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EVIDENCE ON ANTI-AMERICANISM IN  
PAKISTAN**

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***DEVELOPMENT ECONOMICS***



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# IDENTIFYING IDEOLOGY: EXPERIMENTAL EVIDENCE ON ANTI-AMERICANISM IN PAKISTAN<sup>†</sup>

## Abstract

Identifying the role of intrinsic, ideological motivation in political behavior is confounded by agents' consequential aims and social concerns. We present results from two experiments that implement a methodology isolating Pakistani men's intrinsic motives for expressing anti-American ideology, in a context with clearly-specified financial costs, but minimal consequential or social considerations. Over one-quarter of subjects forgo around one-fifth of a day's wage to avoid anonymously checking a box indicating gratitude toward the U.S. government, thus revealing anti-Americanism. We find that ideological expression responds to financial and social incentives, and that measured ideology predicts membership in a major anti-American political party.

JEL Classification: C90, D03 and P16

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# 1 Introduction

Political action, from voting to engaging in political protest, has long captured the attention of social scientists. Economists have typically focused on instrumental or consequential motives for political behavior: for example, in the pivotal voter model, individuals vote to (probabilistically) change electoral outcomes and thus policy.<sup>1</sup> More recently economists have studied the role of social incentives in political behavior.<sup>2</sup> Less well understood is the *intrinsic* utility derived from political expression, which might arise from a particular identity or a set of deeply-held beliefs; we will refer to political expression motivated by intrinsic utility as “ideological.”<sup>3</sup>

A wide range of political behavior *appears* to be ideologically-motivated: from poor Americans supporting the Tea Party despite their positions in the income distribution and their reliance on federal transfers, to suicide bombers’ self-sacrifice for political causes. Yet whether these behaviors are ideologically-motivated remains far from clear: Tea Partiers may believe that they will rise in the income distribution or they may participate in the protests for social reasons; suicide bombers may place a great deal of weight on the consequences of their actions for those whom they leave behind. Disentangling ideological motives from consequential (or social) motives is even more difficult when these are aligned: for example, wealthy individuals may disproportionately support conservative parties because they believe in liberty and the efficiency of the private sector (ideological motives) or because the low tax rates favored by conservative parties disproportionately benefit them (consequential).<sup>4</sup> Discovering qualitatively important ideological roots of political behavior is of more than scientific interest: if political behavior simply reflects consequential concerns or the social environment, variation in material incentives and the context in which political behavior occurs will have large effects. On the other hand, the presence of important, ideological motives behind political behavior implies weaker, and far more heterogeneous effects of changed social context and material incentives.

Identifying the role of intrinsic motivation (“ideology”) in driving political action requires the study of political behavior in which one is certain that the private cost of expression exceeds any anticipated consequential or social benefits. Yet, such behavior may be difficult to interpret if

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<sup>1</sup>See Downs (1957), Palfrey and Rosenthal (1983), Ledyard (1984), and Palfrey and Rosenthal (1985).

<sup>2</sup>Social incentives may operate through a desire to conform (Bernheim, 1994), through a desire to send a signal to a particular group, or through the utility derived from social activity. This is true even of the (often) private act of voting (Gerber et al., 2008, DellaVigna et al., 2013, and Gerber et al., 2013).

<sup>3</sup>We thus use the term “ideology” in a specific, reduced form way. Intrinsic utility that motivates political expression may arise from a set of deeply-held beliefs (Bénabou, 2008), or it may be a component of one’s identity (Akerlof and Kranton, 2000) or culture (Guiso et al., 2006). See also the literature on expressive voting (Riker and Ordeshook, 1968, Tullock, 1971, Brennan and Buchanan, 1984, Brennan and Lomasky, 1993, Scheussler, 2000, Feddersen and Sandroni, 2006, Feddersen et al., 2009, and Kamenica and Brad, 2014).

<sup>4</sup>Gelman et al. (2007) present a rich analysis of the relationship between income and political preferences in the United States. *Forbes* magazine presents evidence that of the 50 richest families in America, 28 are solidly Republican (as measured by campaign contributions), while only 7 are solidly Democratic (the other 15 donate to both parties). See <http://goo.gl/GX5vQC>, last accessed January 18, 2016.

individuals' behavior is distorted by the awareness that their choices are being studied by the experimenter or due to the artificiality of the setting and action. This tension is visible in existing empirical work: for example, Kamenica and Brad (2014) sharply test for intrinsic (expressive) motives for voting behavior, but do so in a lab setting with student subjects, using direct elicitation. In contrast, the famous “lost letter” methodology (Milgram, 1977) elicits attitudes indirectly, but cannot isolate intrinsic motives for holding particular attitudes.

In this paper, we present evidence from two experiments in which we develop and implement a methodology for identifying intrinsically-motivated, ideological political expression. We minimize instrumental and social incentives for political expression, and elicit political attitudes in an *indirect* manner to reduce concerns about unnatural behavior or experimenter demand effects.<sup>5</sup> Our experimental designs allow us to study how ideological expression responds to economic incentives—both financial costs and the social context in which expression occurs—and to correlate our measure of ideological expression with relevant, real-world political behavior. Our focus is the expression of anti-American ideology in Pakistan. Although it is easy to find evidence of anti-American behavior among some Pakistanis, it is difficult to determine whether there exists intrinsically-motivated, *ideological* anti-Americanism.

Our first experiment implementing our methodology (“Experiment 1”) was conducted in Pakistan in July, 2013, with 1,152 participants.<sup>6</sup> During each experimental session, groups of Pakistani men, aged between 18 and 35, were brought into a room where they were asked to complete a standard “Big Five” personality survey. The intervention of interest occurred *after* subjects had completed the survey, though subjects were unaware of this fact. In return for completing the survey, study participants were offered a “bonus” payment (above a show-up fee they had received upon arrival). Receiving the bonus payment required checking a box in a form that indicated (from the subject’s perspective): “I gratefully thank the [funding agency] for its generosity and I accept the bonus payment offer.” Rejecting the payment required checking a box in the same form that indicated (again, from the subject’s perspective): “I choose not to accept the bonus payment offer.” The experiment randomly varied three separate components of the form, at the individual level, in a  $2 \times 2 \times 2$  design:

**The identity of the funding agency:** The funding agency was either the U.S. government or the Lahore University of Management Sciences (LUMS), a leading Pakistani university.<sup>7</sup>

**The expectation of privacy:** In the “private” condition, subjects were told, “If you choose to accept the bonus payment, **your decision will be private**; in order to receive this additional

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<sup>5</sup>Social psychologists have long been aware of problems created by experimenter demand effects (Rosenthal, 1963, 1966). Reflecting this, many studies in social psychology make use of indirect elicitation in part to avoid experimenter demand effects (e.g., Cohen et al., 1996).

<sup>6</sup>All survey personnel in the field were Pakistani, and no mention was made of the involvement of American faculty in designing the survey and analyzing responses.

<sup>7</sup>Funds for bonus payments in fact came from the (public, so government-funded) University of California or from LUMS.

payment, you will simply replace the letter in envelope 2 and submit it with your other survey materials at the end of the study, so no other participants will know your choice.” In the “public” condition, subjects were told: “If you choose to accept the bonus payment, in order to receive this additional payment, you will be asked to turn the letter in to the survey coordinator in the front of the room, so other participants will see you turn in the letter.”<sup>8</sup>

**The amount of money offered:** Subjects were either offered a bonus payment of 100 Pakistani Rupees (Rs.) or of 500 Rs.; both payments represented a sizable fraction of a day’s wage.<sup>9</sup>

Subjects’ willingness to reject payment in order to avoid expressing gratitude to the U.S. government is our indicator of anti-American ideology.<sup>10</sup> In our experiment, the “instrumental” determinant of political expression is practically shut down, since accepting or rejecting the money offer is likely to have only a trivial real-world impact.<sup>11</sup> In the “private” condition social incentives to reject payment are also practically eliminated.<sup>12</sup> We use experimental variation in the social visibility of the rejection decision, and in an individual’s private financial cost of rejecting the U.S. government offer, to estimate the roles of social and financial incentives in an individual’s expression of (anti-American) ideology. Of course, subjects may wish to reject payment for reasons other than anti-Americanism, for example, because they do not want to feel indebted to another party. We thus compare subjects’ rates of rejecting money from the U.S. government to rates of rejecting money from LUMS in order to “difference out” a propensity to reject bonus payments from a relatively neutral funder.

A virtue of our design is our ability to elicit individuals’ ideological views in a setting in which subjects’ awareness of the elicitation is significantly reduced compared to more direct methods of eliciting political attitudes.<sup>13</sup> Not only was no subject aware of the purpose of the study, but also, the action through which individuals’ preferences were revealed appeared, from the subjects’ perspective, simply to be part of the process of receiving payment for completing the survey. Because the choice of whether to accept the bonus payment does not appear to be of scientific

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<sup>8</sup>In fact, all subjects would turn in their materials in exactly the same way: all subjects turned in their envelopes in the front of the room, and were seen doing so by other participants (as emphasized in the public condition). But, no subject’s decision regarding the bonus payment was ever observed by any other participant, because all survey materials were submitted inside subjects’ envelopes. The goal of the intervention was to manipulate subjects’ expectations, without telling them anything that was factually untrue in order to minimize the use of deception in the study.

<sup>9</sup>Irfan (2008) finds that in 2003–2004, the average monthly wage among Pakistani men was 4,278 Rs., or around 200 Rs. per day. Conversations with local research assistants indicated that the daily wage for a manual worker in 2013 was roughly 400–500 Rs.

<sup>10</sup>Of course, “anti-American ideology” can mean different things in different contexts. Here we use the term as a short-hand for ideological opposition to, or distaste toward, the U.S. government.

<sup>11</sup>One might still be concerned about subjects’ *perceptions* of consequential outcomes of their decisions. We discuss this further in Section 4.

<sup>12</sup>We discuss the care taken to preserve subjects’ anonymity and privacy in Section 2.1, and also present evidence suggesting that social concerns did not shape subjects’ rejection decisions in the “private” experimental condition in Section 4.

<sup>13</sup>The influence of the experimenter on subjects’ behavior has been shown, e.g., in Hoffman et al. (1996).

interest to the researcher, we are able to observe subjects’ (relatively) natural behavior, reducing concerns about experimenter demand effects or Hawthorne effects (though these concerns are not completely eliminated, as subjects’ choices are still made in an artificial setting).

We find that when individuals express their ideology *privately*, a significant minority—around one quarter of subjects—are willing to forgo 100 Rs. to avoid taking an action that would undermine their ideology: checking a box and thus thanking the U.S. government for its generosity. We also find that public expression significantly differs from private expression.

It is not obvious *ex ante* what will be the effects of leading subjects to believe that their decision to accept the payment will be observed by the other study participants. On the one hand, in a context in which some individuals hold very strong ideological views, it is plausible that subjects with moderate views (i.e., those who accept the payment in private) may feel pressure to reject the payment offer. On the other hand, because those with strong ideological views are a minority, it is conceivable that they will wish to conform to the majority around them, making them more likely to accept the payment offer. In fact, we find that when subjects anticipate that their behavior will be public, significantly *fewer* individuals reject the bonus payment—the rejection rate falls by nearly 10 percentage points.<sup>14</sup> This suggests that in our context, a desire to conform to the majority behavior dominates any anticipated pressure from individuals with strong ideological views.

Next, we find that individuals’ willingness to check the box thanking the U.S. government is responsive to the size of the payment. While 25% of subjects are willing to forgo a 100 Rs. payment rather than check the box indicating gratitude toward the U.S., only around 10% of subjects are willing to forgo a 500 Rs. payment (this difference is highly statistically significant). Thus, even among individuals with relatively extreme ideological views (i.e., willing to give up a quarter of a day’s wage rather than check the box to accept payment), there is a “downward-sloping demand curve” for ideological expression. Exploiting the experimental variation in prices, we are able to estimate that the cost of publicly rejecting payment is equivalent to around 200 Rs.

Our second experiment (“Experiment 2”) was conducted with 1,991 subjects recruited from the area around Lahore, Pakistan, in September and October, 2015. Rather than recruit subjects into a lab-like setting, we simplified our methodology to allow us to identify ideological preferences at subjects’ homes, using standard household survey methods (requiring an Android tablet). Subjects were asked to privately complete a 10-question personality survey on the Android tablet; then, analogous to our first experiment, subjects were offered a 100 Rs. bonus payment paid for by the U.S. government. Using the same language as in the first experiment, subjects needed to indicate gratitude to the U.S. government to receive the payment. Importantly, subjects were provided with

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<sup>14</sup>In our analysis below, we present results comparing rejection rates for the U.S. government vs. LUMS as the funding agency. The results are very similar to the raw rejection rates presented here. By differencing out LUMS rejection rates across conditions we account for rejection for reasons other than anti-Americanism and for other sources of private/public differences in rejection rates. In fact, LUMS rejection rates are slightly (insignificantly) *higher* in the public condition than in the private condition.

“cover” for their choice of whether to accept or reject the payment: although experimenters paid them directly, payment included a random component, so experimenters did not know whether subjects accepted or rejected the bonus payment offer. Using a different technology, a different subject pool, drawn from a different part of Pakistan, we find a rejection rate of 34%—a similar rejection rate to what we found in the first experiment. This indicates that our findings in Experiment 1 have a degree of external validity and robustness.

In addition to this replication exercise, our second experiment allows us to match individuals’ decisions to reject the bonus payment offer with their *actual* political affiliation, as measured in a previous survey. As we describe in more detail below, we find an economically and statistically significant association between membership in the Pakistan Tehreek-e-Insaf (PTI) political party—the most anti-American in Pakistan—and rejection of the bonus payment offer.

We interpret our findings using a conceptual framework that clarifies threats to our interpretation of rejection of the U.S. bonus payment offer as an ideological political expression. In particular, in Section 4 we explore (i) intrinsic motives for rejecting payment other than political ideology; (ii) consequential motives for rejecting payment; and, (iii) social motives for rejecting payment. To rule out a range of possible intrinsic motives to reject payment (e.g., social norms regarding accepting payments), in Experiment 1, we difference out rejection of payment offers from LUMS; this does not meaningfully affect our conclusions. In addition, responses to direct survey questions, administered following our main intervention in Experiment 1, support our interpretation of rejection of payment from the U.S. government as an expression of anti-American ideology. We find that individuals who rejected the U.S. bonus payment report significantly more negative views of the U.S. government, while individuals who rejected the U.S. payment offer are *no more likely* to report negative views of the government of Japan. Regarding consequential motives for rejection, the stakes are small, and subjects are unlikely to view their choices as “pivotal” with respect to any important policy choices. Finally, regarding social concerns, we note that public expression in our first experiment was more *moderate* suggesting that, if there were social concerns in the private condition, they would work toward finding fewer individuals rejecting payments from the U.S. government. In addition, we find (again following the main intervention in Experiment 1) that individuals are quite willing to indicate distaste for the U.S. government in response to direct questions, suggesting their decisions to reject (or accept) the payment offer were not simply the outcome of perceived intimidation.

Most generally, our work contributes to a growing empirical literature on intrinsic, extrinsic, and social motives for a range of behavior.<sup>15</sup> Our experiments also contribute to a growing litera-

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<sup>15</sup>Intrinsic motivations for a range of behaviors have long received attention among economists, from the study of taste-based discrimination (Becker, 1957), to the important role played by identity in shaping economic and social choices (Akerlof and Kranton, 2000) to individuals’ response to incentives (Bénabou and Tirole, 2003) to altruism (Andreoni, 1990). Recent empirical work on intrinsic and social motives for behavior include DellaVigna et al. (2012), who use a field experiment to test for altruism and social pressure in charitable giving; Ariely et al. (2009), who experimentally evaluate whether larger monetary incentives crowd out social incentives for pro-social behavior, thus testing the theory in Bénabou and Tirole (2006); Rao (2013), who measures the extent to which students

ture on the measurement of sensitive attitudes.<sup>16</sup> Our methodology contributes to these literatures by isolating intrinsic motives for political expression, using indirect elicitation of individuals’ revealed preferences. Finally, our findings contribute to a growing body of empirical evidence on, and economic analysis of, social and political outcomes in South Asia, an area of geopolitical importance.<sup>17</sup> We show that a significant minority of Pakistani men in our two experimental samples are anti-American for intrinsic reasons. We find that some individuals with strongly-held ideological views will suppress the expression of those views when the financial costs or anticipated social costs of expression are high enough. However, the existence of intrinsically-motivated anti-Americanism suggests that there are limits to the effects of policies focused on reducing anti-American political expression simply by changing financial and social incentives.

The remainder of the paper is as follows: in Section 2, we describe the implementation of, and the results from, Experiment 1. In Section 3, we discuss Experiment 2. In Section 4, we interpret our findings using a conceptual framework that clarifies threats to our interpretation of rejection of the U.S. bonus payment offer as an ideological political expression. In Section 5 we offer concluding thoughts.

## 2 Experiment 1

### 2.1 Design and Implementation

Our experiment was implemented in two stages: first, a set of pilot studies that served as a “proof of concept” that our design could be implemented safely and successfully; then, the main study.

#### 2.1.1 Piloting

We developed our protocol in a series of pilots. First, in November 2012, we ran a small pilot and focus group discussion with 20 undergraduate students at the Lahore University of Management Sciences (LUMS). Next, before running the full experiment, we ran a larger pilot study in the field with 143 subjects. The exercise comprised 6 separate sessions, with approximately 24 subjects per session. 71 subjects participated on June 24th, 2013, in Islamabad and 72 subjects participated on

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from elite Indian schools are willing to pay a cost to avoid being paired with lower income students in a sports competition; and, Augenblick et al. (2012), who conduct an experiment eliciting the beliefs of individuals belonging to an apocalyptic religious group in an incentivized manner.

<sup>16</sup>Warner (1965) introduced the “randomized response technique”, Raghavarao and Federer (1979) formalized the “list experiment” (also called the “unmatched count” and the “item count technique”), and Sniderman and Piazza (1993) provide, to our knowledge, the first example of an endorsement experiment.

<sup>17</sup>Clingsmith et al. (2009) study the impact of the Hajj pilgrimage on a broad range of attitudes among Pakistanis. Beath et al. (2012) study the impact of foreign aid on Afghans’ views on security and on the Afghan government, NGO’s and foreign military forces. Delavande and Zafar (2012) experimentally analyze how Pakistanis’ attitudes towards the U.S. are affected by provision of information about the U.S. Outside of South Asia, Corstange (2014) finds that foreign sponsorship of a survey systematically affects response rates in Lebanon. See Gentzkow and Shapiro (2004) for an overview of anti-Americanism in the Islamic world.

June 25th, 2013, in Peshawar. Anticipating the necessity of having Pakistanis conduct the main experiment, we used the larger pilot to train our lab coordinators, allowing us to avoid the direct involvement of any foreigners in the implementation of the main experiment.<sup>18</sup>

Data from the pilot allowed us to refine our experimental design and to establish that we could carry out the activity safely with minimal risk to enumerators or participants. We committed in advance to using data from the pilot studies only for these purposes, and do not include them in our main analysis.<sup>19</sup>

### 2.1.2 Timeline and Site Selection

We implemented Experiment 1 simultaneously in three cities, Peshawar, Islamabad, and Dera Ghazi Khan, between July 7th and July 16th, 2013. We selected these dates so that half of our sessions would be completed prior to Ramadan and half would be completed during Ramadan, which began on July 11, 2013.<sup>20</sup>

One objective of our project was to measure the degree of anti-Americanism among populations directly affected by the “war on terror”—this is where anti-American views are likely to be of greatest importance.<sup>21</sup> To access these populations, we ran our experiment in areas either directly affected by the United States-led invasion of Afghanistan (Peshawar) or in cities that have substantial numbers of refugees from conflict-affected areas (Islamabad and Dera Ghazi Khan).<sup>22</sup>

Peshawar and Islamabad have large Pashtun populations and Dera Ghazi Khan has a large Balochi population, which make them especially interesting locations for the study of anti-American attitudes. Pashtuns are an ethnic majority in Southern and Eastern Afghanistan and in Northern and Western Pakistan. Both the Afghan and the Pakistani Taliban draw their support primarily from Pashtuns in this region and the vast majority of the fighting related to the U.S.-led invasion of Afghanistan has happened in predominately Pashtun areas. At the time of the study, Balochistan was home to a very active secessionist movement, and the capital, Quetta, is home to the Quetta Shura which is the primary faction of the Afghan Taliban. In scouting locations for our initial pilot, we determined that direct implementation of the experiment either in rural Khyber Pakhtunhwa or in the Federally Administered Tribal Areas (FATA) involved too much risk to respondents and to enumerators, so we opted to work in urban areas with large migrant populations, which are generally safer.

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<sup>18</sup>Our concern was that the elicitation of anti-American attitudes by a team including Americans would compromise the validity of our findings.

<sup>19</sup>Results were qualitatively similar (available from the authors upon request).

<sup>20</sup>We do not find any differences in our results between the pre-Ramadan and Ramadan sessions.

<sup>21</sup>Those individuals affected by the “war on terror” may in fact be less anti-American than other Pakistanis because they may have fled from regions influenced or controlled by the Pakistani Taliban.

<sup>22</sup>Peshawar lies between Kabul, Afghanistan, and Islamabad on the Khyber pass and is the capital of Khyber Pakhtunhwa Province (formerly Northwestern Frontier Province). Dera Ghazi Khan and Islamabad both lie close to the provincial border of Khyber Pakhtunhwa and have large migrant populations.

### 2.1.3 Subject Recruitment and Screening

We contracted with local survey firms to recruit men aged between 18 and 35 from neighborhoods with large migrant populations in Islamabad and Peshawar. In both cities, we asked the recruiters to target migrants from the Federally Administered Tribal Areas (FATA), Khyber Pakthunhwa (KP), and Balochistan.<sup>23</sup> In Dera Ghazi Khan, we first selected a *tehsil* randomly, then selected a union council randomly, and then used a simple right-hand sampling rule to contact potential participants. We ran 22 sessions in Peshawar, 10 sessions in Islamabad, and 16 sessions in Dera Ghazi Khan (Appendix A1, Figure A.1, presents a map of the laboratory locations).

Upon contacting a potential subject, recruiters asked him to read aloud a short script in order to verify literacy, and an additional literacy test of comparable difficulty was administered when a subject reached the study site. Potential subjects who failed either test were not allowed to participate. Subject literacy was crucial for our experimental design, as the entire study required subjects to comprehend printed text. Appendix A1, Figure A.2, provides Urdu translations of the two literacy screening tasks and English translations of both literacy test scripts are reproduced in Appendix A2.

### 2.1.4 Enrollment

After subjects arrived at the study site, they were directed to a waiting room, provided with an informed consent form to read, and asked to wait until they were called to participate. We relied on *verbal* informed consent to assure subjects that personally-identifiable information on their participation and choices was not being collected. The study coordinator called subjects to enroll one at a time; subjects then received a chit with a randomly assigned subject number, between 1 and 24, from a research assistant.<sup>24</sup> After receiving their number, subjects then went to the enrollment desk outside of the laboratory (Appendix A1, Figure A.3, provides a picture of the enrollment desk). At the desk, subjects read the second literacy script aloud, and received a payment envelope with their subject number printed on it.<sup>25</sup> After completing the enrollment procedure, a research assistant led subjects into the laboratory and seated them at the individual lab station corresponding to their subject number.

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<sup>23</sup>While we did not record the birth place of subjects to preserve anonymity, in these cities our recruiters drew subjects from neighborhoods primarily populated by migrants from the Swat and Malakand agencies (agencies are administrative units in FATA). Both of these agencies, located in FATA, have seen substantial levels of insurgent conflict in recent years.

<sup>24</sup>Individual stations were ordered sequentially by subject number inside the lab. Subject numbers were provided in random order to reduce the chance that subjects would be acquainted with the person sitting next to them—a concern if acquainted subjects entered the study site together, and station assignments were made in a non-random order. In practice, a research assistant handed each subject a chit, numbered from 1 to 24, from a shuffled deck. The number on the chit became a subject’s participant identification number.

<sup>25</sup>Only one potential subject passed the first reading comprehension test but failed the second; this subject was replaced from the pool of recruits.

Lab stations consisted of a chair with a clipboard; laboratory materials were placed on the chairs, which were positioned approximately four feet apart to prevent subjects from observing each other's choices (in Appendix A1, Figure A.4 provides a picture of the experiment site in Islamabad and Figure A.5 provides a picture of the experiment site in Peshawar). We randomly assigned survey versions to lab station numbers using a simple computer program (Appendix A1, Figure A.6, provides the mapping between survey versions and lab stations). All sessions involved exactly 24 subjects, resulting in a total of 1,152 men participating in the main study. After a session, research assistants ensured that subjects exited the building; they were bussed off site immediately and were not allowed to interact with other subjects waiting to participate in the study.

### 2.1.5 The Experiment

At the beginning of a session, the lab director read a set of instructions aloud. After explaining the laboratory protocol, the instructor took the subjects through three specific example questions. Each subject had a printed version of these questions, which were intended to familiarize subjects with the kinds of multiple choice questions that they would have to answer in activity 1 (a personality survey). Importantly, these instructions included no content related to politics or ideology. After completing the instructions, the lab director took questions. The director then indicated that no questions would be answered during the experiment, allowing subjects one final opportunity to ask questions before the experiment commenced.<sup>26</sup> It is important to emphasize that no details were provided by the lab director regarding the payment process; research assistants were told to reveal no more than that payment for completing the study would occur at the end of the session. To increase subjects' confidence that they would be paid, subjects were provided their show-up fee of 300 Rupees when they began the first activity in the study.

The experiment involved four separate activities, each of which required completing a form contained in a separate envelope, numbered in order. These materials are reproduced completely in Appendix A2. Upon completion of an activity, subjects were instructed to close their envelope and place it below their chair before proceeding. Furthermore, they were told not to return to previously completed activities, and that subjects who did not comply would be asked to leave. The primary purpose of strictly disallowing participants from returning to previous activities was to ensure that they could not change their responses in the revealed preference activity (activity 2) after completing the stated preference activity (activity 4).

When all subjects had completed the four activities, the lab director and research assistant collected all laboratory materials except for subjects' chits, which subjects had received upon enrollment. The envelopes (on which were written subjects' participant identification numbers) were taken into a separate room with the laboratory materials for the calculation of payments for

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<sup>26</sup>We disallowed questions because we did not want subjects' inquiries to contaminate the research design.

each subject. Payments were placed in envelopes, which were then exchanged for the chits handed out to subjects at the beginning of the session.

### Activity 1

The experiment began as a standard personality survey which was contained in envelope 1 along with subjects' "show up" payment. In addition to a few demographic questions, participants completed a Big 5 personality assessment. The version of the Big 5 assessment used by our team was adapted to use in Pakistan and validated by psychologists at the National Institute of Psychology at Quaid-i-Azam University.

### Activity 2

After completing the survey, subjects opened the second envelope. This envelope contained an offer of an *additional* payment (above that for showing up) in return for checking a box on a letter to the funding agency. Checking the box indicated acceptance of the payment and gratitude to the agency for providing funding. This activity measures whether respondents are differentially willing to forgo a payment, depending on the funder (U.S. government or the Lahore University of Management Sciences), the amount of the payment (100 Rupees or 500 Rupees), and respondents' perception of whether the payment would be public or private. Specifically, envelope 2 contained a piece of paper with the following information printed on it (*italics indicate text that varied depending on the experimental condition, with slashes dividing the conditions*):

"Thank you for completing the survey. In return for completing the survey, we can offer you a bonus payment. Funding for the bonus payment comes from {*Lahore University of Management Sciences / the U.S. government*}. We can pay you {*100 Rupees / 500 Rupees*} for completing the survey, but in order to receive the bonus payment you are required to acknowledge receipt of the funds provided by {*Lahore University of Management Sciences / the U.S. government*} and thank the funder. If you choose not to accept the payment, you will forgo the bonus payment of {*100 Rupees / 500 Rupees*}, but not the payment of 300 Rs. for your participation."

After this passage, in half of the forms, the language emphasized that subjects' choices would be private, while in the other half, the language implied that subjects' choices to accept the bonus payment would be observed by other subjects, as follows:

"If you choose to accept the bonus payment, { $\emptyset$  / *your decision will be private*;} in order to receive this additional payment, {*you will be asked to turn the letter in to the survey coordinator in the front of the room, so other participants will see you turn in the letter / you will simply re-*

*place the letter in envelope 2 and submit it with your other survey materials at the end of the study, so no other participants will know your choice*}. Once you have made your decision on the next page, please place the letter into envelope 2, whether or not you chose to accept the bonus payment.”

In addition to the sheet of paper with instructions, envelope 2 contained the bonus payment acceptance/rejection letter, with the following options:

- I gratefully thank {*Lahore University of Management Sciences / the U.S. government*} for its generosity and I accept the bonus payment offer.
- I choose not to accept the bonus payment offer.

It is worth noting that to ensure the safety of participants, in practice, no subject’s choice of whether to accept the bonus payment was actually public. All participants turned their acceptance/rejection letter in to the survey coordinator at the front of the room, having replaced their letter into envelope 2, and submitting it with the other survey materials (note that we aimed to minimize the use of deception by not providing false information about what would be required of participants, as the language in both “public” and “private” conditions was literally true). The language in the “public” treatment arm was designed to suggest that the decision to accept the bonus payment would not be private, but subjects in the “public” condition still may have expected their decision to be private because they knew that the letter would be enclosed in an envelope. Because we can only imperfectly manipulate expectations of privacy, we view this exercise as providing a lower bound estimate of the effect of making the decision to accept the bonus payment public.

### **Activity 3**

In activity 3, participants filled out a self-response survey that began by asking subjects to guess how many of the other participants were willing to accept the bonus payment. This question was incentivized: subjects were informed that the three individuals who guessed closest to the actual number would receive an additional 300 Rupees. Next, the survey collected information on the number of other participants the respondent knew.

We then ran a “list experiment,” a method used to measure attitudes toward sensitive topics. List experiments provide individual respondents with some degree of plausible deniability (“cover”) for their expression of an unpopular, embarrassing, or stigmatized view, and thus increase the likelihood that such expression will occur (though truthful expression is not incentivized).

The list experiment works as follows: first, respondents are (randomly) assigned either into a control group or to one or more treatment groups. Subjects in all conditions are asked to indicate the *number* of policy positions they support from a list of positions on several issues. Support for any particular policy position is never indicated, only the total number of positions

articulated on the list that a subject supports. In the control condition, the list includes a set of contentious, but *not* stigmatized, policy positions. In the treatment condition, the list includes the contentious policy positions from the control list, but also adds the policy position of interest, which *is* stigmatized. The degree of support for the stigmatized position *at the population level* is determined by comparing the average number of issues supported in the treatment and control conditions.

In our study, we randomly assigned our subjects to a control group or to one of two treatment groups, with each group containing 384 subjects. In the control condition, we asked respondents:

The following are four policies some government officials express support for. Please report HOW MANY of the four you support. You do not need to indicate which ones you support, just how many.

- Providing the poor with free electricity generators
- Establishing an independent state in Kashmir that is not part of India and not part of Pakistan
- Ensuring that civilians (President or Prime Minister) control the military
- Reducing the number of people eligible for the Benazir Income Support Program, but increasing payments to those eligible.<sup>27</sup>

In the treatment conditions, subjects were asked a question that is identical other than the inclusion of an additional stigmatized item. In the first treatment group (the “U.S. aid list”), we added the policy position:

- refusing humanitarian aid from the U.S. government.

In the second treatment group (the “PTI list”), we added the position:

- supporting the activities of Pakistan Tehreek-e-Insaf (PTI).<sup>28</sup>

#### Activity 4

Envelope 4 contained another survey, which asked subjects direct questions to elicit their stated preference support for: (i) aid provided by the Japanese government to Pakistan; (ii) the Japanese government overall; (iii) aid provided by the United States; and (iv) the United States government overall. We also asked a question regarding willingness to take risk using a simple Likert scale approach; we asked about subjects’ political awareness; and, about their support for Japan and the U.S. *relative* to other subjects in the room.

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<sup>27</sup>The Benazir Income Support Program is a popular targeted, unconditional cash transfer program.

<sup>28</sup>PTI is the most anti-American of the major parties in Pakistan. Support for a party known for its anti-American stance was a natural policy position reflecting anti-American attitudes for us to include in the list experiment.

## Payments

When all subjects had completed the survey, they were asked to come, in order of their subject number, to the front of the room. They gave their payment envelope and materials packet to the session coordinator and were asked to return to their seat to await payment. After collecting all 24 packets, two research assistants went into a separate room and calculated total subject payments. The payments were sealed in an envelope, with the cash payments wrapped in a thick debriefing handout so that subjects could not tell how much each had been paid. This was important to ensure that subjects could not be identified as having accepted a bonus payment offer based on the thickness of the payment envelope.

Subjects were then called to the front of the room, were paid by providing their chit with the subject number on it in exchange for the payment, and were sent out of the lab into a waiting bus—there were no opportunities for subjects who had completed the study to communicate with subjects who had not yet participated. As soon as all subjects were paid and had exited, the subsequent session began immediately.

## 2.2 Empirical Analysis

This section presents our core empirical results from Experiment 1. We first present descriptive data on our sample and study individuals' private ideological expression. Next, we explore the role of social incentives by examining differences in rejection rates between subjects in the private and public conditions. Then, we study the sensitivity of private ideological expression to the size of the payment offer. Finally, we use the experimental variation in the financial cost of political expression to estimate the cost, in monetary terms, of expressing anti-American attitudes in public, and to estimate the share of subjects who would reject very small bonus payment offers.

### 2.2.1 Sample Characteristics and Balance Across Conditions

Table 1, column 1, presents the characteristics of our experimental sample. One can see that all of our participants were men, which was by design. In addition, participants were, on average, young and relatively well-educated. The latter is again by design, as literacy was required to implement our study. Around one half of the subjects were engaged in some economic activity at the time of the study. Around two-thirds of subjects were Pashtun, 10 percent Punjabi, and another 10 percent Baloch. The bottom row of Table 1 displays the sample sizes in each treatment cell, and columns 2–9 of Table 1 present the characteristics of subjects across experimental conditions. We find that respondent characteristics, including demographics, education levels, and Big 5 personality traits are balanced across conditions (see Table 1, column 10).

## 2.2.2 Ideological Political Expression

We begin by examining rejection rates among subjects offered the 100 Rupees bonus payment in the “private” condition. We find that 25.2% of subjects offered the 100 Rupees bonus payment from the U.S. government in the private condition choose to reject it. Of course, it might be the case that some of these subjects would have rejected money from any funding agency, not only from the U.S. government. In order to account for this possibility, we can difference out the rejection rate among subjects offered 100 Rupees from LUMS, in the private condition: in this group, only 8.4% of individuals chose to reject the payment. We subtract this fraction from the overall rate of rejection of the U.S. government offer to estimate that the proportion of subjects who rejected the U.S. offer, but would have accepted an offer from LUMS, is 16.8% (the p-value from a test that this difference equals zero is  $<0.001$ ).

Note that 16.8% may represent a lower bound for the fraction of people who are anti-American, as some of those who rejected the LUMS offer might be anti-American as well. Indeed, LUMS has an international orientation, and is patterned after universities in the United States. Given this, subjects may associate LUMS with the United States, biasing our results toward finding less anti-Americanism when we compare U.S. government offer rejection rates to LUMS offer rejection rates. Of course, if subjects would have rejected payment from any *government*, then this would also result in higher rejection rates for the U.S. government offer than the LUMS offer. We explore whether attitudes toward foreign governments in general might drive our results in Section 4, below.

Table 2, column 1, reports these rejection rates in a regression framework: for subjects who received the 100 Rs. offer in the private condition, we simply regress a rejection dummy variable on a U.S. government donor dummy. Column 2 reports coefficients from the same regression, but including session fixed effects. Column 3 reports coefficients from a regression including session fixed effects and controls for the variables presented in Table 1.<sup>29</sup> The estimated treatment effects—i.e., the significantly greater rejection of the bonus payment offered by the U.S. government—remain virtually unchanged, suggesting that the implementation of the laboratory protocol across rounds and experimental sites was successful.<sup>30</sup>

## 2.2.3 The Role of Social Context

We next investigate a second dimension of randomization incorporated into our design: variation in subjects’ perceptions of whether their choice to accept the bonus payment offer would be publicly observed by other participants at the end of the session. Examining the raw rejection rates across conditions, we find that the proportion of subjects who rejected the 100 Rs. U.S. government offer

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<sup>29</sup>Table 2 presents robust standard errors. We have also estimated all of the specifications presented in the paper with standard errors clustered at the level of the experimental session. Results are extremely similar and are available from the authors upon request.

<sup>30</sup>Implementation is of special concern in our study: as outsiders (including the co-author from Eastern Pakistan), our presence could have affected subjects’ behavior, preventing us from directly monitoring the experiment.

in the public condition was 8.2 percentage points *lower* than in the private condition (the p-value from a test that rejection rates in the public and private conditions are the same is 0.093).

Of course, subjects' decisions of whether to accept the bonus payment offer might differ between the public and private conditions even in the absence of any effect of the social environment on the expression of political ideology, *per se*. For example, one may be less likely to reject the bonus payment offer in the public condition out of concern that one will appear ungrateful or foolish. One might also be less likely to reject payment in public if one worried about family members' displeasure if they discovered that a financial payment was forgone. On the other hand, one may be more likely to reject the payment offer in the public condition if one were concerned about being publicly identified as having just received a large payment. These effects of the public condition in our study would exist irrespective of the identity of the funding agency.

We study these effects of the public condition on rejection rates by considering the public versus private difference in rejection rates for subjects who received a 100 Rs. offer from LUMS. In fact, the difference between the public and private rejection rates of the 100 Rs. LUMS offer was quite small—an increase in rejection of 2.7 percentage points—and not statistically significant ( $p=0.439$ ). The *higher* rejection rates in public for the LUMS offer suggests that the *lower* public rejection rates we found for the U.S. offer were not a result of a general reduction in rejection rates when choices are made publicly.

To isolate the effect of (anticipated) public expression on the willingness to express political ideology, we calculate the public versus private difference in rejection rates of the U.S. offer, after differencing out the public and private rejection rates for the LUMS offer. We now estimate a 10.9 percentage point lower rejection rate for the U.S. government offer in the public condition compared to the private condition (the p-value of the difference is 0.069). We present the effects of (anticipated) public expression on subjects' willingness to reject the bonus payment in a regression framework in Table 3. In column 1, we present coefficients from a regression of a rejection dummy variable on the interaction of a public condition dummy and a U.S. government donor dummy, as well as the main effects of the public dummy and the U.S. government donor dummy—this reproduces the raw differences just described. Column 2 adds session fixed effects to the specification in column 1, and column 3 includes session fixed effects and subject covariates—the estimated differences across conditions are qualitatively unchanged.

Across specifications, our results indicate that social context affects the expression of ideological positions. Moreover, the direction of the effect of anticipated social incentives, in the context of our study, is toward *moderation*: fewer subjects rejected the U.S. offer when they believed their choice would be made public to other participants.

An important consideration when evaluating our estimated effects of social incentives is whether these effects are consistent with subjects' beliefs about the views of the other subjects around them. For example, if anti-American subjects moderated the public expression of their political views out

of a desire to conform to the (perceived) majority attitude, then it should be the case that these subjects correctly perceived that they were in the minority.

To measure subjects' beliefs about other subjects' willingness to accept the bonus payment, we included additional components in the study *after* the decision of whether to accept the bonus payment offer. The third envelope in the experiment (immediately after the bonus payment offer) included an incentivized elicitation of individuals' beliefs about the number of other participants in the room (from 0 to 23) who accepted the bonus payment offer (all sessions included exactly 24 participants). Among respondents who received the 100 Rs. offer from the U.S. government, in the private condition, the average guess was that 80% (median 95.6%) of other participants in the room accepted the payment offer. Thus, subjects correctly believed that the majority of others would choose *in private* to accept the money from the U.S. government. Importantly, respondents who rejected the U.S. government offer correctly viewed themselves as belonging to a minority: among respondents who rejected the 100 Rs. U.S. government offer in private, the average guess was that 62.3% (median 87%) of other respondents accepted the offer.

We also directly elicited subjects' views of the individuals around them: in the fourth (and final) envelope, subjects were directly asked to compare their views to those of others in the room regarding: (i) the U.S. government; and (ii) accepting U.S. aid. Among those who accepted the "100 Rs.-private-U.S. donor" payment, 17% of subjects viewed themselves as more anti-U.S. government than the other respondents in the room; among those who rejected that offer, that number rose to 57.2%.<sup>31</sup> Moreover, only 14.3% of respondents rejecting the offer report viewing others in the room as more anti-American than themselves.<sup>32</sup>

The results we find in our analysis of the exercises contained in envelopes 3 and 4 paint a consistent picture: rejectors of the U.S. government bonus payment offer believed that a majority of the other subjects would accept the payment, and also self-identified as belonging to an anti-American minority. Interestingly, we find that those individuals who have the highest "agreeableness" score in the Big 5 personality survey also exhibit the largest reduction in rejection rates when they anticipate their choice will be public (results available from the authors upon request). Our results are thus consistent with anti-American individuals anticipating a (net) social cost when expressing their ideology publicly.<sup>33</sup> Of course, *ex ante*, one might have hypothesized that a minority of extremists might have pressured moderate individuals to express *more* anti-American attitudes

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<sup>31</sup>Admittedly, one worries that this elicitation is affected by subjects' decisions regarding the bonus payment, so it is best viewed as a suggestive complement to the incentivized estimates of other subjects' behavior.

<sup>32</sup>When we look at views on accepting U.S. aid, the numbers are very similar: among those who accepted the offer, 18.2% view themselves as more likely to refuse U.S. aid, whereas the percentage is 58.3% among those who reject the money offer (and only 16.6% of those rejecting the offer view themselves as less likely to refuse U.S. aid than others in the room).

<sup>33</sup>Individuals' desire to signal "conforming" behavior might also help explain the change in rejection rates between the private and public 100 Rs. conditions. This is analogous to the analysis in Bénabou and Tirole (2006) and the findings of Ariely et al. (2009). In the 500 Rs. condition, however, there is little signal value of accepting the payment; indeed, we find very little change in the rejection rates between the private and public 500 Rs. conditions.

in public. While this might occur in some settings, our findings of moderating effects of public expression are of interest given the theoretical ambiguity.

Finally, we consider the (non-random) variation in social context arising from respondents' familiarity with each other from previous interactions outside the study. In the third envelope, we included a question asking subjects how many people they knew in the room.<sup>34</sup> Nearly 60% of respondents reported knowing at least one other person, suggesting that although the study occurred in an artificial setting, some of the social connections in the room were natural. We find that the impact of social incentives on an individual's ideological expression positively varies with that individual's familiarity with others in the room, and that the moderating effect of the public condition on ideological expression is largest among individuals knowing most of the participants in the session.

#### **2.2.4 Sensitivity of Political Expression to Payment Size**

We next ask: how sensitive is the expression of ideology to the financial cost of that expression? To answer this question, we exploit the random assignment of bonus payments of 500 Rs., rather than 100 Rs., to half of the study's subjects. We find that the rejection rate of the 500 Rs. U.S. government offer (in the private condition) is just 9.7%. This is a decline in the rejection rate of 15.5 percentage points, from 25.2% to 9.7% ( $p=0.001$ ), relative to 100 Rs. private condition offer from the U.S. government.

Examining subjects' rejection of the LUMS bonus payment offer, we find a 2.8 percentage point reduction in rejection rates comparing the (private) 100 Rs. and 500 Rs. offers. Differencing out the change in the LUMS rejection rate across bonus payment size conditions, we find a reduction in rejection of the U.S. government offer of 12.7 percentage points ( $p=0.0128$ ).

As above, we can examine these differences in a regression framework. In Table 4, we report the coefficients from regressions of a rejection dummy on the interaction of a high payment dummy and a U.S. government donor dummy, as well as main effects of the high payment dummy and the U.S. government donor dummy. Column 1 reports coefficients from a regression without controls; column 2 reports coefficients of a regression using session fixed effects. Column 3 reports coefficients of a regression including session fixed effects and a set of subject covariates. Across specifications, the regression results match the raw differences.

#### **2.2.5 Additional Analyses**

We can exploit the experimental variation in prices to estimate several additional parameters of interest. First, one might wish to estimate the financial cost equivalent to the social cost of public

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<sup>34</sup>Subjects were asked to pick from 5 categories: no other participant; between 1 and 6 other participants; between 7 and 12; between 13 and 18; and, between 19 and 23. This was asked just after subjects estimated the number of other subjects who accepted the bonus payment.

expression found above. To do so, we assume a functional form for the relationship between the size of the private, U.S. government bonus payment offer and the rejection rate. Then, we estimate the financial cost of rejection that would produce the rejection rate we observed above in the 100 Rs., *public* U.S. government, condition. The difference between this amount and 100 Rs. is our estimate of the financial equivalent to the social cost faced by individuals offered the bonus payment from the U.S. government in the public condition.

We first assume that the relationship between rejection and the cost of rejection (i.e., the bonus payment size) is linear. In this case, we estimate that the social cost of rejecting the U.S. government offer is 211 Rs. If we instead assume that there is a logistic relationship between rejection and the size of the bonus payment, we find estimate that the social cost of rejecting the bonus payment publicly is around 180 Rs.

One might also be interested in individuals' private expressions of anti-American attitudes when the cost of expression is arbitrarily low. This will allow for a more direct comparison with the list experiment responses, which come at no cost (we turn to this below). We thus predict private rejection rates of the U.S. offer at price zero, exploiting the experimental variation we observe between 100 Rs. and 500 Rs. Assuming a linear relationship between expression and cost, the private rejection rate of the U.S. offer would be 29% at price zero. Assuming a logistic functional form, the estimated rejection rate at price zero is 31%.

Finally, we take an initial approach to “validate” our methodology using the results from the list experiments conducted in activity 3. It is important to emphasize that the list experiments were conducted after our intervention of interest. Because simply *receiving* the U.S. government bonus payment offer may have directly affected stated attitudes toward the U.S., in our analysis of the list experiments we focus on individuals who received the LUMS bonus payment offer. Note that the attitudes expressed in the list experiments are somewhat conceptually distinct from our estimates of *ideological* anti-Americanism: one might report opposition to foreign aid (or in favor of the PTI) for reasons unrelated to ideology. However, we believe it is a useful check that the magnitudes we estimate for ideological anti-Americanism roughly correspond to expressed anti-Americanism when cover is provided for expressing anti-American views.

Among subjects receiving the LUMS offer, we estimate that 22% of subjects indicate support for, “refusing humanitarian aid from the U.S. government,” and that 55.1% indicate support for, “supporting the activities of Pakistan Tehreek-e-Insaf (PTI),” the most anti-American of the major parties in Pakistan. Thus, our estimate of intrinsically-motivated anti-Americanism in the sample lies between the two list experiment results. This seems reasonable: some individuals who are broadly anti-American may not oppose American aid for consequential reasons; some individuals who support the PTI party may do so for reasons other than being ideologically anti-American.

## 3 Experiment 2

### 3.1 Design and Implementation

Between September 19 and October 21, 2015, we ran a second experiment in a new location: the areas surrounding Lahore. This experiment allows us to: (i) address questions about replicability and external validity; (ii) test whether our methodology can be implemented not only in a group/laboratory setting, but also in a door-to-door survey; and, (iii) link rejection of bonus payment offers to individuals' actual political party affiliations. Experiment 2 was implemented in two stages, which appeared, from a subject's perspective, to be unrelated, and which were conducted by two different survey teams. In the first stage, a door-to-door survey measured subjects' political affiliations; in the second stage, a tablet-based experiment (again based on door-to-door recruiting) elicited intrinsic anti-American ideology.<sup>35</sup>

#### 3.1.1 Context

Experiment 2 was implemented in the lead up to the first election under a new local government system in Punjab, Pakistan. Elections for local government bodies were held in Lahore ten days after the conclusion of our experiment, on October 31, 2015, with the two largest parties in Pakistan, *Pakistan Muslim League* (Nawaz League), or PML-N, and *Pakistan Tehreek-i-Insaf*, or PTI, expected to have a competitive contest. Experiment 2 was thus conducted in an environment where politics was a salient issue.

PML-N is a party typically associated with large-scale infrastructure programs. The party has invested heavily in transport and road development projects, particularly in the provincial capital Lahore, where we conducted our experiment. PML-N refers to infrastructure spending as the 'hallmark priority for PML(N)' in its party manifesto.<sup>36</sup>

PTI, in contrast, contested the 2013 elections on a strong anti-corruption and anti-American (put in terms of anti-“war on terror”) platform. Of particular interest to us is its anti-American stance, which is repeatedly mentioned in its party manifesto. The manifesto argues that Pakistan should “not fight others' wars or act as a surrogate for power. [Pakistan] has been subjected to the will of external powers with the most recent involvement in the U.S.-led war on terror which has created polarized and often violent cleavages within Pakistan's polity [...] Nothing symbolizes this more accurately than the U.S. imposed war on terror which has degenerated into a war of terror for ordinary Pakistanis.”<sup>37</sup>

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<sup>35</sup>A pilot study preceding these stages allowed us to refine our experimental design and to establish that we could carry out the activities safely, with minimal risk to enumerators and participants.

<sup>36</sup>See page 13 at <http://www.pmo.gov.pk/documents/manifesto.pdf>, last accessed January 26, 2018.

<sup>37</sup>PTI Manifesto, 2013 <http://www.scribd.com/doc/134950996/PTI-Manifesto-2013>, last accessed January 25, 2016.

### 3.1.2 Timeline and Site Selection

The experiment was conducted in four neighborhoods of the city of Lahore between September 19th and October 21st, 2015, with the first stage running through October 6th, and the second stage starting on October 8th. The neighborhoods were selected according to two criteria: first, they needed to have large enough populations to provide a sample size of around 2,000 people in the first stage of fieldwork.<sup>38</sup> Second, they needed to be areas with mixed political affiliations, to provide variation in support for the anti-American, PTI party. Using these criteria to guide us, we conducted fieldwork in Bara Sanda, Chungi Amar Sidu, Shalimar Bagh and Bakr Mandi.

### 3.1.3 Subject Recruitment and Screening

We contracted the same local survey firm as in Experiment 1 to recruit men aged between 18 and 35 from the targeted neighborhoods.<sup>39</sup> The survey firm employed a strict protocol to ensure that from the perspective of respondents, the two stages of the experiment would appear unrelated. In addition to using different sets of field enumerators in the two stages, and using different methods of collecting answers (paper vs. tablets, as discussed below), different survey company names were used in the two stages. In the first stage, enumerators introduced themselves as belonging to the survey company SEDCO (Socio Economic Development Concerns) Associates, while in the second stage, the new enumerators said that they were from DCS (Development Consultancy Services). Both companies are owned and run by the same organization in Islamabad—as in Experiment 1, we attempted to minimize our use of deception.

Upon engaging a potential household for the first stage of the intervention, enumerators inquired about the presence of men between the ages of 18 and 35 in the household. If there was no one suitable, that household was skipped and the next household was engaged. If a suitable subject did reside in the house, but was not available, the enumerators made a return visit to interview the person later the same day.<sup>40</sup> Once a proper respondent was identified and available, enumerators introduced the study, followed by an exercise to gauge literacy (which was necessary for participation in stage 2 of the experiment). In the exercise, enumerators handed the respondents an envelope that contained a single sheet of paper that allowed respondents to write a few brief comments to the Election Commission of Pakistan regarding the upcoming local bodies election in Lahore. If the respondents responded they were not literate, or if the enumerator observed that they were not literate, the interview was concluded and the next household was approached for a suitable

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<sup>38</sup>We aimed to match a total of 1,200 subjects between the two stages; assuming some unsuccessful attempts to match, we aimed to reach 2,000 respondents in stage 1.

<sup>39</sup>In both stages, each neighborhood team was headed by a field supervisor who managed four enumerators. Prior to beginning fieldwork, the supervisors canvassed the neighborhoods and drew paper-based maps of the lanes and households. Enumerators were then assigned lanes that they were individually responsible for covering. Households only interacted with enumerators, who reported separately to the supervisors.

<sup>40</sup>If more than one suitable man resided in the household, the youngest was selected to be part of the study.

respondent.

The second stage of the experiment was a modified version of Experiment 1, but rather than elicit anti-American ideology in a centralized experimental setting, stage 2 of Experiment 2 was conducted at subjects' houses, on an Android tablet. The major recruitment challenge was to conduct stage 2 with the same respondents in the same households as in the first stage. To ensure that this would be possible, field supervisors kept detailed maps of the neighborhoods for which they were responsible, along with using form IDs, and other information noted on the survey questionnaire from the first stage to assist in matching.

Over the course of the fieldwork in the first stage, enumerators approached 4,000 households, of which 1,530 households did not have a suitable respondent, 479 had a suitable respondent, but refused to be interviewed. In total, 1,991 households were successfully interviewed during the first stage of the intervention. The field team was instructed to match households from stage 1 with a targeted sample of 1,200 subjects for stage 2. In recruiting for the second stage, 1,674 of the 1,991 households were approached, of which 410 respondents were not available at home and 52 refused the survey. This produced a sample of 1,212 respondents who participated in both stages Experiment 2. As we show below, the respondents successfully contacted and matched during stage 2 are representative of the full sample of respondents in stage 1.

### 3.1.4 The Experiment

The first stage of Experiment 2 simply involved a five-minute survey at the subject's doorstep.<sup>41</sup> After checking for subjects' literacy using the exercise described above, enumerators asked a series of questions regarding two major parties: PML-N and PTI. In particular, enumerators asked which of the two parties respondents believed to be more anti-American, and whether respondents were members of either party.

The second stage was modeled after the design in Experiment 1, but modified to allow surveyors to conduct the study at subjects' homes using Android tablets. Subjects were asked to (privately) complete a brief ten-question personality survey. Following this survey, half of the subjects were randomly assigned to be asked direct questions about their views on the U.S. government and U.S. government aid to Pakistan (we call this the *stated-preference condition*). The ideology of the other half of the subjects was elicited using the methodology developed in Experiment 1 (we call this the *revealed-preference condition*).

Payment in the two conditions was as follows. In the stated-preference condition, subjects were paid 100 Rs. guaranteed as participation payment. Subjects were told that in addition to the participation payment, a lottery would determine whether they would receive a payment of up to 200 Rs. (in practice, the additional payment amount was drawn from a lottery assigning equal probabilities to the amounts of 0 Rs., 100 Rs., or 200 Rs.). This means that subjects in the

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<sup>41</sup>All of the study materials for both stages are reproduced in Appendix A2.

stated-preference condition could receive 100 Rs., 200 Rs., or 300 Rs. from participating in the study.

In the revealed-preference condition, there was also a 100 Rs. participation payment, as well as the possibility of additional payment to be determined via lottery. In this condition, the lottery amount payment was up to 100 Rs. (in practice, the additional payment amount was drawn from a lottery assigning equal probabilities to the amounts of 0 Rs. or 100 Rs.). In addition to the participation payment and the lottery bonus, subjects in the revealed-preference condition were offered a bonus payment from the U.S. government, just as in the private condition of Experiment 1. As in Experiment 1, subjects were asked to check a box indicating whether they accepted or rejected the bonus payment offer, with the language associated with the two check box options identical to that in Experiment 1. In total, subjects in the revealed-preference condition who accepted the U.S. government offer could receive 200 Rs. or 300 Rs., while those who rejected the offer could receive 100 Rs. or 200 Rs.

We designed the lottery component of subjects' payment to provide "cover" for a subject's choice of whether to accept the bonus payment offer. At the end of the survey, regardless of the treatment condition, a screen simply told the enumerator the total amount of money the subject should receive. Enumerators would pay the subject without knowing the treatment condition or the lottery payment outcome. Thus, regardless of subjects' choice to accept or reject the bonus payment offer, the survey enumerator who paid the subject would be *unaware* of whether the subject was even offered a payment from the U.S. government, let alone whether the subject accepted the payment.

Of course, subjects were not provided with complete information about the experimental design; thus, it is important to examine the issue of "cover" from the perspective of subjects in the revealed-preference condition. It is important to note that subjects in the revealed-preference condition were informed that due to funding constraints, only half of subjects were offered the bonus payment from the U.S. government. Now, consider a subject who rejected the bonus payment: he would either receive 100 Rs. or 200 Rs., depending on the outcome of the lottery payment. Because the subject was informed that some individuals did not receive the bonus payment offer, he should have been aware that a payment of 100 Rs. might simply result from an individual not receiving the U.S. offer, and having bad luck in the lottery. A payment of 200 Rs. might result from an individual not receiving the U.S. bonus payment offer, or from an individual accepting the bonus payment, then winning 100 Rs. in the lottery. Thus, we feel that subjects who chose to reject the bonus payment should have done so perceiving little to no pressure from the enumerator.

Next consider a subject who accepted the bonus payment: he would either receive 200 Rs. or 300 Rs., depending on the outcome of the payment lottery. If the subject received 200 Rs., this could have come resulted from a choice to reject the payment, plus winning 100 Rs. in the lottery. However, if the subject ended up with a payment of 300 Rs., the subject might believe that the

enumerator would be certain that he accepted the payment (subjects in the revealed-preference condition were not aware that individuals in the stated-preference condition had their payment determined by a lottery with a 200 Rs. top payoff). This raises an important concern: our design offered subjects perfect cover for their choice of whether to accept the U.S. bonus payment offer; however, the design only provided imperfect *perceived* cover if subjects accepted the offer.

How might (perceived) imperfect cover have affected subjects decisions of whether to accept the U.S. offer? In Experiment 1, we find that anticipated public expression pushed subjects in the direction of *accepting* the bonus payment—this suggests that (perceived) social pressure would be of greater concern if *rejection* did not have cover. However, it is possible that some subjects wanted to accept the offer, anticipated pressure to reject it, and perceived a lack of cover for the choice to accept the payment. In this case, we would have a higher rejection rate than we would observe in the complete absence of perceived social pressure. Note that this mis-measurement of some subjects’ ideology would weaken any association between revealed ideological preferences and subjects’ party membership.

## 3.2 Empirical Analysis

### 3.2.1 Sample Characteristics and Balance Across Conditions

Table 6 presents the mean characteristics of the sample from the two stages of Experiment 2, with the stage 2 sample the subset of the stage 1 subjects whom were included in both stages. Table 6, column 1 presents the mean values of the same variables in Experiment 1, for comparison. By looking at Table 6, columns 1–3, one can see that, relative to respondents in Experiment 1, subjects in Experiment 2 are older (26 vs. 24), less likely to be single (50% vs. 69%), less educated (10 vs. 12 years of education), and more likely to be engaged in an economic activity (80% vs. 50%). This indicates that the two samples of young men are somewhat different, besides being drawn from different regions of the country.

Comparing Table 6, columns 2 and 3, one can observe that there is no evidence of selection into being included in both stages of the second experiment (p-values reported in Table 6, column 6). Finally, Table 6, columns 4–5 indicate that the randomization into two treatments in the second stage of Experiment 2 was successful (p-values in Table 6, column 7).

### 3.2.2 Replicating Experiment 1

In the second stage of Experiment 2, we find that 34% of the respondents rejected the 100 Rs., (private) bonus payment offer from the U.S. government. This number is quite similar to the rejection rate we observed in the 100 Rs., private condition in Experiment 1. This result is valuable both for establishing some degree of external validity of our original finding, and for testing the robustness of our elicitation methodology: it is worth emphasizing that the results in Experiment

2 were found in a different part of Pakistan, with a different sample frame, and a different data collection method.

### 3.2.3 Association with Real-world Behavior

By linking respondents’ answers across stages of Experiment 2, we can correlate party membership collected in stage 1 with U.S. government offer rejection rates from stage 2. To focus on the politically informed and engaged subset of the sample, we examine respondents who consider PTI to be the more anti-American of the two parties and who planned to vote in the upcoming elections. Among these respondents, the PTI membership rate was 3% among the 177 individuals who accepted the offer and 8% among the 89 individuals who rejected it (the p-value of the difference is 0.108). (Alternatively, the rejection rate of the 100 Rs. U.S. offer was 32% among non-members of the PTI party, while it was 58% for those who were members of the party—the p-value of this difference is 0.075.) Interestingly, when we examine the correlation between party membership and *stated* views about the U.S. government or U.S. humanitarian aid, we find a *negative* correlation. This might result from stated preferences providing a noisy signal or possibly from greater sensitivity among PTI members in expressing anti-American attitudes in response to direct questions without any “cover” provided.

## 4 Discussion

### 4.1 Conceptual Framework

We next develop a conceptual framework that clarifies the threats to our interpretation of rejection of the bonus payment offer from the U.S. government as an ideological political expression. Suppose that individual  $j$  derives utility from rejecting payment through three channels. First, rejecting payment may provide an individual with utility for *instrumental* reasons; that is, because expression changes the world (for individual  $j$  or for others) in ways that bring individual  $j$  utility. Second, individual  $j$  might derive utility from rejecting the payment for *intrinsic* reasons: these include ideology, but can also include other intrinsic reasons to reject payment. Finally, when rejection of the payment is (anticipated to be) observed by others, it might differentially provide utility (or disutility) for *social* reasons.

In the context of our experiments, these three elements can be enumerated as follows:

- Consequential utility concerns of individual  $j$  are the financial consequences we impose,  $C_j$  (the money forgone when the bonus payment is rejected), plus any other utility-relevant outcomes a subject anticipates,  $c_j$  (e.g., a utility gain from taking money from the U.S. government).

- Social utility concerns of individual  $j$  are those that are generated by our public condition in Experiment 1,  $S_j$ , plus any other considerations that also exist in the private condition,  $s_j$ .
- Intrinsic utility concerns of individual  $j$  are ideological motives,  $I_j$ , and other intrinsic motives for rejecting payment,  $i_j$  (for example, one might feel guilty accepting additional payment for participation beyond the promised show-up fee).

An idealized view of our methodology is that in the private condition of Experiment 1 and in Experiment 2, we set  $C_j > 0$ ,  $S_j = 0$ , and  $i_j = c_j = s_j = 0$ . In this case, rejection of the U.S. government bonus payment offer would occur if:

$$I_j > C_j,$$

and rejection would clearly reflect an ideological revealed preference priced at  $C_j$ . Of course, this ideal is unlikely to be perfectly realized. All we can assume is that  $C_j > 0$  and  $S_j = 0$ . Thus, in the private condition of Experiment 1 and in Experiment 2, an intrinsically-motivated (not necessarily *ideological*), revealed preference for rejecting the bonus payment will be observed if the intrinsic benefits from rejecting payment exceed the consequential costs of rejecting payment plus any social cost. That is, if:

$$I_j + i_j > C_j + c_j + s_j$$

This equation makes it clear that our treatment of rejection of the bonus payment as an *ideological* expression of anti-Americanism relies on:  $I_j$  being positive, and arising from anti-American ideology; and,  $i_j$ ,  $c_j$ , and  $s_j$  being “small”. We next discuss these parameters, in turn.

## 4.2 Interpreting Rejection of the Bonus Payment Offer

### 4.2.1 Intrinsic Utility for Reasons other than Anti-American Ideology, $I_j$ and $i_j$

An important concern is that subjects in both experiments might have privately rejected the U.S. bonus payment offer not because they disliked the U.S., but for some other intrinsic reason. For example, perhaps they felt uncomfortable accepting an additional monetary payment. As discussed above, however, we address this concern in our analysis of Experiment 1 by differencing out the private rejection rates from the LUMS offer: we find a substantial fraction of the population rejecting the U.S. government offer beyond those who reject the LUMS offer.

Of course, the U.S. government offer differed from the LUMS offer both in the foreignness of the entity offering the payment, and in the fact that the entity was a government. One might be concerned that the difference in rejection rates between the U.S. payment and the LUMS payment conditions arose from anti-foreign or anti-government views, rather than specifically anti-American

views. We can assess this possibility by examining the correlation between rejection of the U.S. offer and stated preferences. As noted above, in Experiment 1, following subjects' decisions of whether to accept the bonus payment, they were asked to answer a number of direct survey questions, which included elicitation of their stated views on: (i) aid provided by the U.S. government, (ii) the U.S. government overall, (iii) aid provided by the Japanese government, and (iv) the Japanese government overall (Japan was picked as a plausibly neutral, rich, foreign nation that is currently engaged in providing funds to Pakistan).

For each of these questions, respondents were asked to express their views by picking a number from 1 to 5, with 1 corresponding to very negative views, and 5 to very positive views. We convert responses into "negative views" dummy variables equal to 1 if subjects' responses were either "1" or "2". Subjects were also asked to compare their views on the four aforementioned topics *relative* to the other participants in the room, also on a scale from 1 to 5; we converted these into analogous "negative relative views" dummy variables. Responses to the direct questions on stated views about U.S. aid and the U.S. government suggest anti-American sentiment among a significant minority of the sample: 26.4% of respondents report having a negative view of U.S. aid (i.e., picked either 1 or 2 as their answer to the corresponding question) and 29.8% of respondents have a negative view of the U.S. government overall.

To examine whether rejection of the U.S. government offer was specifically associated with anti-American attitudes, we first regress the "negative views on U.S. aid" dummy variable on a dummy variable indicating whether subjects rejected the bonus payment in the 100 Rs., private, U.S. offer, condition. In Table 5, column 1, one can see that individuals who rejected the U.S. payment were around 63 percentage points more likely to express negative views on U.S. aid in response to a direct question (the coefficient is significant at the 1% level). In Table 5, column 2, we present results from an analogous regression, but using negative views of the U.S. government as the outcome. Again, one sees economically and statistically significantly higher rates of expressing negative views among subjects who rejected the U.S. government bonus payment. In Table 5, columns 3 and 4, we present results analogous to columns 1 and 2, but based on questions asking subjects about their views relative to others in the room. One can see that subjects who rejected the U.S. bonus payment offer view themselves as *relatively* more anti-American.

Finally, as a falsification exercise, in Table 5, columns 5–8, we repeat the regressions from columns 1–4, but study subjects' views on aid from Japan, and on the Japanese government more generally. One can see that rejection of the U.S. payment is associated with very small, statistically *insignificant* differences in views on Japan. These associations suggest that rejection was specifically associated with attitudes opposed to the U.S. government: while individuals who rejected the offer expressed very anti-American views, their views were *not* differentially negative regarding the Japanese government. All of these results suggest that the dominant source of intrinsic motivation to reject the U.S. government bonus payment offer was indeed anti-American ideology.

### 4.2.2 Consequential Concerns Other Than The Forgone Payment, $c_j$

We designed our study such that the stakes of rejecting the payment offer would be meaningful for subjects, but trivial for the U.S. government: it is difficult to imagine a meaningful effect on U.S. finances arising from subjects' decisions to reject or accept the bonus payment offer. However, despite the fact that the fiscal stakes for the U.S. government were trivial, subjects may have believed that their choices in aggregate would have meaningful consequences by sending a signal to the U.S. government. For example, checking the box may have been viewed as analogous to voting on American policy.

Importantly, however, the median subject who rejected the U.S. bonus payment offer in the 100 Rs., private condition believed (as measured in our incentivized elicitation) that 87% of the other subjects accepted the offer. Thus, it is unlikely that any individual's decision to reject the bonus payment would have been viewed as pivotal.<sup>42</sup> We thus believe it is likely that  $c_j$  was perceived to be "small".

### 4.2.3 Social Concerns, $s_j$

We next consider the possibility that subjects' choices to reject the bonus payment offer were shaped by social concerns despite our attempts to make their decisions completely private. Note that our methodology aims to improve upon asking direct survey questions by eliciting subjects' political attitudes without their being aware of the elicitation. However, the choice that subjects made regarding accepting the bonus payment intentionally, *necessarily*, had an ideological component. Thus, it is important to consider whether this ideological component led subjects to think consciously about whether the experimenter was engaged in measuring their ideological positions, and thus to respond in an inauthentic way to the bonus payment offer.

However, it is worth remembering that just prior to the attitude elicitation in each experiment, subjects had completed a survey that was entirely non-ideological. Having completed the survey, subjects simply made a natural choice about payment, which should have appeared to be ancillary to the main purpose of the surveys.

Even if subjects did consider the possibility that their choices might be observable, there are several reasons to think that this social cost term would have *increased* the cost of rejecting the U.S. payment offer (making the revealed ideological preference even stronger). First, if subjects were concerned about the observability of their choice by the research team, standard experimenter demand effects would seem to pull in the direction of accepting the payment offer: if a subject is offered a bonus payment, there might be (if anything) implicit pressure to accept. Second, if subjects believed that their choice might be revealed to others, our estimate in Experiment 1 of the effect of

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<sup>42</sup>A similar logic applies to individuals who accepted the bonus payment. The median subject accepting payment believed that over 95% of other subjects accepted payment; thus, it is unlikely that any individual's decision to accept payment would have been viewed as pivotal.

anticipated public expression suggests that observability of the choice would again *reduce* rejection rates. One still might worry about subjects' choices being distorted by fear induced by the mention of the U.S. government. Yet subjects were remarkably willing to express anti-American views in response to direct questions even if they were offered a payment by the U.S. government: over 70% of subjects who rejected the U.S. offer openly express negative views of the U.S. government.

As a check of whether subjects' choices were likely to have been affected by concerns about sanctions (by the U.S. government or others) for expressing particular attitudes, we can examine whether patterns of behavior were similar for subjects with differing levels of risk aversion or neuroticism. In Experiment 1, envelope 1, we elicited subjects' Big 5 personality traits; in envelope 4, we measured subjects' risk preferences using a five-point Likert scale. We create a "neurotic" dummy variable equal to 1 for subjects with above-median neuroticism, and a "risk averse" dummy that is equal to one if individuals reported to be either "very unwilling" or "unwilling" to take risks (around 56% of the sample are thus categorized as risk averse). First, we note that there is no effect of receiving a U.S. offer on reported risk preferences (neuroticism is elicited prior to the offer, and is uncorrelated with receiving the U.S. offer). Reassuringly, we find that individuals who are neurotic or risk averse according to these definitions do not show significantly different rates of rejection of the U.S. offer in our baseline condition (100 Rs. payment, private condition).

## 5 Conclusion

Marx and Engels (1970) famously argued that all ideology is ultimately rooted in the material interests of the ruling class, writing, "The ruling ideas are nothing more than the ideal expression of the dominant material relationships, the dominant material relationships grasped as ideas." In our work we do not take a stance on the *ultimate* source(s) of intrinsic political motivation, but we are able to identify a meaningful role for such intrinsic motivation in shaping political expression. We show that a significant minority of Pakistani men in our two experimental samples are willing to forgo a sizable payment simply to avoid checking a box that affirms gratitude toward the U.S. government for providing the funds. This behavior is private, and is unlikely to be of large "real world" consequence, suggesting that rejection of payment is an intrinsically motivated, revealed preference expression of anti-American ideology. We also find that some individuals with strongly-held ideological views will suppress the expression of those views when the financial costs or anticipated social costs of expression are high enough.

By implementing a second experiment, in a different setting, and with a different survey technology, we show that our finding of a significant presence of intrinsically motivated anti-Americanism is robust and has some degree of external validity. Generally, our different samples consist of literate, young men, and are therefore not representative of Pakistan's population as a whole. However, our samples include a broad representation from across Pakistani ethnic groups, drawn from four

distinct study sites, and we find the same patterns of results across all main ethnic groups represented and across all sites. Therefore, although our sample is not representative, our results broadly hold across a range of literate, young men, whose anti-American attitudes may be of special interest (see, e.g., Berman, 2009, and Krueger, 2007, on the role of educated young men in extremist organizations). Moreover, we also show that ideological motivation, as elicited using our method, correlates strongly with a real-world political behavior of interest: membership in a major Pakistani anti-American party. Our findings suggest not only that ideological motives can be at the root of political behavior, but also that they may play an important role in driving political behavior of interest. This suggests that policies aimed at reducing anti-American political expression simply by changing instrumental incentives will be limited: ideologues are driven by their intrinsic motivation, not by the consequences of their actions.

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Table 1: Summary Statistics and Covariates Balance in Experiment 1

	Full Sample (1)	LUMS				U.S. government				p-value (10)
		Low payment		High payment		Low payment		High payment		
		Pri (2)	Pub (3)	Pri (4)	Pub (5)	Pri (6)	Pub (7)	Pri (8)	Pub (9)	
Currently engaged in economic activity?	0.504 (0.500)	0.468 [0.042]	0.489 [0.042]	0.518 [0.043]	0.489 [0.043]	0.500 [0.042]	0.529 [0.042]	0.521 [0.042]	0.518 [0.042]	0.97
Age	23.7 (5.0)	23.2 [0.4]	23.6 [0.5]	23.6 [0.4]	24.2 [0.4]	23.3 [0.4]	23.8 [0.5]	24.2 [0.5]	23.6 [0.4]	0.63
Gender (male=1)	1 -	1 -	1 -	1 -	1 -	1 -	1 -	1 -	1 -	-
Single	0.692 (0.462)	0.696 [0.039]	0.691 [0.040]	0.691 [0.039]	0.683 [0.040]	0.748 [0.038]	0.669 [0.040]	0.674 [0.040]	0.684 [0.040]	0.90
Years of education	11.9 (2.8)	12.1 [0.2]	11.9 [0.3]	11.8 [0.2]	11.7 [0.2]	12.1 [0.2]	11.5 [0.3]	11.7 [0.3]	12.0 [0.2]	0.55
<i>Ethnic groups</i>										
Punjabi	0.101 (0.301)	0.090 [0.025]	0.098 [0.026]	0.096 [0.025]	0.104 [0.027]	0.101 [0.027]	0.093 [0.026]	0.119 [0.028]	0.105 [0.027]	1.00
Pashtun	0.641 (0.480)	0.634 [0.042]	0.632 [0.042]	0.640 [0.041]	0.634 [0.042]	0.643 [0.042]	0.667 [0.042]	0.622 [0.042]	0.654 [0.041]	1.00
Baluchi	0.091 (0.288)	0.082 [0.024]	0.120 [0.028]	0.103 [0.026]	0.067 [0.022]	0.093 [0.026]	0.093 [0.026]	0.096 [0.025]	0.075 [0.023]	0.88
<i>Religion</i>										
Shia	0.053 (0.224)	0.037 [0.016]	0.045 [0.018]	0.083 [0.024]	0.060 [0.021]	0.040 [0.017]	0.076 [0.023]	0.045 [0.018]	0.038 [0.017]	0.66
Sunni	0.853 (0.354)	0.844 [0.031]	0.841 [0.032]	0.812 [0.034]	0.851 [0.031]	0.849 [0.032]	0.855 [0.031]	0.895 [0.027]	0.880 [0.028]	0.67
Muslim (unspecified)	0.076 (0.265)	0.096 [0.025]	0.091 [0.025]	0.090 [0.025]	0.075 [0.023]	0.095 [0.026]	0.061 [0.021]	0.038 [0.017]	0.060 [0.021]	0.37
<i>Big 5</i>										
Openness to experience	3.020 (0.424)	3.062 [0.032]	3.072 [0.039]	2.998 [0.036]	3.014 [0.035]	3.021 [0.038]	3.015 [0.036]	2.990 [0.035]	2.985 [0.032]	0.56
Conscientiousness	4.110 (0.563)	4.110 [0.047]	4.101 [0.048]	4.110 [0.044]	4.121 [0.044]	4.095 [0.058]	4.124 [0.045]	4.064 [0.043]	4.157 [0.047]	0.93
Extraversion	3.590 (0.512)	3.655 [0.044]	3.586 [0.045]	3.572 [0.038]	3.564 [0.042]	3.543 [0.049]	3.543 [0.041]	3.566 [0.040]	3.689 [0.042]	0.14
Agreeableness	3.805 (0.566)	3.812 [0.047]	3.848 [0.051]	3.792 [0.047]	3.740 [0.048]	3.785 [0.046]	3.835 [0.044]	3.797 [0.048]	3.829 [0.047]	0.82
Neuroticism	2.901 (0.530)	2.902 [0.047]	2.919 [0.041]	2.952 [0.038]	2.869 [0.046]	2.898 [0.046]	2.911 [0.040]	2.880 [0.046]	2.876 [0.049]	0.89
Number of observations	1152	144	144	144	144	144	144	144	144	

*Notes:* Column 1 presents the mean for each variable based on our sample of 1,152 subjects. The Big 5 characteristics were recorded on a 1 to 5 Likert scale. Standard deviations are in parentheses. Columns 2 to 10 report the mean level of each variable, with standard errors in brackets, for each treatment cell. For each variable, column 10 reports the p-value of a joint test that the mean levels are the same for all treatment cells (columns 2–9). The last row presents the number of observations in each treatment condition. Some calculations used a smaller sample size due to missing information. The proportion of subjects with missing information for each variable is never greater than 8%. The ethnic group categories do not sum to one because of a few small omitted categories (e.g., subjects identifying as Seraiki speakers) and non-response to this question.

Table 2: Ideological Political Expression in Experiment 1

Dependent Variable:	Rejected (=1)		
	(1)	(2)	(3)
U.S. government	0.168*** [0.043]	0.169*** [0.043]	0.175*** [0.046]
Mean LUMS offer (low, private)	0.084 [0.023]	0.084 [0.023]	0.084 [0.023]
Session FE	No	Yes	Yes
Covariates	No	No	Yes
Observations	286	286	243

*Notes:* This table reports the coefficients of regressions of rejection on a U.S. government donor dummy. Column 1 reports coefficients of a regression with no controls. Column 2 reports coefficients of a regression using session fixed effects. Column 3 reports coefficients of a regression including session fixed effects and a set of subject covariates. The sample in these regressions includes subjects who received the 100 Rs. offer in the private condition. All of the variables presented in Table 1 are included as covariates in column 3. The sample size in the regression presented in column 3 is smaller due to missing values for some covariates. Robust standard errors are in brackets. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

Table 3: The Effect of the Public Treatment in Experiment 1

Dependent Variable:	Rejected (=1)		
	(1)	(2)	(3)
Public $\times$ U.S. government	-0.109* [0.060]	-0.107* [0.060]	-0.141** [0.064]
Public	0.027 [0.035]	0.028 [0.036]	0.066* [0.038]
U.S. government	0.168*** [0.043]	0.169*** [0.043]	0.179*** [0.045]
Mean LUMS offer (low, private)	0.084 [0.023]	0.084 [0.023]	0.084 [0.023]
Session FE	No	Yes	Yes
Covariates	No	No	Yes
Observations	571	571	488

*Notes:* This table reports the coefficients of regressions of rejection on the interaction of a public condition dummy and a U.S. government donor dummy, and main effects of the public condition dummy and the U.S. government donor dummy. Column 1 reports coefficients of a regression with no controls. Column 2 reports coefficients of a regression using session fixed effects. Column 3 reports coefficients of a regression including session fixed effects and a set of subject covariates. The sample in these regressions includes all subjects who received the 100 Rs. offer. All of the variables presented in Table 1 are included as covariates in column 3. The sample size in the regression presented in column 3 is smaller due to missing values for some covariates. Robust standard errors are in brackets. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

Table 4: Price Effects in Experiment 1

Dependent Variable:	Rejected (=1)		
	(1)	(2)	(3)
High payment $\times$ U.S. government	-0.127** [0.053]	-0.127** [0.053]	-0.129** [0.056]
High payment	-0.028 [0.030]	-0.027 [0.033]	-0.016 [0.033]
U.S. government	0.168*** [0.043]	0.169*** [0.042]	0.181*** [0.044]
Mean LUMS offer (low, private)	0.084 [0.023]	0.084 [0.023]	0.084 [0.023]
Session FE	No	Yes	Yes
Covariates	No	No	Yes
Observations	572	572	499

*Notes:* This table reports the coefficients of regressions of rejection on the interaction of a high payment dummy and a U.S. government donor dummy, and main effects of the high payment dummy and the U.S. government donor dummy. Column 1 reports coefficients of a regression with no controls. Column 2 reports coefficients of a regression using session fixed effects. Column 3 reports coefficients of a regression including session fixed effects and a set of subject covariates. The sample in these regressions includes subjects who received an offer in the private condition. All of the variables presented in Table 1 are included as covariates in column 3. The sample size in the regression presented in column 3 is smaller due to missing values for some covariates. Robust standard errors are in brackets. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

Table 5: Revealed and Stated Preferences in Experiment 1

	Negative views about U.S. aid (1)	Negative views about U.S. government (2)	Relatively more negative views about U.S. aid (3)	Relatively more negative views about U.S. government (4)	Negative views about Japan aid (5)	Negative views about Japan government (6)	Relatively more negative views about Japan aid (7)	Relatively more negative views about Japan government (8)
Rejected	0.627*** [0.081]	0.542*** [0.085]	0.401*** [0.092]	0.402*** [0.092]	0.020 [0.076]	0.042 [0.071]	-0.019 [0.079]	0.030 [0.086]
Mean (accepted U.S. offer)	0.115*** [0.032]	0.152*** [0.035]	0.170*** [0.038]	0.182*** [0.039]	0.175*** [0.038]	0.125*** [0.033]	0.219*** [0.041]	0.248*** [0.042]
Observations	139	141	135	135	139	140	140	141

Notes: This table reports differences in stated preference views between subjects who rejected and those who accepted the U.S. 100 Rs. private offer. In Column (1), subjects were asked about their views toward aid provided by the U.S. government to Pakistan; possible responses were “very negative”, “negative”, “neither negative nor positive”, “positive”, or “very positive”. We coded a “negative views about U.S. aid” dummy variable equal to 1 for subjects who answered “very negative” or “negative”. Column (2) uses a question about subjects’ views toward U.S. government in general. Columns (3) and (4) are based on questions asking subjects how their views of U.S. aid and the U.S. government in general compare to those of others in the room. Columns (5) to (8) replicate columns (1) to (4) using views on Japan instead of the U.S. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

Table 6: Summary Statistics and Covariates Balance in Experiment 2

x	Experiment 1 (1)	Experiment 2		Stage 2		p-value	
		Stage 1 (2)	Stage 2 (3)	Revealed Preference (4)	Stated View (5)	(2)=(3) Column (6)	(4)=(5) (7)
Currently engaged in economic activity?	0.504 [0.015]	0.797 [0.009]	0.799 [0.012]	0.791 [0.016]	0.807 [0.016]	0.869	0.475
Age	23.7 [0.2]	26.5 [0.1]	26.4 [0.2]	26.2 [0.2]	26.7 [0.2]	0.857	0.150
Single?	0.692 [0.014]	0.499 [0.011]	0.500 [0.014]	0.514 [0.020]	0.486 [0.020]	0.889	0.329
Years of Education	11.9 [0.1]	10.0 [0.1]	10.0 [0.1]	10.1 [0.1]	10.0 [0.1]	0.401	0.615
Number of observations	1152	1991	1212	611	601		

*Notes:* Column 1 presents the mean for each variable in the first experiment. Columns 2 and 3 present the mean for each variable respectively in the first and second stage of the second experiment. Columns 4 and 5 present information on subjects from the second stage of the second experiment separately for those in the revealed preference and in the stated view groups. Column 6 presents p-values of tests that means are the same for subjects in the stage 1 and stage 2 of the second experiment, while column 7 presents p-values of tests that means are the same for subjects in the revealed preference and stated view groups.

# Online Appendix: Not for publication

## A1 Appendix Figures and Tables

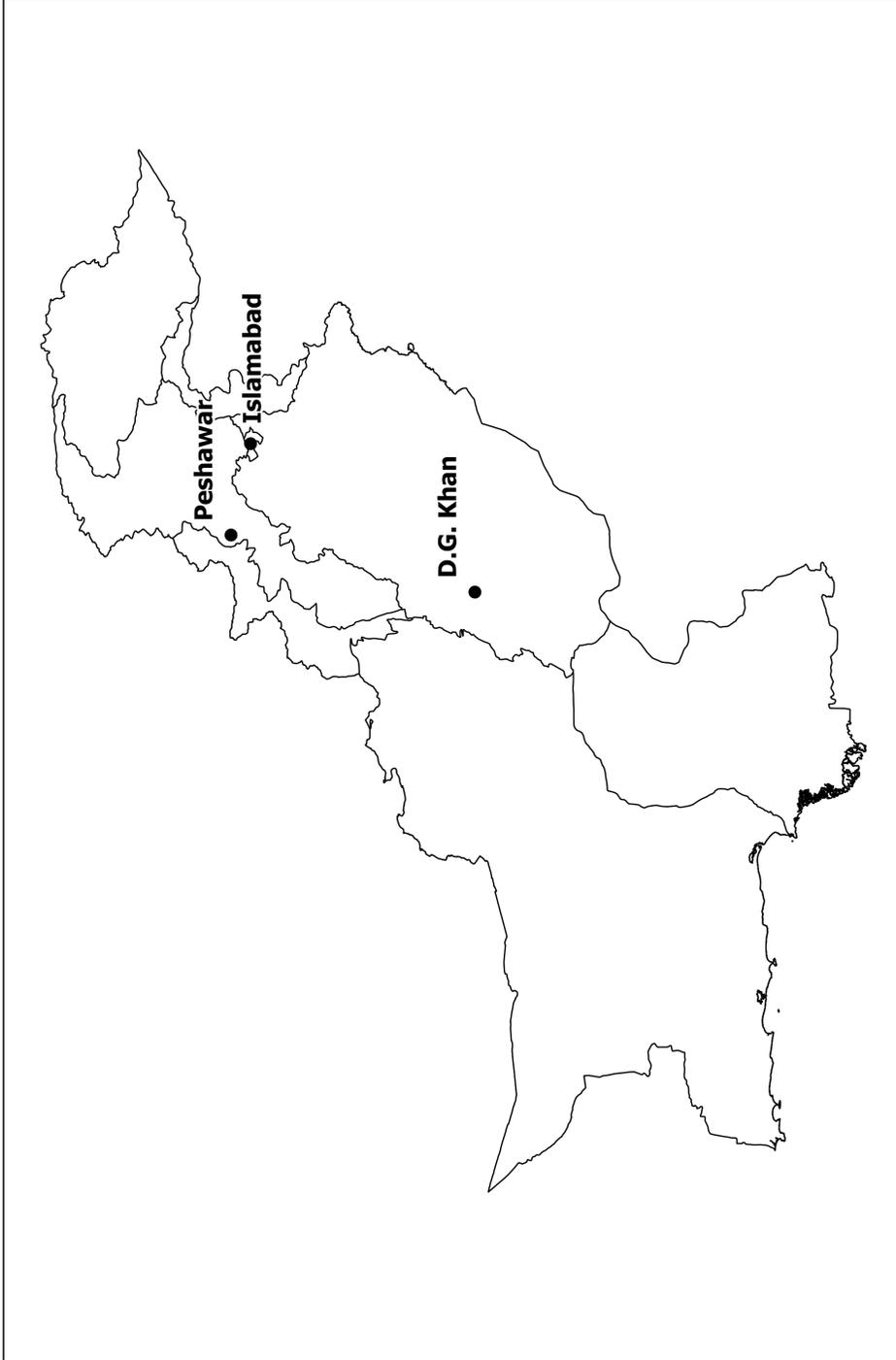


Figure A.1: Map of Experiment 1 Laboratory Locations in Pakistan

Panel A: First Screening Test

## ایسا کبھی نہیں ہوتا

”دنیا بھری سستی، کام چوری اور کاہلی میری لڑکی پر ختم ہے۔“

امی کی ایونٹ ٹرانسمیشن کا آغاز خلاف توقع آج جلدی ہو گیا تھا۔ اس نے ڈھٹائی کی اعلیٰ روایات قائم کرتے ہوئے انہیں نظر انداز کر کے لینے رہنے کی کوشش کی مگر آج امی فارم میں تھیں اور مسلسل اس کی مدح سرائی فرما رہی تھیں اسے اٹھنا ہی پڑا مگر یہ اٹھنا عام اٹھنا نہیں تھا۔ اپنے کمرے کے دروازے کو اچھی طرح شیخ کر وہ باہر آئی تھی۔

”چار گھنٹے پہلے تو آپ کا فرمان تھا کہ دنیا بھری سستی، کام چوری اور کاہلی تجھ سے شروع ہوتی ہے اور چار گھنٹے کے اندر اندر یہ مجھ پر ختم ہوتا شروع ہو گئیں، بندے کو اپنی زبان پر تو قائم رہنا چاہئے۔“

اس نے صحن میں آتے ہی بیان داغا تھا اور پھر برآمدے کے واش بیسن کے سامنے کھڑے ہو کر چہرے پر پانی کے چھینے مارنے لگی امی صحن میں تخت پر بیٹھی ہنسی بنا رہی تھیں۔

”زبان دیکھی ہے قہقہی کی طرح چلتی ہے۔“

انہوں نے اس کی بات پر آگ بگولہ ہوتے ہوئے کہا تھا۔

Panel B: On-site Screening Test

## ترکیب

مرغ کو صاف کر کے دھو لیں۔ ایک دیگی میں آدھا کپ پانی ڈالیں، اس میں لوہنگ اور بسن ڈال کر مرغ ہلکا گلائیں۔ بلینڈر میں بادام، پستہ، انجیر، کھوپرا، ادراک، پنے، خشخاش، دہی ڈال کر موٹا موٹا پیس لیں۔ ایک دیگی میں کوکنگ آئل گرم کر کے اس میں پیاز ڈال کر ہلکا سبز ہونے دیں اس کے بعد اس میں پیسا ہوا مصالحہ، نمک اور سرخ مرچ پاؤڈر شامل کر کے بھون لیں۔ اس کے بعد بھنا ہوا مصالحہ مرغ کے پیس میں بھر دیں۔ اوپر بھی اچھی طرح لگا دیں۔ بیلنگ ڈش میں کوکنگ آئل لگا کر اسے چکنا کر لیں مرغ اس میں رکھ کر پہلے سے گرم اوون میں 200 ڈگری سینٹی گریڈ پر رکھ کر پینتیس سے چالیس منٹ تک بیک کریں۔ اس کے بعد مرغ کے اوپر کوکنگ آئل لگا کر مزید دس منٹ تک بیک کریں۔ گوشت کی رنگت سرخی مائل ہونے پر اسے اوون سے نکال لیں۔ لذیز مرغ میوہ دار تیار ہے۔

سلاد کے ساتھ پیش کریں۔

Figure A.2: Urdu Versions of Literacy Screening Tests for Experiment 1

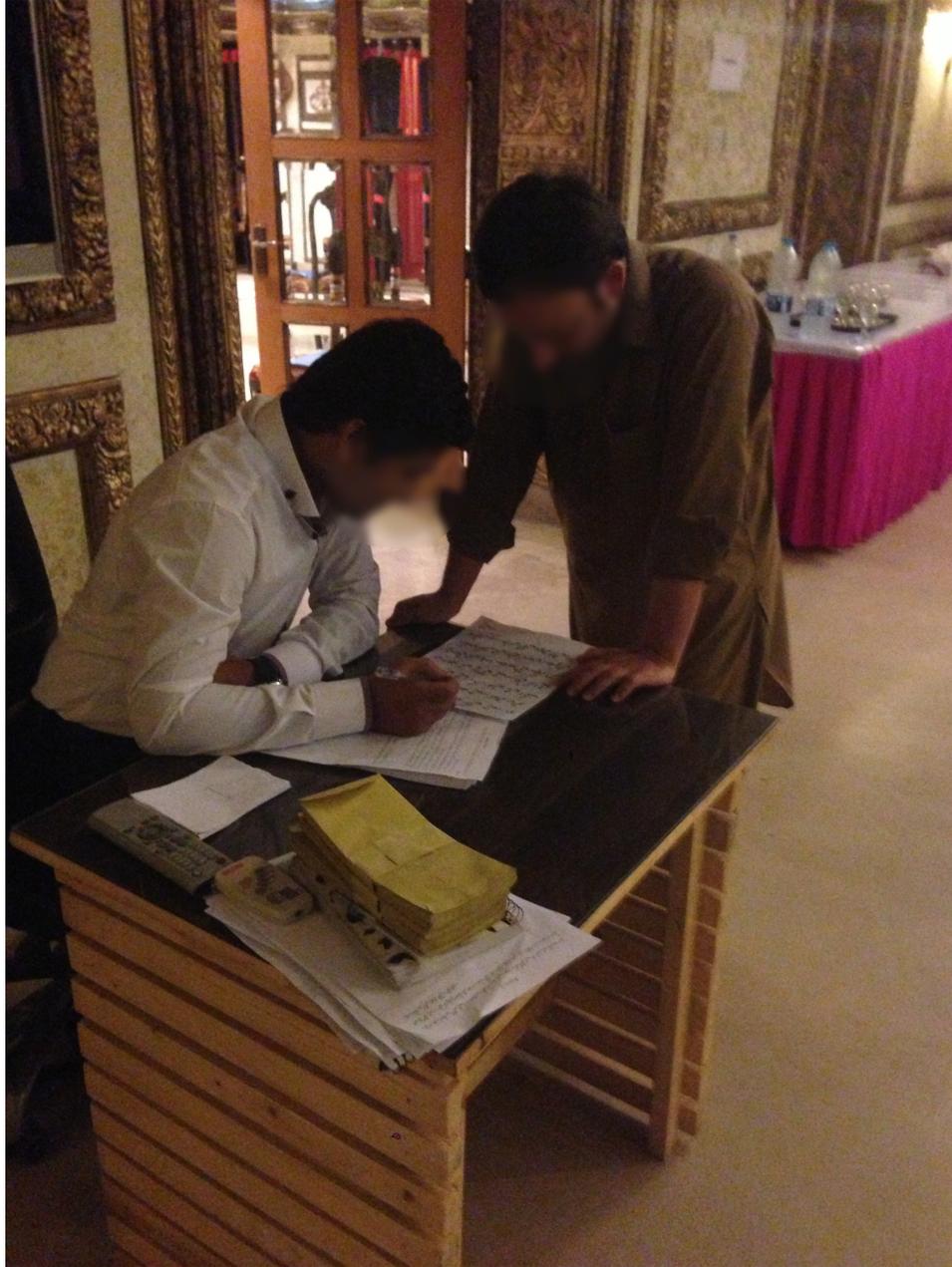


Figure A.3: Experiment 1 Enrollment Desk Outside of the Lab in Islamabad



Figure A.4: Experiment 1 Session in Islamabad



Figure A.5: Experiment 1 Session in Peshawar

		Participant Identification Number																							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Laboratory Session Number	1	l	k	c	v	n	o	u	s	h	w	p	b	a	i	q	m	d	f	t	e	j	g	x	r
	2	w	t	q	p	x	m	j	b	s	k	n	l	v	i	d	o	e	a	h	r	g	u	c	f
	3	r	w	q	n	c	t	h	i	k	a	d	g	b	o	j	x	e	l	f	v	s	p	u	m
	4	k	w	g	r	c	v	u	n	x	i	p	d	t	m	b	a	l	q	s	j	e	h	o	f
	5	h	c	w	s	q	d	f	r	v	m	l	u	e	a	g	x	k	t	n	i	o	j	p	b
	6	v	t	n	c	q	h	o	e	p	r	j	f	w	a	l	m	s	u	b	d	i	x	g	k
	7	k	g	s	i	m	c	v	h	r	p	l	x	o	b	n	j	d	w	f	u	e	q	t	a
	8	w	k	d	l	h	s	f	m	g	x	b	a	o	q	p	n	c	v	e	i	u	t	r	j
	9	g	x	c	u	q	l	i	j	d	b	m	p	v	t	n	f	e	k	a	s	w	h	o	r
	10	m	x	w	b	c	u	l	k	t	d	e	q	p	j	h	i	n	r	o	a	f	v	g	s
	11	c	b	h	f	u	w	s	t	a	n	e	o	j	l	g	m	k	v	r	d	q	i	x	p
	12	l	v	j	t	i	d	r	m	c	u	b	a	x	p	e	n	o	g	q	h	s	f	k	w
	13	c	p	q	a	b	v	d	n	l	x	j	g	r	e	f	k	i	h	w	o	s	t	m	u
	14	q	h	a	t	i	p	k	e	c	v	n	x	m	o	r	f	g	d	b	l	s	w	u	j
	15	w	j	a	q	b	g	e	t	c	d	h	o	x	m	r	i	k	u	n	p	f	v	l	s
	16	r	s	q	g	w	m	o	k	x	p	d	a	c	v	b	e	t	i	j	l	f	u	n	h
	17	d	h	n	x	w	c	o	l	f	i	e	r	j	v	m	g	s	a	u	k	t	q	b	p
	18	x	e	b	n	l	a	s	h	o	t	d	c	v	j	f	i	q	g	r	w	u	k	m	p
	19	o	b	r	s	q	i	p	t	e	w	k	c	a	g	n	d	l	j	v	m	h	f	x	u
	20	n	l	h	x	q	u	s	m	i	k	b	c	w	e	f	g	v	r	p	a	t	j	o	d
	21	r	w	k	q	h	x	v	d	f	n	t	i	s	l	o	e	g	m	a	c	j	b	p	u
	22	h	e	w	p	s	t	m	k	f	q	l	b	a	u	r	d	n	i	g	j	o	c	v	x
	23	d	v	s	i	j	g	q	n	l	e	r	k	f	p	c	w	b	m	a	t	u	o	h	x
	24	c	j	i	n	g	l	a	e	t	b	v	u	k	s	x	o	d	q	f	p	h	m	w	r
	25	b	i	c	k	v	a	q	s	m	u	t	h	e	g	l	n	p	j	f	x	r	w	o	d
	26	l	j	k	e	s	i	o	a	r	w	x	h	n	v	b	f	c	g	u	t	m	p	d	q
	27	c	m	l	o	d	n	v	t	i	w	s	x	u	g	f	j	h	r	q	p	e	b	a	k
	28	b	u	i	m	g	l	t	o	k	c	x	s	j	f	r	p	n	h	d	w	e	a	v	q
	29	x	h	k	p	j	u	m	v	i	t	n	a	g	d	w	c	q	l	s	o	h	r	f	e
	30	t	b	c	v	n	x	o	s	r	j	e	q	d	a	p	k	f	w	m	u	g	i	b	l
	31	u	c	b	v	x	f	d	t	s	l	w	o	m	g	k	r	j	a	q	n	i	p	e	h
	32	d	j	r	p	i	q	k	e	n	u	o	a	t	g	w	c	v	f	s	x	m	h	b	l
	33	i	g	c	f	p	d	q	e	b	a	u	n	w	j	v	o	t	s	r	m	h	x	l	k
	34	u	g	e	x	l	p	t	h	m	s	o	f	v	i	r	b	k	a	n	w	j	q	d	c
	35	s	k	m	x	f	e	p	c	w	d	i	n	o	b	h	g	r	u	v	l	j	t	a	q
	36	p	v	m	r	j	e	k	f	x	g	t	u	i	q	b	c	a	s	o	w	h	l	n	d
	37	r	i	f	o	k	p	v	q	h	s	l	g	c	a	n	d	x	t	u	m	j	w	b	e
	38	w	b	j	e	d	i	l	h	t	o	c	k	x	n	a	f	q	r	v	m	u	g	s	p
	39	a	w	u	c	v	q	g	p	e	o	x	m	h	t	l	k	b	d	i	f	r	n	s	j
	40	o	h	v	c	p	r	n	d	m	w	k	b	u	e	f	s	q	l	x	i	a	g	j	t
	41	t	c	l	b	w	v	x	k	d	i	j	p	a	s	o	e	r	f	h	q	m	n	g	u
	42	a	u	n	j	f	d	t	g	s	x	r	p	e	v	i	q	l	o	c	h	b	k	w	m
	43	i	u	m	q	o	r	a	g	x	d	h	p	l	s	n	t	c	v	f	w	k	e	j	b
	44	m	t	a	c	f	b	d	p	n	h	i	o	r	g	k	v	l	x	j	e	u	q	s	w
	45	t	c	w	d	v	f	o	j	b	n	u	x	a	p	h	l	i	q	s	g	r	e	k	m
	46	e	c	f	p	i	o	q	g	a	d	t	u	h	b	l	m	x	r	k	j	n	v	w	s
	47	n	a	x	j	w	s	h	c	d	k	o	p	i	m	u	b	l	g	t	q	f	e	v	r
	48	t	g	l	d	b	p	e	v	i	m	k	a	n	c	s	x	w	f	r	h	j	o	q	u

Figure A.6: Survey Version to Session-Participant Number Mapping in Experiment 1

## **A2 Experimental Protocols**

### **On-site literacy screening script for Experiment 1**

Clean the chicken and then wash it. Add half a cup of water. Add cloves and garlic and cook the chicken until it is slightly tender. Blend together almonds, pistachios, fig, coconut, ginger, chick peas, poppy seeds and yogurt in a blender. Put some cooking oil in a pot and warm it. Add some onion to it and allow it to become green. Then add to it crushed spices, salt, and red chili powder and cook. Then stuff the cooked spices in the chicken's stomach. Cover the outside of the chicken with this preparation as well. Cover the baking dish with cooking oil and put the chicken in the dish. Then put this dish in an oven pre-heated to 200 degrees centigrade, and let it bake for 35 to 40 minutes. Then put some cooking oil on the chicken and bake it for another 10 minutes. When the chicken starts turning red, take it out. Your delicious, sweet chicken is ready! Serve with salads.<sup>1</sup> (See the Urdu version of our screening tests in Appendix Figure A.2.)

### **Experiment 1 Materials**

#### **Activity/Envelope 1**

Standard Big 5 survey adapted to use in Pakistan. This is used in all survey versions (versions A-X).

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<sup>1</sup>This text was taken from a free online repository of recipes in Urdu (<http://www.lawaonline.com/blog/murg-mewa-dar-recipes-pakistani-cooking-urdu-recipes/>), accessed July 7, 2013.

## Activity/Envelope1

Instructions for filling out the questionnaire:

1. Read every statement carefully and encircle the response you agree with.
  - a. If you completely disagree with the statement, encircle (1).
  - b. If you mostly disagree with the statement, encircle (2).
  - c. If you are indifferent to the statement, encircle (3).
  - d. If you mostly agree with the statement, encircle (4).
  - e. If you completely agree with the statement, encircle (5).
2. This test has no concept of right or wrong, nor do you have to be an expert to solve it. Respond as sincerely as possible. Write your opinion as carefully and honestly as possible. Answer every question and ensure that for every response, you have encircled the right option. During the test, if you encircle the wrong option by mistake or if you change your mind after encircling a response, do not erase it. Instead, mark the wrong response with a cross and encircle your correct one.

Statements:

1. I am not depressed 1 2 3 4 5
2. I like to be amongst lots of people 1 2 3 4 5
3. I don't like to waste time day-dreaming 1 2 3 4 5
4. I try to be polite to everyone I meet 1 2 3 4 5
5. I keep all my things clean and tidy 1 2 3 4 5
6. I often feel inferior to other people 1 2 3 4 5
7. I laugh easily 1 2 3 4 5
8. When I find out the right way to do something, I stick with it 1 2 3 4 5
9. I often get into quarrels with my family members and coworkers 1 2 3 4 5
10. I pace my work such that I am able to complete everything on time 1 2 3 4 5
11. Sometimes when I am under intense psychological pressure, I feel as if I am about to fall to pieces 1 2 3 4 5
12. I don't consider myself to be a jolly person 1 2 3 4 5
13. Art and wonders of nature fascinate me 1 2 3 4 5
14. Some people think that I am selfish and egoistic 1 2 3 4 5
15. I am not a very organized person 1 2 3 4 5
16. I rarely feel lonely or sad 1 2 3 4 5
17. I really enjoy talking to people 1 2 3 4 5
18. I think that listening to controversial speakers can confuse students and lead them astray 1 2 3 4 5
19. I prefer cooperation over conflict 1 2 3 4 5
20. I try to complete all tasks entrusted to me according to my conscience 1 2 3 4 5
21. I often feel mentally stressed and anxious 1 2 3 4 5
22. I often long for thrilling situations 1 2 3 4 5
23. Poetry has very little or no influence on me 1 2 3 4 5
24. I am mistrustful and skeptical about the intentions of others 1 2 3 4 5

25. My objectives are very clear and I work to achieve them in a very organized way 1 2  
3 4 5
26. Sometimes I feel completely worthless 1 2 3 4 5
27. I usually prefer to work alone 1 2 3 4 5
28. I often try new and exotic dishes 1 2 3 4 5
29. I believe that if you give them the chance, people will always exploit you 1 2 3 4 5
30. I waste a lot of time before starting to work 1 2 3 4 5
31. I rarely feel scared or depressed 1 2 3 4 5
32. I often feel full of energy 1 2 3 4 5
33. I don't pay much attention to the moods and feelings evoked my surroundings and  
circumstances 1 2 3 4 5
34. People who know me usually like me 1 2 3 4 5
35. I work very hard to achieve my goals 1 2 3 4 5
36. I often get frustrated by the way people treat me 1 2 3 4 5
37. I am a jolly and optimistic person 1 2 3 4 5
38. I believe that we should consult religious leaders for making decisions involving  
moral affairs 1 2 3 4 5
39. Some people think I am cold-hearted and selfish 1 2 3 4 5
40. When I start something, I don't rest until I finish it 1 2 3 4 5
41. Often when things start taking a turn for the worse, I give up and abandon my work  
1 2 3 4 5
42. I am not a jolly and optimistic person 1 2 3 4 5
43. Sometimes while studying poetry or looking at masterpieces of art, I feel chills of  
thrill and excitement 1 2 3 4 5
44. I am strict and stubborn in my attitude 1 2 3 4 5
45. Sometimes I am not as trustworthy as I ought to be 1 2 3 4 5
46. I am rarely sad or depressed 1 2 3 4 5
47. Fast pace is a highlight of my life 1 2 3 4 5
48. I have little interest in pondering over the working of the universe or the human  
condition 1 2 3 4 5
49. I usually try to be concerned and care about others 1 2 3 4 5
50. I am useful person and always do my work 1 2 3 4 5
51. I often feel helpless and wish someone else would resolve my problems 1 2 3 4 5
52. I am a very active person 1 2 3 4 5
53. I have a lot of intellectual curiosity in me 1 2 3 4 5
54. If I don't like someone I let him/her know about it 1 2 3 4 5
55. I feel that I can never keep myself organized 1 2 3 4 5
56. Sometimes I want to hide myself due to shame 1 2 3 4 5
57. I would prefer to live on my own terms as opposed to being a leader for others 1 2 3  
4 5
58. I often enjoy abstract ideas and theories 1 2 3 4 5
59. If need be, I am ready to use people to get my own work done 1 2 3 4 5
60. I try to do everything perfectly 1 2 3 4 5

**Please give us answers to the following questions.**

- 1.1 Are you currently engaged in any economic activity from which you earn income?  
1. Yes  
2. No
- 1.2 Apart from your main economic activity, are you engaged in any other economic activity?  
1. Yes  
2. No
- 1.3 Which of these best describes your secondary economic activity? (S.A.)  
1. Employee receiving wages / salary  
2. Daily paid / casual worker / in temporary employment  
3. Agricultural crops or livestock related self employment  
4. Other self employment  
5. Other (describe \_\_\_\_\_)
- 1.4 Which of the following types of agricultural crop/livestock activities are you involved in? (mark all)  
1. Rice  
2. Wheat  
3. Cotton  
4. Other grains (corn, maize, etc.)  
5. Tobacco  
6. Other (specify: \_\_\_\_\_)
- 1.5 How often do you receive income from these agricultural crop/livestock self employment activities? (mark all)  
1. At least weekly  
2. At least every two weeks  
3. At least monthly  
4. Less frequently than monthly

**Personal Information**

- 1.6 What is your age and year of birth?  
Years \_\_\_\_\_ Months \_\_\_\_\_ Year of Birth \_\_\_\_\_
- 1.7 Gender  
1. Male  
2. Female
- 1.8 Marital Status  
1. Single/Never Married  
2. Married  
3. Widowed  
4. Divorced  
5. Separated

1.9 What ethnic group do you belong to ?

1. Punjabi
2. Pashtun
3. Tajik
4. Hazara
5. Baluchi
6. Other (Specify.....)

1.10 What religious group do you belong to?

1. Shia
2. Sunni
3. Christian
4. Hindu
5. Sikh
6. Other ( Specify.....)

1.11 Which languages do you speak at home?

	1. Yes	2. No
<b>a.</b> Pashto	1	2
<b>b.</b> Persian/Dari	1	2
<b>c.</b> Balochi	1	2
<b>d.</b> Punjabi	1	2
<b>e.</b> Urdu	1	2

1.12 What is the highest level of education that you have completed? \_\_\_\_\_

- 1=Completed Grade 1,
- 2=Completed Grade 2,
- 3=Completed Grade 3,
- 4=Completed Grade 4,
- 5=Completed Grade 5,
- 6=Completed Grade 6,
- 7=Completed Grade 7,
- 8=Completed Grade 8,
- 9=Completed Grade 9,
- 10=Completed Grade 10 (Matric/ O Levels),
- 11=Completed Grade 11,
- 12=Completed Grade 12 (FSC/A Levels),
- 13=Completed some years at university,
- 15=Completed university degree,
- 16=Masters,
- 17=Technical Training,
- 18=Not gone to school

1.13 Then how many years of formal education have you had?

Years \_\_\_\_\_

Please place the completed survey back in envelope 1.

After that, you should close and seal envelope 1, and place it in the larger envelope.

After that, you may open envelope 2.

## Activity/Envelope 2

Thank you for completing the survey. In return for completing the survey, we can offer you a bonus payment. Funding for the bonus payment comes from {*Survey versions A-L*: Lahore University of Management Sciences; *Survey versions M-X*: the U.S. government}. We can pay you {*Survey versions A, B, C, G, H, I, M, N, O, S, T, U*: 100 Rs.; *Survey versions D, E, F, J, K, L, P, Q, R, V, W, X*: 500Rs} for completing the survey, but in order to receive the bonus payment you are required to acknowledge receipt of the funds provided by {*Survey versions A-L*: Lahore University of Management Sciences; *Survey versions M-X*: the U.S. government} and thank the funder. If you choose not to accept the payment, you will forgo the bonus payment of {*Survey versions A, B, C, G, H, I, M, N, O, S, T, U*: 100 Rs; *Survey versions D, E, F, J, K, L, P, Q, R, V, W, X*: 500 Rs}, but not the payment of 300 Rs for your participation.

The letter of acknowledgment and thanks can be found on the next page.

{*Survey versions G-L, S-X*: If you choose to accept the bonus payment, in order to receive this additional payment, you will be asked to turn the letter in to the survey coordinator in the front of the room, so other participants will see you turn in the letter. Once you have made your decision on the next page, please place the letter into envelope 2, whether or not you chose to accept the bonus payment.}

{*Survey versions A-F, M-R*: If you choose to accept the bonus payment, in order to receive this additional payment, **your decision will be completely private**; you will simply replace the letter in envelope 2 and submit it with your other survey materials at the end of the study, so no other participants will know your choice. Once you have made your decision on the next page, please place the letter into envelope 2, whether or not you chose to accept the bonus payment.}

After that, you should close and seal envelope 2, and place it in the larger envelope.

After that, you may open envelope 3.

## Letter of acknowledgment and thanks

## **Letter of acknowledgment and thanks**

I gratefully thank Lahore University of Management Sciences for its generosity and I accept the bonus payment offer.

I choose not to accept the bonus payment offer.

## Envelope 3

1) [Survey versions A-X]

In the previous section, you were asked to check a box to indicate that you thanked the funder for their generosity. There are 24 people in this room. How many people in this group, excluding yourself, do you believe were willing to accept the additional payment by checking the box?

*If your guess is one of the three closest to the true number (among participants in this group), you will receive an extra 300 rupees.*

Please indicate your belief about how many checked the box here \_\_\_\_\_

2) [Survey versions A-X]

There are 24 participants in this session. Approximately, how many people in this room are you acquainted with?

1 – No one

2 - Between 1 and 6

3 - Between 7 and 12

4 – Between 13 and 18

5 - Between 19 and 23

6 – Everyone

# Envelope 3

LIST EXPERIMENTS: [DO NOT TRANSLATE THIS LINE]

**Control:** [Survey versions A, D, G, J, M, P, S, V]

The following are four policies some government officials express support for. Please report HOW MANY of the four you support. You do not need to indicate which ones you support, just how many.

- a. Providing the poor with free electricity generators
- b. Establishing an independent state in Kashmir that is not part of India and not part of Pakistan
- c. Ensuring that civilians (President or Prime Minister) control the military
- d. Reducing number of people eligible for the Benazir Income Support Program, but increasing payments to those eligible

TOTAL THAT YOU SUPPORT (CIRCLE ONE)    0        1        2        3        4

---

**Treatment 1:** [Survey versions B, E, H, K, N, Q, T, W]

The following are five policies some government officials express support for. Please report HOW MANY of the five you support. You do not need to indicate which ones you support, just how many.

- a. Providing the poor with free electricity generators
- b. Establishing an independent state in Kashmir that is not part of India and not part of Pakistan
- c. Ensuring that civilians (President or Prime Minister) control the military
- d. Reducing number of people eligible for the Benazir Income Support Program, but increasing payments to those eligible
- e. Refusing humanitarian aid from the US government

TOTAL THAT YOU SUPPORT (CIRCLE ONE)    0        1        2        3        4        5

---

**Treatment 2:** [Survey versions C, F, I, L, O, R, U, X]

The following are five policies some government officials express support for. Please report HOW MANY of the five you support. You do not need to indicate which ones you support, just how many.

- a. Providing the poor with free electricity generators
- b. Establishing an independent state in Kashmir that is not part of India and not part of Pakistan
- c. Ensuring that civilians (President or Prime Minister) control the military
- d. Reducing number of people eligible for the Benazir Income Support Program, but increasing payments to those eligible
- e. Supporting the activities of Pakistan Tehreek-e-Insaf (PTI)

TOTAL THAT YOU SUPPORT (CIRCLE ONE)    0        1        2        3        4        5

## Envelope 3

---

[Survey versions A-X]

Please place the completed survey back in envelope 3.

After that, you should close and seal envelope 3, and place it in the larger envelope.

After that, you may open envelope 4.

## Activity/Envelope 4

### *SURVEY VERSIONS A-X*

This is the final section. Please complete the questions below and then place this document back in the envelope.

1. How do you view aid provided by the Japanese government to Pakistan? Very negatively (1), very positively (5), or something in between?

Circle one of the following:      1      2      3      4      5

2. How do you view the Japanese government overall? Very negatively (1), very positively (5), or something in between?

Circle one of the following:      1      2      3      4      5

3. How do you view aid provided by the United States government to Pakistan? Very negatively (1), very positively (5), or something in between?

Circle one of the following:      1      2      3      4      5

4. How do you view the United States government overall? Very negatively (1), very positively (5), or something in between?

Circle one of the following:      1      2      3      4      5

5. How willing are you to take risks? Are you very unwilling to take risks (1)? Are you very willing to take risks (5)? Or, something in between?

Circle one of the following:      1      2      3      4      5

6. Do you know the name of the chief minister of your province? Please write the name below:

7. How do you think your political views on Japan compare to other individuals in the room? More anti-Japanese (1), more pro-Japanese (5), or something between?

Circle one of the following:      1      2      3      4      5

8. How do you think your political views on receiving aid from Japan differ relative to other individuals in the room? Less willing to accept aid (1), more willing to accept aid (5), or something in between?

Circle one of the following:      1      2      3      4      5

9. How do you think your political views on the United States compare to other individuals in the room? More anti-American (1), more pro-American (5), or something between?

Circle one of the following:      1      2      3      4      5

10. How do you think your political views on receiving aid differ from the United States relative to other individuals in the room? Less willing to accept aid (1), more willing to accept aid (5), or something in between?

Circle one of the following:      1      2      3      4      5

11. Would your decision of whether to take the additional payment by checking the box have changed if the payment amount was increased by 100 rupees?

1 – Yes

2 – No

12. Would your decision of whether to take the additional payment by checking the box have changed if the payment amount was increased by 300 rupees?

1 – Yes

2 – No

13. Would your decision of whether to take the additional payment by checking the box have changed if the payment amount were offered by the government of Japan?

1 – Yes

2 – No

14. Would your decision of whether to take the additional payment by checking the box have changed if the payment amount were offered by the University of California (an American university unaffiliated with the government).

1 – Yes

2 – No

---

Please place this completed survey back in envelope 4, seal the envelope, and place envelope 4 in the large envelope. Then, raise your hand to indicate that you have completed the survey.

## Experiment 2 Materials

### Stage 1 Instrument

## Section 1

*Hello! I'm here on behalf of SEDCO Associates, which is a local survey firm. I'm here to talk to you about the upcoming local level elections that are scheduled to occur at the end of October in Lahore, as well as the rest of Punjab.*

Have you heard about them?

*This is the first time in Pakistan that these elections are being held locally on a party-basis. The purpose of my visit today is to talk about these elections.*

On a scale of 1 to 10, how important do you think these elections are for service provision in your neighborhood?

\_\_\_\_\_

*Before we move further, I would like to inform you that we are also collecting anonymous citizen feedback regarding these elections. This envelope contains a piece of paper with a question on it. Please write down your response to this question under it and put this paper back in the envelope.*

*{Hand over the envelope. Continue once it is handed back. If respondent says that he is illiterate, end the survey and move on to the next house.}*

## Section 2

Between the two parties, PTI and PML-N, which party do you perceive as being more able to bring benefits and services to you and your local community?

- A. PTI
- B. PML-N

Between the two parties PTI and PML-N, which party do you perceive as more anti-American?

- A. PTI
- B. PML-N

Political party members are registered with political parties. Parties usually provide information to their members before important events like rallies, meetings etc. and keep them updated about the general proceedings of the party. Are you presently a member of a political party?

- C. Yes. Which Party?: \_\_\_\_\_ (Skip to section 4)
- D. No

As part of our goal of promoting participation in political life, we would like to provide you an opportunity to become a member of one of two political parties. Becoming a member of a party will allow you to stay up to date regarding important developments in party politics. If you are interested, we can sign you up today. This is a print-out of the official party website. We can fill the form together right now, and we will sign you up online at our offices. Signing up should only take us about 2-3 minutes to complete.

If you are interested in signing up, which party would you like to join?

A - PTI

B - PML-N

(Note for enumerator: If asked about why just these 2 parties, enumerator should respond: "Because these are the only two major parties for which it is possible to sign up online")

If the respondent was unwilling to sign up for a party, please mark an X here:

\_\_\_\_\_

### Section 3

1. Name  
\_\_\_\_\_ (full name)
2. Age  
\_\_\_\_\_ years
3. Marital Status  
\_\_\_\_\_ (single / married / widower)
4. Years of Education  
\_\_\_\_\_ (number of years)
5. Engaged in economic activity (job/business etc)  
\_\_\_\_\_ (yes / no)
6. Religious affiliation  
\_\_\_\_\_ (Muslim/Christian etc)
7. Caste/Biradri  
\_\_\_\_\_ (Jatt/Rajput etc)
8. Are you registered to vote  
\_\_\_\_\_ (yes/no)
9. Do you plan on voting  
\_\_\_\_\_ (yes/no)

## Stage 2 Instrument

**Stage 2 Android Survey**

Probabilities for versions:

A – 50 percent

B – 50 percent

Screen 1 (if version A)

Hello,

This is a 5-10 minute survey. We have limited funds, so in addition to the Rs.100 guaranteed, we are offering an extra payment through a lottery where you can earn up to Rs.200 more, for a total of Rs.300. The outcome of the lottery will be determined at the end of your participation.

Screen 2 (if version A)

(Short big 5)

No.	Question	Answer	Codes	Instructions
1	I like to be amongst lots of people		1 = Strongly disagree	
			2 = Disagree	
			3 = Indifferent	
			4 = Agree	
			5 = Strongly agree	
2	Some people think that I am selfish and egoistic		Same as 1	
3	I am not a very organized person		Same as 1	
4	I often feel mentally stressed and anxious		Same as 1	
5	I am mistrustful and skeptical about the intentions of others		Same as 1	
6	I don't pay much attention to the moods and feelings evoked my surroundings and circumstances		Same as 1	
7	I work very hard to achieve my goals		Same as 1	
8	I am a jolly and optimistic person		Same as 1	
9	I often feel helpless and wish someone else would resolve my problems		Same as 1	
10	I have a lot of intellectual curiosity in me		Same as 1	

Screen 3 (if version A)

(Stated preference)

- How do you view the United States government overall? Very negatively (1), negatively (2), neither negatively nor positively (3), positively (4), very positively (5)?

Circle one of the following:    1       2       3       4       5

2. How do you view aid provided by the United States government to Pakistan? Very negatively (1), negatively (2), neither negatively nor positively (3), positively (4), very positively (5)?  
Circle one of the following:    1       2       3       4       5

Screen 4 (if version A)

(Final screen displays total amount, where amount includes Rs.100 guaranteed payment, and with 33 percent probability a lottery of Rs.0, Rs.100 or Rs.200, so that the total payment is either Rs.100, Rs.200, or Rs.300.)

Please collect your total payment of Rs. .... From the recruiter

Screen 1 (if version B)

Hello,

This is a 5-10 minute survey. We have limited funds, so in addition to the Rs.100 guaranteed, we are offering an extra payment through a lottery where you can earn up to Rs.100 more, for a total of Rs.200. The outcome of the lottery will be determined at the end of your participation.

Screen 2 (if version B)

(Short big 5)

No.	Question	Answer	Codes	Instructions
1	I like to be amongst lots of people		1 = Strongly disagree	
			2 = Disagree	
			3 = Indifferent	
			4 = Agree	
			5 = Strongly agree	
			Same as 1	
2	Some people think that I am selfish and egoistic		Same as 1	
3	I am not a very organized person		Same as 1	
4	I often feel mentally stressed and anxious		Same as 1	
5	I am mistrustful and skeptical about the intentions of others		Same as 1	
6	I don't pay much attention to the moods and feelings evoked my surroundings and circumstances		Same as 1	
7	I work very hard to achieve my goals		Same as 1	
8	I am a jolly and optimistic person		Same as 1	
9	I often feel helpless and wish someone else would resolve my problems		Same as 1	
10	I have a lot of intellectual curiosity in me		Same as 1	

Screen 3 (if version B)

*(Revealed preference)*

You are one of 50 percent who are taking this survey receiving this offer to receive an additional Rs.100.

Funding for this bonus payment comes from the US government. We can pay you Rs.100 for completing the survey, but in order to receive the bonus payment you are required to acknowledge receipt of the funds provided by the US government and thank the funder. If you choose not to accept the payment, you will forego the bonus payment of Rs.100, but not the payment of Rs.100 for your participation, or the lottery payment that you are awarded at the end. Please note that the enumerator has no way of knowing whether you accepted or rejected the bonus payment.

The letter of acknowledgment and thanks can be found on the next page.

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Screen 4 *(if version B)*

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Option 1: I gratefully thank the US government for its generosity and accept the payment

Option 2: I do not accept the payment

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Screen 5 *(if version B)*

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*(Final screen displays total amount, where amount includes Rs.100 guaranteed payment, Rs.100 bonus payment if offer is accepted, and with 50 percent probability a lottery of Rs.0, Rs.100, so that the total payment is either is either Rs.100, Rs.200, or Rs.300.)*

Please collect your total payment of Rs. .... From the recruiter

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