DD estimate of the effect of the picture manipulation on the dollar amount respondents decided to give to Habitat for the overall sample. Respondents gave about $1.6 more in response to black pictures when race was revealed ("blur"), but they gave $1.7 more in response to black pictures when race was concealed ("blue"). Thus, if anything, this effect was due to the backgrounds in the black pictures, not the race of the people in them. The difference, -$0.1, which is not statistically significant, is the estimated effect of seeing black Katrina victims on giving.

Since the picture manipulation most strongly changed race perceptions in Slidell, its effect on giving in Slidell is the more credible estimate of effect of the perceived race of victims on giving. The DD estimate indicates that seeing black Katrina victims reduces giving by $0.5 in Slidell, but this effect is not statistically significant. The corresponding figure is basically zero for Biloxi, but little inference can be drawn from this because the picture manipulation also did not move race perception in Biloxi.

Table 6 presents regressions of the effect of the picture and audio manipulations on giving. These regressions confirm the results presented in Table 5a. Respondents do not significantly change the amount they give in response to seeing black pictures in which race is visible. In the overall sample, the response is -$1.3 and in the Slidell subsample the response is $3.2. Thus, for Slidell, where the picture manipulation had the greatest effect on race perceptions, respondents, if anything, seem to increase their giving in response to black victims, but the 95% confidence interval ranges from -$9 to $15 for a manipulation that increases the perceived fraction black by 14 percentage points. We therefore conclude that the point estimates suggest there is little effect of victims' race on giving, but given this relatively large confidence interval, we are not able to rule out substantial racial biases.

The audio manipulations, almost all of which strongly affected the corresponding perceptions, do not significantly affect giving either, with the exception of the manipulation on the economic situation of the city. Respondents significantly reduced their giving, by $5.1 in the overall sample and by $10.0 in the Slidell subsample when we told them that the city was relatively economically advantaged.[13] The $10 decrease in giving represents a 16% decrease in

[13] The black picture manipulation reduces the perceived income of Habitat recipients by $4.4k (see table 4). Thus, in the absence of any direct effect of race, giving should have increased in response to the black picture manipulation since giving increases in response to lower income perceptions. In particular, given that the income manipulation increases perceived income by $12.2k (see table 4), a $4.4k reduction in perceived income should have

giving in response to a perceived increase in Habitat recipients' income of 42%. This suggests that the elasticity of giving with respect to recipient income is about –0.4. It should be kept in mind, however, that the income manipulation may have affected giving not only through its effect on perceived recipient income but also through the perceived economic situation of Slidell as a whole. These results suggest that need-based generosity may be the primary motive for giving to victims of a natural disaster. It is striking that the other manipulations, such as whether many victims were on government assistance or whether victims took reasonable precautions against hurricanes, have sufficiently small effects on giving that they do not show up as statistically significantly, despite the standard error on them being just $2.2 in the overall sample and $3.0 in the Slidell sample. Apparently, in the case of natural disasters, Americans are willing to assist victims independently of victims' characteristics, with the exception that victims from poorer areas receive more assistance.

4.3. Robustness Checks

4.3.1 Addressing Social Desirability

While we tried not to make it obvious to respondents that our study was about race (by not mentioning race or asking questions about race until the last section of the survey), many respondents undoubtedly correctly guessed that our study was about race. Thus, one possible interpretation of the result that giving does not seem to be influenced by the victims' race is that respondents may have changed their behavior because they did not want to appear racially biased (or see themselves as racially biased). This would not invalidate the results – on the contrary, it would suggest that knowledge that a certain behavior could be racially biased would reduce racial bias in that behavior. Still, it is interesting to know whether such a mechanism underlies our results on giving.

Ideally, we would like to eliminate any awareness among respondents that our study is about race. However, this is impossible, partly because of media coverage that links Katrina to race

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increased giving by (4.4/12.2) × $10.0 = $3.6, which is slightly higher than $3.2, the observed increase in giving in response to the picture manipulation in Slidell. Thus, controlling for income perceptions, the point estimate on the direct effect of race on giving also becomes slightly negative in Slidell. Alternatively, we can control for income perceptions in the regression by instrumenting for these perceptions using the income manipulation. The resulting estimated effect of the black picture manipulation on giving now becomes –$1.3 with a SE of $6.2.

relations in minds of many people. Instead, we chose to increase the saliency of race. We did this by altering our main instrument in two ways. First, in the opening screen, we told respondents that they participated in a study on "Hurricane Katrina, race relations, and whether the race of Katrina victims mattered for how America responded to Katrina." To drive this point home, we asked about race perceptions immediately after the slide presentation and before the question on giving. Because we are estimating the effect of the race of Habitat recipients in the race-salient instrument relative to that in the regular instrument, all pictures in the race-salient instrument were blurred (and none were blued). We administered the race-salient instrument only to non-black respondents because we would expect social desirability to be most relevant for them. If the effect of seeing blurred black pictures (relative to blurred white pictures) increased giving more in the race-salient instrument than in the regular instrument, we would conclude that we would have found a less positive (or more negative) effect of seeing black pictures in the regular instrument if respondents had been completely oblivious that our study was about race.

Panel A of Table 7 shows how respondents' giving behavior is affected by making race more salient. All the regressions in this table are estimated using a sample of non-black respondents. The coefficient on *Black pictures* × *Race-Salient and Blur* shows the difference between the effect of seeing blurred black pictures (rather than blurred white ones) in the race-salient instrument compared to the main instrument. The estimates are negative, though statistically insignificant, in the overall sample and in each of the cities. Thus, if anything, respondents seem to give less in response to black pictures when race is more salient, which is the opposite of what we would have expected to find if social desirability were partly driving our estimates on giving from the main sample.

4.3.2. Addressing Low Stakes

Another way of reducing the effect of social desirability is to make it more costly to give the socially desirable answer. Rather than having a 10% change of having their giving decision implemented, the respondents receiving the full-stakes version of our instrument had their decision implemented for sure. This instrument also addresses potential concerns about the validity of results from decisions that only have a probability of being pay-off relevant. In order

to make the $100 more "real" in the minds of the respondents, we gave them the $100 at the beginning of the instrument, before the slide show. After the slide show, we told them they could give away part of their $100 to Habitat for Humanity to help Katrina victims. The full-stakes instrument only contained blurred pictures and was administered only to non-blacks.

Panel B compares giving in the full-stakes instrument to giving in the main version. The coefficient on *Black pictures* × *Full-stakes and Blur* shows the effect of the full-stakes instrument on the amount respondents' give in response to blurred black pictures rather than blurred white pictures. The sign of the effect varies by city, but it is not statistically significant in either case. Thus, respondents do not appear to respond tremendously differently to victims' race when the stakes are higher. This suggests that our main effects were not driven by it being cheap in expected value for respondents to conceal a racial bias in giving. However, given the standard errors we cannot rule out that this might have been part of the mechanism. Larger stakes, however, do significantly reduce the average level of giving (by roughly $15).[14]

4.4. Group Loyalty

In the results so far, we examined whether Americans *on average* give more or less depending on the race of the recipients, and found no evidence of such an effect. It is conceivable, however, that this lack of an effect masks reactions in opposite directions by subgroups of the population. For example, seeing pictures of black recipients might increase giving among black respondents but decrease giving among white respondents. In table 8, we test for such group loyalty effects, i.e. whether respondents give more when the recipients belong to the same group, where group can be based on race, behaviors or beliefs.

Rows A and B examine racial group loyalty. In row A, we estimate racial group loyalty using a triple difference: we compare the DD estimate of black picture race on giving by black respondents to the DD estimate of black picture race on giving by non-black respondents. We find that in the overall sample, blacks give about $6.5 more in response to black pictures than non-black respondents. However, in the Slidell subsample, where the picture manipulation had

[14] This is a puzzle for expected utility theory: one's preferences over goods in a given state of the world should not depend on the probability of that state of the world. This puzzle can be resolved, for example, by recognizing that respondents may receive utility now ("warm glow") by making a "nice" decision about a future state of the world (independently of the likelihood of that state of the world).

the greatest effect on perceptions, blacks give about $7.4 less in response to black pictures than non-blacks do. Neither estimate is statistically significant.

The triple difference estimate presented in row A, allows for black and non-black respondents to react differently to the backgrounds of the pictures. In row B, we impose the assumption that the backgrounds of the pictures have the same effect on giving for respondents from different racial groups. If this assumption is valid, we can estimate racial group loyalty more precisely using a DD estimator that compares the difference in giving by respondent race to blurred black pictures to the difference in giving by respondent race to blurred white pictures. Thus, this DD estimator is only based on the subsample of observations that saw blurred pictures. For the DD estimator, we find that both in the overall sample and in the Slidell subsample black respondents, if anything, give less in response to black pictures than white respondents. Despite the 25% smaller standard errors, these estimates are not statistically significant. Overall, we believe that the estimates provide little support for racial group loyalty in the context of assistance to Katrina victims, though we recognize that the standard errors are sizeable.

In rows C though H, we examine group loyalty for groups based on political preferences, religiosity, economic situation (income), willingness to help others, and work behavior/attitudes. In all these cases, the fraction of recipients belonging to these groups is experimentally manipulated through the audio manipulations, which generally work equally well for both cities. Thus for these rows, there is no longer reason to consider the Slidell results as the most credible. We do not find evidence of group loyalty among these groups despite standard errors that are generally around $1.5 for the overall sample. We conclude that there is little evidence of group loyalty along these dimensions in the context of giving to disaster victims.

4.5. Other Measures of Support for Katrina Victims

In this experiment, we went to considerable length and expense to create a measure of generosity that is based on behavior because we believe that self-reported measures of generosity are more prone to be affected by respondents giving socially desired answers. Yet, it is interesting to examine how the response of these self-reported measures of generosity differ from our behavior-based measure of generosity. We collected three self-reported measures. First,

immediately after having made their decision on how much to give to Habitat, we ask "Suppose that you had not just given [the amount they just gave] to Habitat for Humanity. Instead, suppose that Habitat for Humanity in [city] had mailed a letter to your home describing the effects of Katrina on [city] and had asked you for a donation. How much, if anything, would you have given?" We call this amount *hypothetical giving*. After the questions about perceptions, we ask respondents, on a 7-point scale, whether they think the government should spend more or less on Katrina victims in the city in question and whether they think charities should spend more or less on Katrina victims in the city in question.

Table 9 presents the effects of the experimental manipulations on actual giving and these three self-reported measures of support. We only present the results for Slidell because the experimental manipulations had the greatest effects on perceptions in this city. We find that the audio manipulation that suggests that Katrina victims took reasonable precautions against hurricanes significantly increases subjective support for government spending on Katrina victims in Slidell. Otherwise none of the manipulations had an effect on these three self-reported measures that was significant at the 5% level. In particular, the income manipulation, which had a clear effect on actual giving, does not significantly reduce any of the other measures of support for Katrina victims.

4.6. Endogenous versus Exogenous Perceptions

A number of studies have explained preferences for redistribution based on self-reported beliefs or perceptions (Alberto Alesina, Edward Glaeser and Bruce Sacerdote, 2001, Christina M. Fong, 2001). While these studies are fascinating, they must deal with the question of whether the beliefs cause the preference for redistribution or merely serve to rationalize it. Since we have manipulations that both exogenously move perceptions and measure endogenous perceptions, we can examine to what extent these affect giving the same way. These results are presented in Table 10. Since the endogenous perceptions are correlated with demographic characteristics, we present the results with endogenous perceptions both with and without demographic controls.

The table shows that respondents give less when perceived income is higher, whether the income perception is experimentally manipulated or endogenous. However, there are also differences. The endogenous perception of crime significantly reduces giving. The point

estimate of –0.32 implies that a 25 percentage point increase in the fraction of Habitat recipients with a criminal record would reduce giving by 0.32×25= $8.00 (with a S.E. of 1.8). This, however, is well outside the confidence interval of the crime manipulation, which exogenously increases the perceived fraction with a criminal record with 25 percentage points. The endogenous perception of the fraction of Habitat recipients that is willing to work hard to get ahead in life also significantly increases giving. However, there is no inconsistency in this finding and the lack of effect of the sweat equity manipulation on giving, since the sweat equity manipulations did not significantly move this perception in the first place. Overall, we believe that these results indicate that care should be taken when using endogenous perceptions measures to explain outcomes.

5. Conclusion

Our experiment yielded three primary results. First, the perceived race and worthiness of Katrina victims had no significant effect on giving. Second, we found no evidence of group loyalty of any kind. Third, the perceived income of recipients mattered. Respondents gave significantly less when presented with information that caused them to believe that victims had relatively high incomes. We also have two interesting secondary results. First, there was a highly significant direct effect of the stakes – respondents gave $15 less on average (independently of the race in the pictures) when they played $100 dictator games with certainty compared to when they had only a 10% chance of playing the same game. Second, the mean offers were unusually high – respondents gave $65 of average in the main sample, and $50 on average in the full-stakes $100 game. In contrast, average offers in laboratory dictator games are often around 20% of the pie (Colin Camerer, 2003).

An interpretation of our findings suggested by the literature reviewed above is that racial bias occurs in situations involving reciprocity and trust via beliefs about other racial groups, but not necessarily in situations involving needs-based generosity. Instead, needs-based generosity, which appears to be important when need is severe and due to exogenous circumstances, may be the most relevant factor for giving in our experiment. If the reciprocity interpretation suggested by the literature is correct, then, given the overall lack of effects of perceived crime rates among victims and other indicators of worthiness, it would simultaneously explain the lack of racial bias

and the lack of group loyalty. This is because according to the reciprocity interpretation, racial bias and group loyalties would operate through perceptions of worthiness, but our measures of worthiness did not matter. Indeed, the only manipulation that had a significant effect on giving was the income level of the recipients. Respondents gave significantly less when presented with information that caused them to believe victims were richer. This suggests that respondents were concerned primarily with the level of need of the victims.

The high average offers in our experiment are also consistent with the idea that the extreme and exogenous nature of Katrina may have made recipients highly "worthy" of assistance. Other studies have shown that subjects give substantially more to "morally worthy" recipients. For example, in a dictator game experiment, subjects gave roughly three times more to the American Red Cross than to anonymous players (Catherine Eckel and Phillip Grossman, 1996).

Our results should not be taken as an indication of the absence of racial biases in general. Instead, they help us understand how and when racial bias may occur. Our results suggest that assistance to victims of exogenous events, such as natural disasters, is not racially biased. However, even if there is no racial bias in the public's response to an exogenous disaster, there could still be systematic racial bias in the incidence of these disasters. This is because racial bias elsewhere in the economy – e.g., in housing and labor markets – may increase the likelihood that blacks are victimized by a natural disaster, even if blacks and whites receive equal aid once victimized.

Appendix A: Survey Instrument

- Text that is notes is bold and in brackets. Text that is the name of a question or a variable name is in brackets and capital letters.
- Audio text that respondents hear is in italics; all other text the respondents read.
- For multiple choice questions they were given radio buttons to click on, in this appendix that feature shows up as numbered options [1], [2], [3], this is different from audio manipulations which are distinguished (0), (1).
- Separating lines correspond to new screens.
- **[City]** was replaced in both the text and the audio with either the word "Biloxi" or the word "Slidell" depending on the version.

– Main Questionnaire -

This is a study conducted by researchers at Carnegie Mellon University and Harvard University. The general topic is Hurricane Katrina and other issues facing America.
THANK YOU FOR YOUR PARTICIPATION!

[PART I. BACKGROUND ABOUT A SMALL CITY AFFECTED BY HURRICANE KATRINA]

Presentation about Hurricane Katrina

Shortly, you will see a brief presentation about the effects of Hurricane Katrina on a small town. However, first we would like to know, how closely did you follow the news about Hurricane Katrina and its aftermath?

Very closely (e.g., watching TV, listening to the radio or reading news about Katrina for more than an hour a day during the week following the hurricane) 1
Quite closely (e.g., watching TV, listening to the radio or reading news about Katrina for about 31-60 minutes a day during the week following the hurricane)..... 2
Somewhat closely (e.g., watching TV, listening to the radio or reading news about Katrina for about 10-30 minutes a day during the week following the hurricane)..... 3
Not too closely (e.g., watching, listening to, or reading headline news for a few minutes a day for one or more days during the week following the hurricane)..... 4
Not at all 5

Though you may already have seen quite a bit of media coverage about Katrina, much of the coverage focused on the effects of Katrina on New Orleans and its residents. However, many small towns and cities were also affected, and they differ in many ways from New Orleans. Next you will see a short presentation about the effects of Hurricane Katrina on a small city called **[CITY]**.

Please have the volume on your computer or TV adjusted so that you can clearly hear the speaker's voice that goes with the slides.

To respect their privacy, we have obscured the identities of the people shown in the slides.

During the presentation, the "Continue" button only becomes active after the speaker has finished.

[Respondents view first pair of pictures and hear following audio text]
Effects of Katrina on **[CITY]**
*As you may know, Hurricane Katrina hit the Gulf coast on August 29th, 2005. While the devastation in New Orleans received the most media coverage, many small cities in Louisiana and Mississippi were also affected. Here we show you some of the effects of Katrina on the residents of the small city of **[CITY]**.*

Contrary to what many people believe, this city differs in many ways from New Orleans, such as in terms of the make-up of the population or the effects of Katrina.
[REPUBLICAN]:

0. **[NO INFORMATION CONDITION]**

1. For example, while New Orleans votes overwhelmingly Democratic, Republicans have a solid majority in Slidell.

[Respondents view second pair of pictures and hear following audio text]
The Residents of **[CITY]**
[RECEIVING GOV'T BENEFITS]:
*Katrina also caused financial hardship for the residents of **[CITY]**. Many business operations had to close, and postal service to the area was interrupted for a long time.*

1. As a result, many recipients of government assistance stopped receiving their benefit checks.

0. As a result, many employees stopped receiving their pay-checks.

[ECONOMICALLY ADVANTAGED]:
[Biloxi] *0. Economically, Biloxi is relatively disadvantaged. Prior to Katrina, its median household income was well below the national average and its poverty rate was 18 percent higher than the rest of the country.*

1. **[NO INFORMATION CONDITION]**

[Slidell] *0.* **[NO INFORMATION CONDITION]**

1. Economically, Slidell is relatively well-off. Prior to Katrina, its median household income was above the national average and its poverty rate was 5 percent lower than the rest of the country.

[CRIME]:

0. This city has mostly law-abiding citizens.

1. This city has been troubled by crime and drug abuse.

[CHURCH ATTENDANCE]:

0. Many residents do not attend church on Sunday.

1. Many residents attend church on Sunday.

[CHURCH ATTENDANCE AND CRIME MANIPULATIONS WERE COMBINED INTO ONE SENTENCE, SUCH AS "THIS CITY HAS BEEN TROUBLED BY CRIME AND DRUG ABUSE, AND MANY RESIDENTS DO NOT ATTEND CHURCH ON SUNDAY."]

[RESPONDENTS VIEW THIRD PAIR OF PICTURES AND HEAR FOLLOWING AUDIO TEXT]
Reactions to Hurricane Katrina in **[CITY]**
*In **[CITY]**, there were a variety of reactions to the hurricane.*
[WILLING TO HELP OTHERS]:

0. When the threat of the Hurricane became clear, many residents became mostly concerned about their own situation and did not help others in need.

1. When the threat of the Hurricane became clear, many residents became concerned about the situation and helped others in need.

[LOOTING]:

0. **[NO INFORMATION CONDITION]**

1. *In the aftermath of Katrina, looting and lawlessness were a concern.*

Habitat for Humanity, a non-profit charity, has stepped in to help those in need of decent housing.

[RESPONDENTS VIEW FOURTH PAIR OF PICTURES AND HEAR FOLLOWING AUDIO TEXT]
Habitat for Humanity in **[CITY]**
[PREPARES FOR HURRICANES]:

0. Partly because many residents underestimated the risk of hurricanes, Katrina did considerable damage.

1. Even though many residents took reasonable precautions against hurricanes, Katrina did considerable damage.

*Fortunately, **[CITY]** has its own local chapter of Habitat for Humanity which helps build housing for people in the community who need it. Families moving into these homes experience an improvement in housing conditions that they could not have attained by themselves.*

[SWEAT EQUITY]:

0. *In return, they must invest at least 300 hours of labor – so-called "sweat equity" - into building their own homes.*
1. *In return, they must invest at least 300 hours of labor – so-called "sweat equity" - into building their own homes plus homes for other families.*

[SOUND CHECK] How well could you hear the speaker's voice in the presentation you just saw?

I didn't hear any sound 1
I heard some sound but couldn't understand what she was saying 2
The speaker's voice was clear and understandable 3

[IF RESPONDENT SELECTS 1 ("DIDN'T HEAR ANY SOUND") OR 2 ("COULDN'T UNDERSTAND WHAT SHE WAS SAYING") IN CHECK, SURVEY SKIPS TO DISPLAY SCREEN AT THE BEGINNING OF PART IV.]

[PART II. DECISION-MAKING TASK]

Decision-making task

Now, you are going to make a decision about assistance to Katrina victims in **[CITY].** 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.

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 **[CITY]**. 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 **[CITY]**. 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 **[CITY]** will mail you a note to confirm that we sent them exactly the amount you specified.

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.

[GIVING] Now, please decide how much of your $100 you want to give to Habitat for Humanity for Katrina victims in **[CITY]** 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 **[CITY]**.

[IF THE RESPONDENT DID NOT ENTER A NUMBER FROM 0 TO 100 THEY WERE GIVEN THE MESSAGE: "YOU HAVE ENTERED AN INVALID NUMBER. PLEASE ENTER A NUMBER FROM $0.00 TO $100.00"]

[CONFIRM] If the first number of the Pick3 draw on **[LOTTERYDATE]** is **[LOTTERYNUMBER]**, $**[AMOUNT FROM ABOVE]** will be sent to victims of Hurricane Katrina via Habitat for Humanity in **[CITY]**, and $**[100 - AMOUNT FROM ABOVE]** will be sent to you as a credit of **[1000*REMAINDER]** bonus points to your Knowledge Networks account.

Is this correct?

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

[SHOWN GIVING AGAIN IF RESPONDENT SELECTED "NO" IN CONFIRM]

[SHOWN FOLLOWING IF GIVING=0]

[HYPOTHETICAL GIVING]:

Suppose that Habitat for Humanity in **[CITY]** had mailed a letter to your home describing the effects of Katrina on **[CITY]** and had asked you for a donation. How much, if anything, would you have given?

[GIVEN A NUMBER BOX WITH A RANGE 0-99999]

[SHOWN FOLLOWING IF GIVING>0]

[HYPOTHETICAL GIVING]:

Suppose that you had not just given $**[GIVING]** to Habitat for Humanity. Instead, suppose that Habitat for Humanity in **[CITY]** had mailed a letter to your home describing the effects of Katrina on **[CITY]** and had asked you for a donation. How much, if anything, would you have given?

[GIVEN A NUMBER BOX WITH A RANGE 0-99999]

[PART III. QUESTIONS ABOUT [*CITY*]]

Factual questions about Katrina

From the information presented earlier, you may have learned more about **[CITY]**. Now, we'd like to ask you some questions about **[CITY]** and about the characteristics of Katrina victims who receive aid from Habitat for Humanity in **[CITY]**.

It is very important to us that you answer these questions as carefully as possible. We will give you 1500 bonus points for completing this section of the study. In return, we would appreciate it if you would put in extra effort to answer these questions as carefully as possible.

[WINDSPEED]: First, we'd like to know how severe you thought Hurricane Katrina was when it hit **[CITY]**. Note that, by definition, the maximum sustained wind speeds of category 1-5 storms are as follows: 74–95 mph for category 1, 96-110 mph for category 2, 111-130 mph for category 3, 131-155 mph for category 4, and 156 mph or more for category 5.

What do you think was the maximum sustained wind speed in **[CITY]** when Katrina hit?

74–95 mph (Category 1 hurricane) ..... [1]
96–110 mph (Category 2 hurricane) ..... [2]
111–120 mph (Category 3 hurricane) ..... [3]
121–130 mph (Category 3 hurricane) ..... [4]
131–139 mph (Category 4 hurricane) ..... [5]
140–155 mph (Category 4 hurricane) ..... [6]
156–169 mph (Category 5 hurricane) ..... [7]
170 mph or greater (Category 5 hurricane)..... [8]

[FOR EACH OF THE FOLLOWING QUESTIONS RESPONDENTS WERE GIVEN A NUMBER BOX WITH A RANGE 0 TO 100]

[INCOME OF HABITAT FOR HUMANITY RECIPIENTS].

We'd like to know what you think the median household income is for recipients of Habitat for Humanity in **[CITY]**. The median (i.e., middle) household income is the income where half of the Habitat households are richer and half are poorer.

As a reference, the Federal poverty standard is currently about $20,000 for a family of 4, and exactly half of all households in the U.S. have an income less than $44,000 per year

My best guess is that the median household income of recipients of Habitat for Humanity in **[CITY]** is about $ ___,000 per year.

[PERCENT OF RECIPIENTS WILLING TO WORK HARD]:

As your best guess, what percentage of recipients of Habitat for Humanity in **[CITY]** are willing to work hard in order to get ahead in life?

[PERCENT OF RECIPIENTS WITH A CRIMINAL RECORD]:

As your best guess, what percentage of recipients of Habitat for Humanity in **[CITY]** have a criminal record?

[PERCENT OF RECIPIENTS ATTENDING CHURCH]:

As your best guess, what percentage of recipients of Habitat for Humanity in **[CITY]** attend religious services almost every week?

[PERCENT OF RECIPIENTS WHO PREPARED FOR HURRICANE]:

As your best guess, what percentage of recipients of Habitat for Humanity in **[CITY]** prepared as well as one can reasonably expect for Hurricane Katrina?

[PERCENT OF RECIPIENTS HELPING OTHERS]:

. As your best guess, what percentage of adult recipients of Habitat for Humanity in **[CITY]** helped fellow hurricane victims when the threat of the Hurricane became clear?

[PERCENT OF RECIPIENTS RECEIVING GOV'T BENEFITS]:

As your best guess, what percentage of recipients of Habitat for Humanity in **[CITY]** received government cash assistance *before* Katrina hit?

[PERCENT OF RECIPIENTS WHO VOTED FOR BUSH]:

Now, we'd like to ask you about Habitat for Humanity recipients in **[CITY]** who voted in the 2004 Presidential election. As your best guess, what percentage of these people voted for George W. Bush?

[Part IV. Survey Questions]

Survey Questions

Now we'd like to ask you some survey questions about Hurricane Katrina and other issues. There are no right or wrong answers. Please simply answer the questions as truthfully as you can.

[KATRINA ASSISTANCE SPENDING – GOV'T]:

Compared to the current level of spending, do you think the government should spend more or less of its budget on rebuilding and assistance to Katrina victims in **[CITY]**?

Government should spend much LESS			Government should spend the same			Government should spend much MORE
[1]	[2]	[3]	[4]	[5]	[6]	[7]

[KATRINA ASSISTANCE SPENDING – CHARITIES]:

Compared to their current level of spending, do you think that charities should spend more or less of their budgets on rebuilding and assistance to Katrina victims in **[CITY]**?

Charities should spend much LESS			Charities should spend the same			Charities should spend much MORE
[1]	[2]	[3]	[4]	[5]	[6]	[7]

[HABITAT FOR HUMANITY EFFECTIVENESS]:

How effective do you think [City]'s local chapter of Habitat for Humanity is at getting aid to needy recipients? More specifically, out of every $100.00 that is donated to it, how many dollars do you think go to needy recipients?

[RESPONDENTS GIVEN A NUMBER BOX WITH RANGE 0 TO 100]

[GOV'T EFFECTIVENESS AND SPEED]:

Do you think the Federal Government responded as quickly and effectively as it should have to meet the needs of Katrina victims in **[CITY]**?

Yes ..... [1]
No ..... [2]

[GOV'T CAPABILITY AND CARING]:

To the degree that the response was inadequate, do you think the reason was primarily that the Federal Government did not care enough about the residents of **[CITY]** or that the Federal Government was not capable enough?

Government did not care enough						Government was not capable enough
[1]	[2]	[3]	[4]	[5]	[6]	[7]

[PERSONAL CONNECTION TO EVENT]:

Do you personally know someone who was injured or killed, lost property or had to evacuate because of Hurricane Katrina?

Yes ..... [1]
No ..... [2]

[PREFERENCES FOR SOCIAL SPENDING]:

We are faced with many problems in this country, none of which can be solved easily or inexpensively. Below, we list two of these problems. For each one, please tell us whether you think we're spending too much money on it, too little money, or about the right amount.

Programs for the poor (e.g., "welfare" or programs like TANF, food stamps, and public housing)

Spending too LITTLE			Spending about the right amount			Spending too MUCH
[1]	[2]	[3]	[4]	[5]	[6]	[7]

Social insurance programs (e.g., Social Security, Unemployment Insurance, and Medicare?).

Spending too LITTLE			Spending about the right amount			Spending too MUCH
[1]	[2]	[3]	[4]	[5]	[6]	[7]

[FOR THE FOLLOWING FOUR QUESTIONS RESPONDENTS WERE GIVEN NUMBER BOXES WITH A RANGE 0 TO 999999]

[THE FOLLOWING WAS SHOWN IF SOUND CHECK=3, HEARD SPEAKER'S VOICE]

[TOTAL GIVING TO KATRINA RELIEF]*:*

Not including any amount you may have given during his survey, what, approximately, is the total amount of money that you and people in your household donated towards the Katrina relief effort?

$ _____

[THE FOLLOWING WAS SHOWN IF SOUND CHECK=1 OR 2, DIDN'T HEAR OR UNDERSTAND SPEAKER'S VOICE]

[TOTAL GIVING TO KATRINA RELIEF]:

What, approximately, is the total amount of money that you and people in your household have donated towards the Katrina relief effort?

$ _____

[TOTAL GIVING TO CHARITIES FOR POVERTY]:

What, approximately, is the total amount of money that you and people in your household have donated in 2005 to charities that help poor people in the U.S.?

$ _____

[TOTAL GIVING TO CHARITIES – ALL]:

What, approximately, is the total amount of money that you and people in your household donated towards <u>all</u> charitable causes in 2005?

$ _____

[REASONS FOR POVERTY]

Now, we would like to ask you about some of the possible reasons why people are poor.

For each of the possible reasons listed below, please tell us how important you believe it is in explaining why some people in this country are poor.

Failure of society to provide good schools for everyone

Not at all important			Somewhat important			Extremely important

[1]	[2]	[3]	[4]	[5]	[6]	[7]

Loose morals and substance abuse

Not at all important			Somewhat important			Extremely important
[1]	[2]	[3]	[4]	[5]	[6]	[7]

Failure of the economy to provide enough jobs

Not at all important			Somewhat important			Extremely important
[1]	[2]	[3]	[4]	[5]	[6]	[7]

Lack of effort by the poor themselves

Not at all important			Somewhat important			Extremely important
[1]	[2]	[3]	[4]	[5]	[6]	[7]

[LIFE PRIORITIES]:

There are many important things in life, but some are more important than others. We are going to ask you about the five most important things from the list below.

First, what do you believe is the <u>most</u> important?

"Always to obey the law" ..... [1]
"To help others in need" ..... [2]
"To enjoy life" ..... [3]
"To work hard" ..... [4]
"To pray and go to church" ..... [5]
"To earn a lot of money" ..... [6]
"To avoid having to depend on government assistance" ..... [7]
"To be financially independent" ..... [8]
"To care for children" ..... [9]
"To get respect from others" ..... [10]

[LIFEPRIORITIES2]: What do you believe is second most important?
[SHOWN RESPONSES NOT SELECTED ABOVE]

[LIFEPRIORITIES3]: What do you believe is third most important?
[SHOWN RESPONSES NOT SELECTED ABOVE]

[LIFEPRIORITIES4]: What do you believe is fourth most important?
[SHOWN RESPONSES NOT SELECTED ABOVE]

[LIFEPRIORITIES5]: What do you believe is fifth most important?
[SHOWN RESPONSES NOT SELECTED ABOVE]

[FOR FOLLOWING TWO QUESTIONS RESPONDENTS WERE GIVEN NUMBER BOXES WITH RANGE 0 TO 100 SUMMING TO 100; WITH A SUM BOX FOR AMOUNTS ENTERED; THEY WERE WARNED IF THE PERCENTAGES WERE NOT EQUAL TO 100]

[PERCENT OF RECIPIENTS WHO ARE [RACE]]:

As your best guess, what percentage of recipients of Habitat for Humanity in **[CITY]** are:
White? _____ %
African American? _____ %
Another race? _____ %

[PERCENT OF RESIDENTS WHO ARE [RACE]]:

As your best guess, what percentage of all residents of **[CITY]** are:
White? _____ %
African American? _____ %
Another race? _____ %

[DIVERSE SOCIAL CIRCLE]:

How often do you socialize with friends from the following racial and ethnic groups?
Caucasian Americans (Whites)

Never	Once a year or less	A few times a year	Once or twice a month	Almost every week	Once a week	Everyday or almost everyday
[1]	[2]	[3]	[4]	[5]	[6]	[7]

African Americans

Never	Once a year or less	A few times a year	Once or twice a month	Almost every week	Once a week	Everyday or almost everyday
[1]	[2]	[3]	[4]	[5]	[6]	[7]

People from other racial or ethnic groups

Never	Once a year or less	A few times a year	Once or twice a month	Almost every week	Once a week	Everyday or almost everyday
[1]	[2]	[3]	[4]	[5]	[6]	[7]

[PERCEIVED RACIAL DISADVANTAGE]:

Just in your opinion, how do the economic opportunities of African Americans compare to the economic opportunities of other Americans? Do African Americans get many fewer opportunities, about the same number, or many more opportunities than other Americans?

Many FEWER			About the same			Many MORE
[1]	[2]	[3]	[4]	[5]	[6]	[7]

[ITEMIZE DEDUCTIONS]:

Do you itemize deductions on your Federal taxes?

Yes ..... [1]
No ..... [2]
Don't know ..... [3]

[CLOSE] Thinking about this topic, do you have any comments you would like to share?
[**OPEN ENDED TEXT BOX PROVIDED**]

Appendix B: The Experimental Design File

With 12 manipulations, there are 2^{12}=4084 possible manipulation combinations, and one would need as many observations to insure that each manipulation is exactly orthogonal to *all possible higher-order interactions* of the other 11 manipulations. It seems, however, unlikely that giving is significantly affected by higher-order interactions. We therefore use a fractional factorial design, in which all manipulations are applied in exactly half the cases and each manipulation is orthogonal to all other manipulations as well as to all possible second-order interactions of the other manipulations.

Because of our interest in the effects of race on giving, we wanted to make sure that the picture manipulations are orthogonal to all the other manipulations as well as any higher order interaction of the other manipulations. We achieved this for the main instrument by creating 8 arms based on the 2 picture manipulations (picture race condition and the blur/blue condition) and the race of the respondent. Within each arm, we give the same 32 combinations of the remaining 10 manipulations (9 audio manipulation and the city). This ensures that the picture manipulations and the respondent race are exactly orthogonal to each other, the 10 other manipulations and any higher-order interaction of any of the manipulations. These 32 combinations are given by the 2^{10-5}_{IV} fractional factorial design, which means that that each of these 10 manipulations are orthogonal to each other and to any second-order interaction of these 10 manipulations. These same 32 combinations are also given to the 2 arms in the race-salient and in the full-stakes versions of the instrument (recall that these instruments do not have the blue condition).

Since the sample size is larger for the non-black respondents of the main instrument, we gave the 32 manipulations (from the 2^{10-5}_{IV} design) three times and, in addition gave them 128 combinations for the 10 non-picture manipulations from a more powerful fractional factorial design. These 128 combinations come from the 2^{10-3}_{V} fractional factorial design, which means that each of these 10 manipulations are orthogonal to each other, and to any second- and third-order interaction of these 10 manipulation. In addition, any second-order interaction of these 10 picture manipulations is orthogonal to any other second-order interaction. The design file for the non-black respondents of the main instrument thus consisted of 4 arms × (3 × 32 combination from the 2^{10-5}_{IV} design + 128 combinations from the 2^{10-3}_{V} design) = 896 manipulation combinations.

Figure 1. Difference-in-Differences Design

(A)
Black picture & Blur



-

(C)
Black picture & Blue



=

A-C = Effect of black race (relative to unknown race)

-

-

-

(B)
White picture & Blur



-

(D)
White picture & Blue



=

B-D = Effect of white race (relative to unknown race)

A-B = Effect of race and background

-

C-D = Effect of background difference only

=

A-B-C+D = Effect of black race relative to white race

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Table 1a. Main Sample: Perceived Percent Black Habitat Recipients

	Blur	Blue	Difference
Black pictures	55.7 (1.2)	50.1 (1.2)	5.5** (1.7)
	273	269	
White pictures	46.0 (1.2)	48.7 (1.2)	-2.6 (1.7)
	277	266	
Difference	9.6** (1.7)	1.5 (1.7)	8.1** (2.4)

Note: Main sample, N=1085. The outcome variable is the answer to the question: "As your best guess, what percentage of recipients of Habitat for Humanity in [City] are African American?". Standard errors in parentheses, number of observations below. Significance levels: *: 10 percent; ** 5 percent. Not weighted. No controls.

Table 1b. Slidell: Perceived Percent Black Habitat Recipients

	Blur	Blue	Difference
Black pictures	55.5 (1.7)	47.2 (1.8)	8.3** (2.4)
	133	135	
White pictures	42.1 (1.6)	47.3 (1.8)	-5.2** (2.5)
	139	128	
Difference	13.4** (2.3)	-0.1 (2.6)	13.5** (3.5)

Note: Slidell portion of the main sample, N=535.

Table 1c. Biloxi: Perceived Percent Black Habitat Recipients

	Blur	Blue	Difference
Black pictures	55.9 (1.7)	53.1 (1.5)	2.8 (2.2)
	140	134	
White pictures	50.0 (1.6)	49.9 (1.6)	0.1 (2.3)
	138	138	
Difference	5.8** (2.3)	3.2 (2.1)	2.6 (3.2)

Note: Biloxi portion of the main sample, N=550.

Table 2. Perceived Percent Black Habitat Recipients

	All		Slidell		Biloxi	
	Coef.	(S.E.)	Coef.	(S.E.)	Coef.	(S.E.)
Black pictures × Blur	8.0**	(2.3)	13.8**	(3.3)	1.9	(3.2)
Blur	-2.6	(1.7)	-5.4**	(2.4)	0.6	(2.2)
Black pictures	1.4	(1.6)	0.3	(2.5)	2.6	(2.1)
Audio Manipulations:						
Republican	-3.4**	(1.2)	-3.4**	(1.7)	-3.4**	(1.6)
Economically advantaged	-2.1*	(1.2)	-3.8**	(1.7)	-0.8	(1.6)
Receiving gov't benefits	1.5	(1.2)	3.4**	(1.7)	0.2	(1.6)
Prepares for hurricanes	0.3	(1.2)	4.5**	(1.7)	-3.5**	(1.6)
Church attendance	2.4**	(1.2)	2.5	(1.7)	2.8*	(1.6)
Crime	1.4	(1.2)	2.2	(1.7)	1.0	(1.6)
Willing to help others	0.0	(1.2)	0.5	(1.7)	-0.1	(1.6)
Sweat equity	-0.3	(1.2)	-1.7	(1.7)	1.1	(1.6)
Mention of looting	1.3	(1.2)	0.0	(1.7)	1.7	(1.6)
Slidell	-2.2	(1.6)				
Demographic controls	Yes		Yes		Yes	
R^2	0.108		0.164		0.105	
N	1085		535		550	

Note: Robust standard errors between parentheses. Significance levels: *: 10 percent; ** 5 percent. The outcome variable is the perceived percentage of Habitat for Humanity recipients in the city in question that is African American. Weighted to adjust for oversampling of African Americans. Demographic controls consist of age, age squared, race (non-hispanic black, non-hispanic white, other), education categories (dropout, high school, some college, college plus), gender, log household size, log household income, dummy for dual income household, dummy for owning a home, marital status, presence of children, region of country (northeast, midwest, west, south), living in a metro area, labor force participation (working, retired, disabled, unemployed, not working for other reason).

Table 3. Slidell: Race Perceptions by Respondent Race

	Baseline		Black Respondents		Non-black Respondents	
	Coef.	(S.E.)	Coef.	(S.E.)	Coef.	(S.E.)
Black pictures × Blur	13.8**	(3.3)	15.4	(9.6)	13.9**	(3.6)
Blur	-5.4**	(2.4)	-7.8	(6.5)	-5.4**	(2.6)
Black pictures	0.3	(2.5)	-4.7	(7.4)	0.8	(2.7)
Audio Manipulations:						
Republican	-3.4**	(1.7)	-6.1	(5.0)	-2.7	(1.9)
Economically advantaged	-3.8**	(1.7)	-7.3	(4.8)	-3.1	(1.9)
Receiving gov't benefits	3.4**	(1.7)	4.0	(4.9)	3.2*	(1.9)
Prepares for hurricanes	4.5**	(1.7)	4.0	(4.1)	4.9**	(1.9)
Church attendance	2.5	(1.7)	0.6	(4.5)	2.6	(1.9)
Crime	2.2	(1.7)	3.1	(4.5)	2.9	(1.9)
Willing to help others	0.5	(1.7)	-6.2	(4.3)	1.5	(1.9)
Sweat equity	-1.7	(1.7)	-3.2	(5.0)	-1.8	(1.9)
Mention of looting	0.0	(1.7)	-1.0	(4.8)	0.0	(1.9)
Demographic controls	Yes		Yes		Yes	
R^2	0.164		0.180		0.158	
N	535		122		413	

Note: Robust standard errors between parentheses. Significance levels: *: 10 percent; ** 5 percent. The outcome variable is the perceived percentage of Habitat for Humanity recipients in the city in question that is African American. Weighted to adjust for oversampling of African Americans. Demographic controls are the same as in table 2.

Table 4. Perceptions of Other Characteristics of Habitat Recipients

	Slidell, LA					Biloxi, MS				
	Black pictures × Blur		Corresponding Audio Manipulation			Black pictures × Blur		Corresponding Audio Manipulation		
Dependent Variable:	Coef.	(S.E.)	Coef.	(S.E.)	R^2	Coef.	(S.E.)	Coef.	(S.E.)	R^2
% Vote for Bush (m=51 sd=24)	-4.0	(3.8)	16.0**	(2.0)	0.19	-6.6	(4.1)	14.1**	(2.1)	0.15
Income of HfH recipients ($000/HH/yr, m=26 sd=16)	-4.4	(2.8)	12.2**	(1.9)	0.17	1.3	(1.8)	3.6**	(0.9)	0.14
% Receiving gov't benefits (m=34 sd=28)	0.1	(4.8)	7.2**	(2.4)	0.12	1.1	(5.1)	0.6	(2.5)	0.08
% Prepared for hurricanes (m=50 sd=28)	8.0	(4.9)	6.8**	(2.5)	0.16	0.4	(4.7)	14.5**	(2.3)	0.14
% Attend church (m=52 sd=28)	-1.7	(4.4)	28.8**	(2.2)	0.31	-7.5*	(4.3)	25.8**	(2.2)	0.27
% With a criminal record (m=23 sd=20)	3.8	(3.1)	9.1**	(1.6)	0.23	1.5	(3.3)	5.9**	(1.7)	0.16
% Helping others (m=52 sd=31)	5.7	(4.7)	31.1**	(2.5)	0.31	-5.6	(5.0)	25.2**	(2.4)	0.23
% Willing to work hard (m=72 sd=23)	-1.2	(3.8)	2.9	(2.0)	0.10	-3.1	(4.0)	-0.4	(2.0)	0.15
Windspeed in town (8-point scale, m=4.8 sd=1.7)	0.2	(0.3)	N/A		0.07	0.3	(0.3)	N/A		0.08

N varies between 532 and 541 for Slidell and between 550 and 560 for Biloxi. Significance levels: *: 10 percent; ** 5 percent. Robust standard errors between parentheses. All regressions include all demographic controls listed in table 2 as well as dummies for "blur", picture race, and the 9 audio manipulations. Weighted to correct for oversampling of African Americans.

Table 5a. Main Sample: Giving To Habitat ($ out of $100)

	Blur	Blue	Difference
Black pictures	66.3 (2.2)	65.6 (2.2)	0.7 (3.1)
	280	273	
Non-black pictures	64.7 (2.2)	63.9 (2.2)	0.8 (3.1)
	280	268	
Difference	1.6 (3.1)	1.7 (3.1)	-0.1 (4.4)

Note: Main sample, N=1101. The outcome variable is the dollar amount that the respondent chose to give to Katrina Victims via Habitat for Humanity in the city in question. Standard errors in parentheses, number of observations below. Significance levels: *: 10 percent; ** 5 percent. Not weighted. No controls.

Table 5b. Slidell: Giving To Habitat ($ out of $100)

	Blur	Blue	Difference
Black pictures	68.0 (3.0)	66.3 (3.0)	1.7 (4.2)
	137	136	
White pictures	62.7 (3.0)	60.5 (3.3)	2.2 (4.5)
	140	128	
Difference	5.4 (4.3)	5.8 (4.4)	-0.5 (6.1)

Note: Slidell portion of the main sample, N=541.

Table 5c. Biloxi: Giving To Habitat ($ out of $100)

	Blur	Blue	Difference
Black pictures	64.6 (3.1)	64.9 (3.2)	-0.3 (4.4)
	143	137	
White pictures	66.7 (3.1)	67.0 (3.0)	-0.3 (4.3)
	140	140	
Difference	-2.1 (4.4)	-2.1 (4.4)	0.0 (6.2)

Note: Biloxi portion of the main sample, N=560.

Table 6: Giving to Habitat ($ out of $100)

	All		Slidell		Biloxi	
	Coef.	(S.E.)	Coef.	(S.E.)	Coef.	(S.E.)
Black pictures × Blur	-1.3	(4.3)	3.2	(6.0)	-5.1	(6.3)
Blur	3.4	(3.1)	1.5	(4.4)	3.9	(4.3)
Black pictures	1.6	(3.1)	2.2	(4.2)	-0.2	(4.6)
Audio Manipulations:						
Republican	0.5	(2.2)	1.3	(3.0)	-0.6	(3.2)
Economically advantaged	-5.1**	(2.2)	-10.0**	(3.0)	-0.1	(3.1)
Receiving gov't benefits	-1.0	(2.2)	1.3	(3.0)	-3.0	(3.2)
Prepares for hurricanes	1.7	(2.2)	2.5	(3.0)	1.3	(3.1)
Church attendance	-1.2	(2.2)	-2.0	(3.0)	-0.4	(3.2)
Crime	1.4	(2.2)	4.8	(3.0)	-1.6	(3.2)
Willing to help others	1.7	(2.2)	0.5	(3.0)	2.3	(3.2)
Sweat equity	-1.3	(2.2)	-2.8	(3.0)	0.3	(3.1)
Mention of looting	-2.7	(2.2)	-3.9	(3.1)	-0.2	(3.1)
Slidell	2.9	(3.0)				
Demographic controls	Yes		Yes		Yes	
R^2	0.129		0.200		0.124	
N	1101		541		560	

Note: Robust standard errors between parentheses. Significance levels: *: 10 percent; ** 5 percent. The outcome variable is the dollar amount that the respondent chose to give to Katrina Victims via Habitat for Humanity in the city in question. Weighted to adjust for oversampling of African Americans. The demographic controls are the same as in table 2.

Table 7: Race-Salient and Full-Stakes Instruments

Dependent Variable: Giving ($ out of $100)	All		Slidell		Biloxi	
	Coef.	(S.E.)	Coef.	(S.E.)	Coef.	(S.E.)
Panel A: Race-Salient						
Black pictures × Race-Salient and Blur	-9.3	(7.1)	-13.5	(10.7)	-5.7	(9.7)
Black pictures × Blur	-2.4	(4.8)	3.6	(6.7)	-7.7	(6.9)
Blur	4.0	(3.4)	1.1	(5.0)	5.6	(4.9)
Black pictures	2.9	(3.4)	2.6	(4.8)	1.9	(5.1)
Race-Salient and Blur	2.2	(4.9)	8.2	(7.2)	-4.4	(6.7)
Demographic and Audio controls	Yes		Yes		Yes	
R^2	0.1303		0.1899		0.1451	
No. of Race-Salient observations	119		61		57	
N	972		477		495	
Panel B: Full-Stakes						
Black pictures × Full-Stakes and Blur	2.1	(7.3)	-5.0	(10.5)	10.6	(10.0)
Black pictures × Blur	-2.2	(4.8)	3.9	(6.7)	-7.3	(6.9)
Blur	3.9	(3.4)	1.3	(5.0)	4.9	(4.8)
Black pictures	2.9	(3.4)	2.9	(4.8)	1.4	(5.1)
Full-Stakes and Blur	-15.9**	(5.2)	-9.6	(7.5)	-22.0**	(7.2)
Demographic and Audio controls	Yes		Yes		Yes	
R^2	0.1348		0.2117		0.1363	
No. of Full-Stakes observations	124		57		67	
N	978		473		505	

Note: Robust standard errors between parentheses. Significance levels: *: 10 percent; ** 5 percent. The outcome variable is the dollar amount that the respondent chose to give to Katrina Victims via Habitat for Humanity in the town in question. Non-black respondents only. The Race-Salient and the Full-Stakes versions of the instrument only contained blurred pictures. The demographic and audio controls are the same as in table 2.

Table 8: Group Loyalty

Dependent Variable: Giving ($ out of $100)	All		Slidell		Biloxi	
	Coef.	(S.E.)	Coef.	(S.E.)	Coef.	(S.E.)
A: By race (DDD-estimate)						
Black pictures × Blur × Black respondent	6.5	(9.6)	-7.8	(13.6)	16.8	(14.2)
B: By race (DD-estimate, Blur sample only)						
Black pictures × Black respondent	-2.7	(6.9)	-7.4	(10.3)	4.7	(10.7)
C: By political orientation						
(Audio manip.: Republican) × R's affiliation with Republicans	1.1	(1.0)	0.7	(1.4)	1.4	(1.4)
D: By religiosity, using respondent church attendence						
(Audio manip.: Church attendence) × R's church attendence	-1.6	(1.4)	-0.5	(1.9)	-2.0	(2.0)
E: By religiosity, using respondent's importance rating of praying						
(Audio manip.: Church attendence) × R values praying	-0.5	(1.1)	0.2	(1.5)	-1.5	(1.5)
F: By economic situation						
(Audio manip.: Econ. advantaged) × R's log household income	1.7	(1.6)	2.7	(3.4)	-0.7	(3.4)
G: By willingness to help others						
(Audio manip: Willing to help others) × R values helping others	0.8	(1.2)	2.3	(1.7)	0.3	(1.8)
H: By attitude towards work						
(Audio manip: Received gov't benefits) × R does not value work	-1.8	(1.3)	0.1	(1.7)	-3.2*	(1.9)

Note: Robust standard errors between parentheses. Significance levels: *: 10 percent; ** 5 percent. The outcome variable is the dollar amount that the respondent chose to give to Katrina Victims via Habitat for Humanity in the town in question. Weighted to adjust for oversampling of African Americans. All regressions contain controls for the lower order terms of the interaction terms shown, controls for the picture manipulations, controls for the audio manipulations, and the same demographic controls as in table 2. *Affiliation with Republicans* is self-identified party affiliation measured on a 7-point scale from "strong Democrat" to "strong Republican." *Church attendance* is measured on a 6-point scale from "never" to "more than once a week." *R values praying, R values helping others*, and *R values work* all come from the life priorities question in which respondents were asked to rank 10 possible life priorities. The score runs from 1 (not among the top 5 priorities) to 6 (the top priority). *R does not value work* is the reverse coded version of *R values work*.

Table 9. Other Measures of Support to Katrina Victims

	Actual Giving to Katrina Victims in Slidell (via Habitat)		Hypothetical Giving to Katrina Victims in Slidell (via Habitat)		Subjective Support for Government Spending on Katrina victims in Slidell		Subjective Support for Charity Spending on Katrina victims in Slidell	
	Coef.	(S.E.)	Coef.	(S.E.)	Coef.	(S.E.)	Coef.	(S.E.)
Black pictures × Blur	3.2	(6.0)	-6.5	(4.3)	-0.27	(0.25)	-0.23	(0.21)
Blur	1.5	(4.4)	2.1	(2.8)	0.18	(0.18)	0.03	(0.15)
Black pictures	2.2	(4.2)	5.4*	(3.2)	0.22	(0.19)	0.29*	(0.16)
Audio Manipulations:								
Republican	1.3	(3.0)	-1.4	(2.1)	0.02	(0.12)	-0.07	(0.11)
Economically advantaged	-10.0**	(3.0)	-1.3	(2.2)	-0.16	(0.13)	-0.12	(0.11)
Receiving gov't benefits	1.3	(3.0)	-0.3	(2.3)	0.10	(0.13)	0.06	(0.11)
Prepares for hurricanes	2.5	(3.0)	-0.8	(2.1)	0.32**	(0.13)	0.00	(0.11)
Church attendance	-2.0	(3.0)	-1.2	(2.2)	-0.01	(0.13)	-0.03	(0.11)
Crime	4.8	(3.0)	-0.3	(2.1)	-0.21*	(0.12)	0.02	(0.11)
Willing to help others	0.5	(3.0)	0.3	(2.2)	0.12	(0.13)	0.11	(0.11)
Sweat equity	-2.8	(3.0)	-0.6	(2.3)	-0.12	(0.13)	-0.08	(0.11)
Mention of looting	-3.9	(3.1)	-2.2	(2.3)	-0.07	(0.13)	-0.04	(0.11)
Demographic controls	Yes		Yes		Yes		Yes	
R^2	0.200		0.076		0.113		0.095	
N	541		541		538		536	

Note: Robust standard errors between parentheses. Significance levels: *: 10 percent; ** 5 percent. The demographic controls are the same as in table 2. Hypothetical giving is in $. Subjective support for government spending and charity spending is on a 7-point scale. Mean and standard deviation are 4.8 (1.4) for government spending and 4.7 (1.2) for charity spending.

Table 10. Exogenous versus Endogenous Perceptions

Dependent Variable: Giving ($ out of $100)	Response to Exogenous Manipulations Coef.	(S.E.)		Response to Endogenous Perceptions Coef.	(S.E.)	Response to Endogenous Perceptions Coef.	(S.E.)
Picture Manipulation			*Corresponding Perception*				
Black pictures × Blur	-1.3	(4.3)	%Black	0.00	(0.06)	-0.02	(0.06)
Audio Manipulations:			*Corresponding Perceptions*				
Republican	0.5	(2.2)	% Vote for Bush	0.04	(0.05)	0.05	(0.05)
Economically advantaged	-5.1**	(2.2)	Log Income of HfH recipients	-4.46*	(2.44)	-4.69*	(2.41)
Receiving gov't benefits	-1.0	(2.2)	% Receiving gov't benefits	0.05	(0.04)	0.03	(0.04)
Prepares for hurricanes	1.7	(2.2)	% Prepared for hurricanes	0.08*	(0.04)	0.08*	(0.04)
Church attendance	-1.2	(2.2)	% Attend church	0.01	(0.04)	0.01	(0.04)
Crime	1.4	(2.2)	% With a criminal record	-0.32**	(0.07)	-0.16**	(0.07)
Willing to help others	1.7	(2.2)	% Helping others	0.02	(0.04)	0.03	(0.04)
Sweat equity	-1.3	(2.2)	% Willing to work hard	0.17**	(0.06)	0.13**	(0.06)
			Windspeed in town	-0.58	(0.65)	-0.51	(0.64)
Other controls			*Other controls*				
Blur	3.4	(3.1)	Blur	0.94	(2.25)	2.92	(2.19)
Black pictures	1.6	(3.1)	Black pictures	2.32	(2.26)	1.70	(2.21)
Slidell	2.9	(3.0)	Slidell	-2.53	(2.36)	-2.06	(2.33)
Mention of looting	-2.7	(2.2)	Mention of looting	-2.65	(2.26)	-2.57	(2.19)
Controls for demographics	Yes			No		Yes	
R^2	0.129			0.087		0.164	
N	1101			1018		1018	

Note: Robust standard errors between parentheses. Significance levels: *: 10 percent; ** 5 percent. The outcome variable is the dollar amount that the respondent chose to give to Katrina Victims via Habitat for Humanity in the town in question. Weighted to adjust for oversampling of African Americans. The demographic controls are the same as in table 2.

Table A.1. Summary Statistics

	Mean	S.D.	Min	Max	N
Outcome variables					
Giving ($ out of $100)	66.5	36.2	0	100	1101
Gave $100	0.454	0.498	0	1	1105
Gave $50	0.203	0.402	0	1	1105
Gave nothing	0.086	0.280	0	1	1105
Gave other amount	0.257	0.437	0	1	1105
Hypothetical giving	19.9	38.2	0	500	1101
Preference for government spending on Katrina victims in [city]	4.83	1.47	1	7	1098
Preference for charity spending on Katrina victims in [city]	4.85	1.19	1	7	1094
Perception variables					
% of Habitat recipients in [city] that is black	51.2	19.2	0	100	1085
% of Habitat recipients in [city] that is white	35.4	18.9	0	100	1085
% of Habitat recipients in [city] that is from another race/ethnic group	13.4	11.0	0	80	1085
% of all residents of [city] that is black	46.6	19.6	0	100	1061
% of all residents of [city] that is white	41.5	20.1	0	100	1061
% of all residents of [city] that is from another race/ethnic group	11.9	10.2	0	75	1061
% of voting Habitat recipients in [city] who voted for Bush in the 2004 election	51.5	23.9	0	100	1088
Household income of Habitat recipients in [city] in $'000 per year	25.8	15.5	0	300	1089
% of Habitat recipients in [city] that received government cash assistance prior to Katrina	33.9	28.3	0	100	1092
% of Habitat recipients in [city] that prepared as well as one can reasonably expect for Hurricane Katrina	49.6	28.4	0	100	1094
% of Habitat recipients in [city] that attend religious services almost every week	52.4	27.9	0	100	1093
% of Habitat recipients in [city] that have a criminal record	22.8	19.6	0	100	1086
% of Habitat recipients in [city] that helped fellow hurricane victims	52.0	31.1	0	100	1084
% of Habitat recipients in [city] that are willing to work hard in order to get ahead in life	72.2	22.8	0	100	1091
Maximum sustained windspeed of Hurricane Katrina in [city] (1-8 scale)	4.79	1.72	1	8	1101
Demographic control variables					
Age	48.08	16.52	18	88	1105
Age^2 / 100	25.84	16.47	3.24	77.44	1105
Dual income household	0.540	0.499	0	1	1105
High school dropout	0.125	0.330	0	1	1105
High school degree	0.321	0.467	0	1	1105
Some college	0.278	0.448	0	1	1105
College or more	0.276	0.447	0	1	1105
Black	0.120	0.325	0	1	1105
Not white or black	0.141	0.348	0	1	1105
Female	0.459	0.499	0	1	1105
Log household size	0.826	0.532	0	2.30	1105
Log household income	10.586	0.922	7.82	12.77	1105
Married	0.564	0.496	0	1	1105
Home owner	0.714	0.452	0	1	1105
Lives in the Northeast	0.191	0.393	0	1	1105
Lives in the Midwest	0.239	0.427	0	1	1105
Lives in the South	0.366	0.482	0	1	1105
Lives in the West	0.204	0.403	0	1	1105
Lives in a metropolitan area	0.825	0.380	0	1	1105
Households with children under 18	0.259	0.438	0	1	1105
Retired	0.185	0.389	0	1	1105

Disabled	0.074	0.262	0	1	1105
Unemployed	0.038	0.191	0	1	1105
Not working for another reason	0.115	0.319	0	1	1105
Other variables					
How closely R followed news on Katrina	2.44	1.12	1	5	1105
Life priorities: always to obey the law	2.66	1.71	1	6	1093
Life priorities: to help others in need	3.46	1.80	1	6	1093
Life priorities: to enjoy life	2.41	1.72	1	6	1093
Life priorities: to work hard	2.95	1.76	1	6	1093
Life priorities: to pray and go to church	2.71	2.03	1	6	1093
Life priorities: to earn a lot of money	1.11	0.57	1	6	1093
Life priorities: to avoid having to depend on government assistance	1.99	1.55	1	6	1093
Life priorities: to be financially independent	2.76	1.89	1	6	1093
Life priorities: to care for children	3.40	1.83	1	6	1093
Life priorities: to get respect from others	1.54	1.17	1	6	1093
Attendence of religious services	3.35	1.64	1	6	1086
Political affiliation (higher: Republican)	4.09	2.11	1	7	1092
Experimental Manipulations					
Black pictures × Blur	0.254	0.435	0	1	1105
Blur	0.506	0.500	0	1	1105
Black pictures	0.504	0.500	0	1	1105
Slidell	0.492	0.500	0	1	1105
Audio manip.: Republican	0.490	0.500	0	1	1105
Audio manip.: Economically advantaged	-0.006	0.703	-1	1	1105
Audio manip.: Receiving gov't benefits	0.504	0.500	0	1	1105
Audio manip.: Prepares for hurricanes	0.504	0.500	0	1	1105
Audio manip.: Church attendance	0.495	0.500	0	1	1105
Audio manip.: Crime	0.497	0.500	0	1	1105
Audio manip.: Willing to help others	0.520	0.500	0	1	1105
Audio manip.: Sweat equity	0.489	0.500	0	1	1105
Audio manip.: Mention of looting	0.491	0.500	0	1	1105

Table A.2. Definitions of Audio Manipulations and Perception Questions

Audio Manipulations Text	**Related Perception Questions**
Republican **0)** --nothing mentioned-- **1)** For example, while New Orleans votes overwhelmingly Democratic, Republicans have a solid majority in [town].	*% Vote for Bush* Now, we'd like to ask you about Habitat for Humanity recipients in [town] who voted in the 2004 Presidential election. As your best guess, what percentage of these people voted for George W. Bush?
Economically Advantaged **Biloxi:** **-1)** Economically, Biloxi is relatively disadvantaged. Prior to Katrina, its median household income was well below the national average and its poverty rate was 18 percent higher than the rest of the country. **0)** --nothing mentioned **Slidell:** **0)** --nothing mentioned-- **1)** Economically, Slidell is relatively well-off. Prior to Katrina, its median household income was above the national average and its poverty rate was 5 percent lower than the rest of the country.	*Income of HfH Recipients* We'd like to know what you think the median household income is for recipients of Habitat for Humanity in [town]. The median (i.e., middle) household income is the income where half of the Habitat households are richer and half are poorer.
Receiving Government Benefits **0)** As a result, many employees stopped receiving their pay-checks. **1)** As a result, many recipients of government assistance stopped receiving their benefit checks	*% Receiving Gov't Benefits* As your best guess, what percentage of recipients of Habitat for Humanity in [town] received government cash assistance *before* Katrina hit?
Prepares for Hurricanes **0)** Partly because many residents underestimated the risk of hurricanes, Katrina did considerable damage. **1)** Even though many residents took reasonable precautions against hurricanes, Katrina did considerable damage.	*% Prepared for Hurricanes* As your best guess, what percentage of recipients of Habitat for Humanity in [town] prepared as well as one can reasonably expect for Hurricane Katrina?
Church Attendance **0)** Many residents do not attend church on Sunday **1)** Many residents attend church on Sunday.	*% Attend Church* As your best guess, what percentage of recipients of Habitat for Humanity in [town] attend religious services almost every week?
Crime **0)** This city has mostly law-abiding citizens. **1)** This city has been troubled by crime and drug abuse	*% With a Criminal Record* As your best guess, what percentage of recipients of Habitat for Humanity in [town] have a criminal record?
Willing to Help Others **0)** When the threat of the Hurricane became clear, many residents became mostly concerned about their own situation and did not help others in need. **1)** When the threat of the Hurricane became clear, many residents became concerned about the situation and helped others in need.	*% Helping Others* As your best guess, what percentage of adult recipients of Habitat for Humanity in [town] helped fellow hurricane victims when the threat of the Hurricane became clear?
Sweat Equity **0)** --nothing mentioned-- **1)** In return, they must invest at least 300 hours of labor – so-called "sweat equity" - into building their own homes.	*%Willing to Work Hard* As your best guess, what percentage of recipients of Habitat for Humanity in [town] are willing to work hard in order to get ahead in life?
Mention of Looting **0)** --nothing mentioned-- **1)** In the aftermath of Katrina, however, looting and lawlessness were a concern.	No corresponding perception question
No manipulation for windspeed	*Windspeed in Town* First, we'd like to know how severe you thought Hurricane Katrina was when it hit [town]. What do you think was the maximum sustained wind speed in [town] when Katrina hit? (1): 74–95 mph (Category 1 hurricane) (2): 96–110 mph (Category 2 hurricane) (3): 111–120 mph (Category 3 hurricane) (4): 121–130 mph (Category 3 hurricane) (5): 131–139 mph (Category 4 hurricane) (6): 140–155 mph (Category 4 hurricane) (7): 156–169 mph (Category 5 hurricane) (8): 170 mph or greater (Category 5 hurricane)

Table A.3. Effect of Picture Treatment on Perceived Racial Composition of Habitat Recipients

Dependent variable:	Perceived Percentage of HfH Recipients that is Black		Perceived Percentage of HfH Recipients that is White		Perceived Percentage of HfH Recipients that is of Another Racial/Ethnic Group		
Sample:	Coeff.	S.E.	Coeff.	S.E	Coeff.	S.E.	N
All	8.2**	(2.1)	-9.0**	(2.1)	0.9	(1.3)	1323
Main, non-black Rs	7.0**	(2.5)	-8.8**	(2.4)	1.8	(1.5)	842
Main, black Rs	12.3**	(5.3)	-12.2**	(5.6)	-0.1	(2.5)	243
Race-Salient instrument	14.2**	(4.0)	-16.7**	(4.2)	2.5	(2.9)	115
Full-Stakes instrument	6.3*	(3.4)	-4.5	(3.4)	-1.8	(2.4)	123
Slidell	13.7**	(3.1)	-12.6**	(3.2)	-1.1	(1.8)	651
Main, non-black Rs	13.8**	(3.6)	-11.8**	(3.7)	-2.0	(2.2)	413
Main, black Rs	13.2*	(7.8)	-15.0*	(8.4)	1.8	(3.8)	122
Race-Salient instrument	22.9**	(5.0)	-19.8**	(5.5)	-3.1	(2.8)	59
Full-Stakes instrument	2.6	(5.7)	-6.8	(5.7)	4.1	(2.8)	57
Biloxi	2.7	(2.8)	-5.5**	(2.7)	2.8	(1.7)	672
Main, non-black Rs	0.3	(3.4)	-5.8*	(3.0)	5.6**	(2.0)	429
Main, black Rs	9.0	(7.3)	-7.1	(7.6)	-1.9	(3.5)	121
Race-Salient instrument	5.1	(6.2)	-13.3**	(6.7)	8.2	(5.1)	56
Full-Stakes instrument	8.2**	(4.0)	-2.3	(3.6)	-5.9*	(3.5)	66

Note: Each entry comes from a separate regression. The reported coefficient is the coefficient on "black pictures × blur". In addition, the regressions control for "blur", black picture, town, the 9 audio manipulations and respondent race. The regressions are unweighted.