Stereotypes or Prejudice:

Behavioural Evidence of Gender Discrimination from Rural India

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Abstract

Discriminatory social norms drive high levels of gender inequality in India. However, there is a paucity of evidence on how gender discrimination manifests in economic decision-making. In this paper, I present a lab-in-the-field experiment using incentivized trust and dictator games to distinguish between statistical and taste-based gender discrimination. Negative stereotypes that manifest as low trust is interpreted as statistical discrimination. Prejudice that manifests as lower trust and social preferences is interpreted as taste-based discrimination. Next, I evaluate whether a behavioural nudge can influence discriminating individuals' preferences over gender versus previous trustworthiness. The evaluation nudge tests whether moving from separate (single-choice) to joint (multiple-choice) evaluation setting triggers a shift from gender-biased to pay-off maximizing decision-making. Results indicate that participants demonstrate statistical discrimination. Signalling higher trustworthiness leads to gender unbiased decision-making under joint evaluation, but not under separate evaluation.

Keywords: gender, discrimination, trust, social preferences, lab-in-the-field, India

JEL codes: J16, C93, D03, O12, O20

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1 Introduction

Discriminatory social norms are a prominent reason for high levels of gender inequality, especially among developing countries. Cultural practices including patri-lineality, dowry and male child preference are associated with gender differences in health, education, political and economic empowerment. There is an extensive literature documenting gender inequality in terms of observed economic outcomes (Anderson and Ray, 2010; Anukriti et al., 2022; Sukhtankar et al., 2022; Sen, 1990).[1] However, there is a paucity of behavioural evidence on how gender discrimination manifests in economic decision-making: first, how do individuals' discriminate in terms of two prominent drivers of economic interactions - trust and social preferences? Second, can discriminating individuals' preferences over gender versus previous trustworthiness be influenced?

In this paper, I use a lab-in-the-field experiment conducted in rural India to investigate whether observed gender discrimination is characterized by statistical discrimination (identified by lower trust) or taste-based discrimination (identified by lower trust and lower social preferences). Statistical discrimination is the result of incomplete information whereby, when there is a lack of knowledge about a person's abilities, stereotypes about their demographic group are used (Aigner and Cain, 1977; Arrow, 1971; Phelps, 1972). Meanwhile, taste-based discrimination is driven by prejudice against interacting with a specific demographic group. Discriminating individuals are willing to sacrifice economic benefits, like wages or profits, to cater to their aversion (Becker, 1971). Distinguishing between taste-based and statistical discrimination can inform the selection of effective policies to reduce inequality.

Next, I explore whether an evaluation nudge can influence discriminating individuals' preferences over gender versus previous trustworthiness (Bicchieri and Dimant, 2019; Thaler and Sunstein, 2008). Previous research has argued that human beings have two distinct cognition modes: the intuitive and automatic System 1 and the reflective and analytical System 2. When separately evaluating a single default option, the lack of comparative information leads to System 1 cognition characterized by reliance upon biased prior beliefs (Kahneman and Miller, 1986; Bazerman et al., 1998). However, joint evaluation of multiple options triggers analytical System 2 cognition by providing additional data-points for comparison (Bazerman and Moore, 2013). This evidence can support the design of behaviourally informed policy interventions to reduce undesirable gender bias without restricting public choice.

[1] For a review of relevant literature, see Jayachandran (2015)

This study was conducted in 12 villages of Chhattisgarh state in central India. Chhattisgarh's poverty rate stood at 40% (double the national average) and the state performs poorly on gender equality indicators. Female education attainment and maternal mortality rates are significantly worse than the national average for India (World Bank, 2016). In the first phase, I use a within-subjects experimental design whereby all participants play incentivised lab games executed under distinct treatment settings. I use an experimental test to distinguish between statistical or taste-based gender discrimination as proposed by Fershtman and Gneezy (2001). The trust game (as per Berg et al. 1995) provides a behavioural measure of *sender's* trust in the *receiver*. Trust is driven by strategic beliefs regarding *receiver's* trustworthiness and *sender's* risk and social preferences.[2] Therefore, any discrimination towards female *receivers* in the trust game can be driven either by negative gender stereotypes affecting the *sender's* strategic beliefs or prejudice driving lower social preferences. The dictator game (as per Forsythe et al. 1994) helps to distinguish between these competing explanations by eliminating the strategic role of the *receiver*.[3]

In the second phase, *senders* are randomly sorted into two treatment groups and asked to make an evaluation decision under two distinct cognitive settings. The first group is randomly matched with one *receiver* (separate evaluation group), while those in the second group are randomly matched with two *receivers* (joint evaluation group). The matched *receivers'* salient characteristics differ along two dimensions: gender-identity (male or female) and previous trustworthiness (high or low). Under separate evaluation, *senders* can accept or reject the matched *receiver*. Under joint evaluation, *senders* can accept one of the matched *receivers* or reject both. If the match is rejected, the *sender* is paired with an anonymous, randomly drawn *receiver*. This setting allows me to explore how *receivers'* characteristics influence *senders*' decision-making.[4]

The lab results confirm that participants discriminate against female *receivers* only in terms of trust. Observed discrimination also appears rational in this context since the share of transfers returned by female *receivers* is lower. Furthermore, men's decision to enter an economic transaction is not influenced by *receiver* gender under either separate or joint evaluation settings. On the other hand, women prefer to transact with other women under separate evaluation and demonstrate simi-

[2]The behavioural definition of trust states, *an individual trusts if (s)he voluntarily places resources at the disposal of the trustee without any legal commitment, but with an expectation that it will increase the trustor's payoff* (Fehr, 2009). Individual preferences driving trust include risk preferences (Eckel and Wilson, 2004), betrayal aversion (Bohnet and Zeckhauser, 2004), inequity aversion and altruism (Ashraf et al., 2006).

[3]Social preferences measured in the dictator game are shown to be driven by preferences for altruism (Andreoni and Miller, 2002; Charness and Rabin, 2002), inequality aversion (Bolton and Ockenfels, 1998; Fehr and Schmidt, 1999), and 'warm glow' giving effects (Eckel and Grossman, 1996).

[4]This analysis relies only on *senders'* evaluation decision since behaviour in the following lab games is endogenous.

lar pay-off maximizing behaviour as men under joint evaluation. Overall, these results indicate that participants demonstrate statistical discrimination driven by negative gender stereotypes. Women demonstrate own-group bias while men demonstrate a status quo bias, i.e. men do not deviate from their default choice, when offered a choice to accept or reject their matched *receiver*. This is consistent with the rejection of taste-based discrimination, i.e. there is no aversion to engage in transactions with female *receivers*.

I argue that differentiating between taste-based and statistical discrimination can help inform policy-makers' interventions to reduce gender inequality. Economics research has broadly focused on two types of interventions: quotas and education. Quotas are effective in promoting equal representation and alleviating discriminatory norms through prolonged exposure over the long-term, however they can also result in negative unintended consequences.[5] On the other hand, educational interventions such as television programs with progressive gender roles and school-based gender sensitization education can improve negative gender stereotypes (Dhar et al., 2017). However, discriminatory prejudices are less malleable (Beaman et al., 2009; Banerjee et al., 2013; Jensen and Oster, 2009). Therefore, contexts where taste-based discrimination dominates may be more suited for quotas to ensure equal representation while slow-moving norms evolve. Conversely, education and behavioural nudges are more relevant where negative stereotypes dominate.

2 Experimental Methodology

In this section, I describe the experimental design, lab games and randomized treatments used in this research. The lab experiments are conducted in the state of Chhattisgarh, India. The state-level poverty rate stood at 40%, compared to the national rate of 22%, and it performs poorly on gender indicators. Female secondary education attainment is very low at 16%, while child sex ratio (969 females per 1,000 males) and female labour force participation (55% of eligible females work) is also low by global standards. Maternal mortality is significantly higher than the national average equalling 221 deaths per 100,000 live births (World Bank, 2016).

The research team selected 12 villages in three adjoining districts: Raipur, Dhamtari and Gariyabandh. These villages are close but not contiguous in order to minimize travel time and the chances of social learning.[6] The research team visited each village in advance to establish a local contact-

[5] Thernstrom and Thernstrom (2009) show voters may dislike quotas which restrict their choices and resent female leaders. Goldin (2014) argues that quotas can also be perceived to violate social norms and reduce the value of traditionally male activities. As a result, quotas may precipitate a backlash against female leaders and even strengthen taste-based discrimination (Rudman and Fairchild, 2004; Boisjoly et al., 2006).

[6] Chaudhuri et al. (2006) show that communication between previous and future participants generates a process

person who assists the team in: 1) advertisement of research study among men and women from all available caste and professional clusters in each village, and 2) identifying an easily accessible and private location for the study within the village.[7] An equal ratio of male and female heads of household or their spouses were invited for participation.

The lab sessions relied on private, paper-based interviews because the participants' low literacy levels preclude the use of computer-based lab protocols. Interviewers used a fixed script to conduct each individual session. Player pairs are formed by randomly matching two individuals across different villages. All individuals from one village participate as *receivers* using the strategy method, while the participants from all 11 remaining villages are *senders*. This one-to-many matching of a single *receiver* with eleven *senders* is required to increase the number of observations and negate inter-personal relationships influencing behaviour in the lab. The empirical analysis is based solely on *sender*-level observations. One village-session is conducted per day, with the *receiver*-village participating on the first day followed by *sender*-villages. *Senders* are paid their real earnings from the risk lottery and one randomly selected round of lab games at the end of the experiment. Mean earnings are Rs 145 which equals half-day's agricultural wages. Average participation duration is approximately 45 minutes. Four hundred and seventy two individuals participated as *senders* and 44 participated as *receivers*.[8]

A simple graphical representation of the experimental design used is provided in Figure 1 below. The complete experiment protocols are available in Appendix B.

2.1 Lab-in-the-field Games

This study relies on standard Trust and Dictator Games played under distinct treatment settings between randomly matched players. In addition, all participants participate in a simple risk lottery to calculate their risk aversion. The games are briefly described below:

Trust Game: All participants in the 11 *sender* villages are assigned the role of trustors, while 44 participants from the single *receiver* village are assigned the role of trustees. Both players start the game with an equal endowment of Rs 50. Next, the trustors are asked to allocate their endowment between themselves and the trustees using multiples of Rs 5 (0; 5; 10; 15;...; 45; 50). The trustee receives triple the amount sent ($3X$) and can send back any amount Y between 0 and $3X$. The

of social learning and influences future participants' experimental behaviour.

[7] The contact-person is usually the local grocery-shop owner who is paid a nominal fee for his assistance.

[8] Power calculations are based on desired power of 0.8, significance level of 0.05 and estimated effect sizes from previous lab experiments with university students, including Fershtman and Gneezy (2001), Fershtman et al. (2005), and Castillo and Petrie (2010). The results indicate a desired sample size of approximately 450 participants.

trustor earns $(50 - X + Y)$ and the trustee earns $(50 + 3X - Y)$. The trustee uses the strategy method to indicate a contingent amount to return for each potential amount which can be received by them.[9] The amount sent by the trustor, i.e. Rs X, is interpreted as a measure of *trust*, while the amount returned by the trustee, i.e. Rs Y, is interpreted as a measure of their *trustworthiness*.

Dictator Game: Same as before, all participants from each of the 11 *sender* villages are assigned the role of dictators, while the 44 participants from the first village are the *receivers*. In this game, only the dictators receive a fixed endowment of Rs 50. Next, the dictators are asked to allocate their endowment of Rs 50 between themselves and the trustees using multiples of Rs 5 (0; 5; 10; 15;...; 45; 50). The *receiver* receives triple the amount sent $(3X)$ and then the game ends for both players. The dictator earns $(50 - X)$ and the *receiver* earns $(3X)$. The transfer sent by the dictator, i.e. Rs X, is interpreted as a measure of their *social preferences*.

Risk Lottery: Each participant has to select either a risky gamble or a certain amount across four rows of choices offered to them. The risky gamble is a 50% chance of winning Rs 100 or nothing, and remains constant in each successive row. The certain amount declines in each successive row and consists of Rs 50, 40, 30 or 20 respectively. One row is selected using a random draw. If the risky gamble was selected then the outcome is decided by a coin-toss. The number of risky gambles rejected by each participant is used as a simple measure of their *risk aversion*.[10]

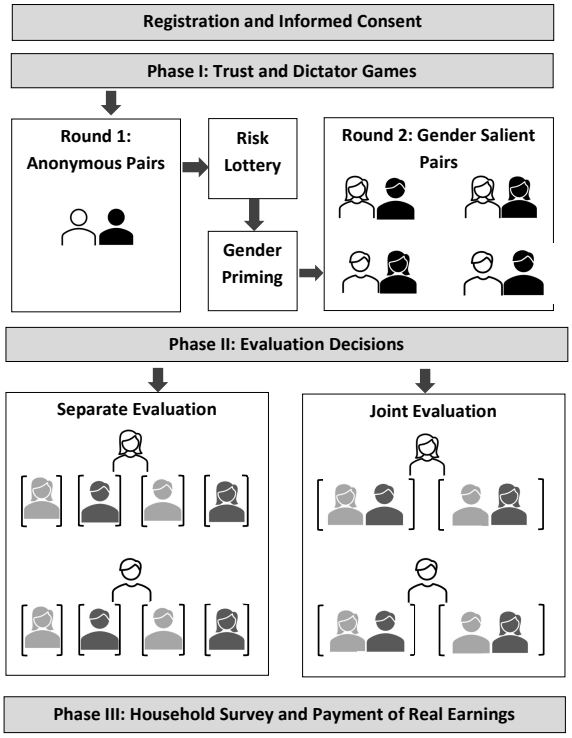
2.2 Experimental Design

In this section, I will describe how each phase is implemented and the specific empirical hypotheses that are evaluated in each round. Each session starts with registration of participants, introduction to the study and recording of informed consent to participate. The lab session consists of three phases: Phase I comprises of lab games played under two distinct treatment settings. The round order is kept fixed and potential carry-over effects are addressed by including a risk lottery and gender beliefs elicitation exercise in between rounds, and by re-matching player-pairs in each round. *Senders* are randomly split into two treatment groups in Phase II and finally participate in a household survey in Phase III. The session concludes with payment of real earnings.

[9] Casari and Cason (2009) show that using the strategy method is linked to a significantly lower rate of trustworthiness, compared to the game method. However, since my analysis is not based on trustees' behavior this does not influence the results of this study.

[10] Multiple variations of these lab games have been proposed in the literature to observe more sophisticated measurements of these behavioural parameters. For this study context, I use the basic variations to maximize successful implementation between experimenters and study participants.

Figure 1: Within-subjects Experimental Design



Notes: This illustration denotes the experimental design. The anthropometric figures indicate whether the participant is anonymous, male or female. Transparent figures indicate the *senders*, while solid figures indicate the *receivers*. Light-grey figures indicate high trustworthiness *receivers* and dark-grey figures indicate low trustworthiness *receivers*.

2.2.1 Phase I: Statistical vs. Taste-based Discrimination

The implementation of Phase I is described below:

Gender-Anonymous Round: Each *sender* is randomly matched with a *receiver* using a random-draw of an anonymous and unique serial number. Both players participate under double-blind setting whereby no information regarding their co-player's identity or geographic location is revealed. After the match is completed and recorded, the first round of trust and dictator games are executed.

Risk Lottery and Gender Beliefs Elicitation: All senders' participate in a risk lottery, as described previously, and a simple gender-beliefs elicitation task designed to prime the *sender's* own gender identity (as per Shih et al. 1999) before the gender-salient round.[11] Experimenters read aloud four statements which express commonly perceived gender roles in the study region. Participants respond to each statement using the scale: *strongly agree, agree, disagree,* or *strongly*

[11]The objective and design of this priming exercise is based on advance field-testing of the experimental protocol in the rural study context. Test subjects who participated in a gender-beliefs elicitation exercise were more likely to acknowledge the *receiver's* gender identity in the gender-salient round, while un-primed test subjects were more likely to ignore the verbal instructions revealing the receiver's gender identity.

disagree. The statements for male participants are: i) *As a man, I help my family by earning an income*; ii) *As a man, I am strong in order to protect myself or my family against outsiders*; iii) *As a man, I make the important investment decisions in my household*; iv) *As a man, I know how to operate machinery*. The corresponding statements for female participants are: i) *As a woman, I help my family by taking care of the house*; ii) *As a woman, I maintain good relations with relatives and neighbours*; iii) *As a woman, I make the daily, household decisions*; iv) *As a woman, I know how to sew clothes and cook food*.

Gender-Salient Round: After priming their own gender identity, the *sender* is next matched with a new *receiver* using a random draw. In this round, the random draw includes the serial number, first-name, and gender of the corresponding *receiver*, which is revealed to *sender*.[12] The *receiver's* first-name and gender is read aloud by the interviewer in the lab instructions. After the instructions are understood by the *sender*, the second round of trust and dictator games are executed.

Overall, gender salience in this study is interpreted as a combination of priming the *sender's* own gender identity plus the revelation of the *receiver's* gender identity. This experimental design allows me to test two empirical hypotheses: 1) randomly matched *receiver's* salient gender identity has no impact on *sender's* trust; 2) randomly matched *receiver's* salient gender identity has no impact on *sender's* social preferences. Taste-based discrimination is inferred if both hypotheses are rejected, i.e. *senders* discriminate against female *receivers* in terms of both the belief component of trust as well as social preferences. Statistical discrimination is inferred if only the second hypothesis is rejected. If both hypotheses fail to be rejected, we can reject gender discrimination altogether.

2.2.2 Phase II: Separate vs Joint Evaluation

In Phase II, *senders* are randomized into either a Separate Evaluation or Joint Evaluation group. The objective is to test the impact of *receivers'* gender and trustworthiness on *sender's* willingness to transact under different cognitive settings. The implementation proceeds as follows:

Pre-selection of *receivers*: To introduce controlled variation in *receiver* characteristics, I select a group of 4 *receivers*, who vary according to gender (2 males and 2 females) and previous trustworthiness (2 with average level of trustworthiness and 2 with below-average trustworthiness). This criterion is used because if matched *receiver's* trustworthiness is significantly below the group average, then *sender's* selection decision will be affected by loss aversion. Similarly, if matched *receiver's*

[12]The caste affiliation of individuals can be inferred from their last names, therefore only *receiver's* first-name is revealed. This negates the influence of caste affiliations on *sender's* behavior while still making *receiver's* gender-identity salient.

trustworthiness exceeds the group average, there will be no incentive to consider the anonymous option.

Receivers' trustworthiness observed under gender-anonymous setting is used for this selection. Average trustworthiness observed across the pool of *receivers* is equal to Rs 3, i.e. on average, *receivers* return Rs 3 more than the amount sent to them by *sender*. Meanwhile, the below-average amount used is Rs 1, i.e. on average, the low trustworthiness *receiver* returns Rs 1 more than the amount sent to them by *sender*.[13]

Accordingly, the group of pre-selected *receivers* will consist of the following individuals: i) *High Trustworthiness-Male*: Male whose trustworthiness in the gender-anonymous round equals the average trustworthiness (Rs 3); ii) *High Trustworthiness-Female*: Female whose trustworthiness in the gender-anonymous round equals the average trustworthiness (Rs 3); iii) *Low Trustworthiness-Male*: Male whose trustworthiness in the gender-anonymous round is below the average trustworthiness (Rs 1); iv) *Low Trustworthiness-Female*: Female whose trustworthiness in the gender-anonymous round is below the average trustworthiness (Rs 1).

Separate Evaluation: *Senders* in this group are randomly matched with one of the pre-selected *receivers* using a random draw: *High Trustworthiness-Male*, *Low Trustworthiness Female*, *High Trustworthiness-Female*, *Low Trustworthiness-Male*. The experimenter then reveals the following information-set: 1) gender of matched *receiver*, 2) matched *receiver's* trustworthiness in the gender-anonymous round, and 3) average trustworthiness of all *receivers* in the gender-anonymous round. The *sender* is asked to either accept or reject the matched *receiver*. If the *sender* accepts the match, then they play the third round with the selected *receiver*. However, if the *sender* rejects the match, they have to randomly draw another anonymous *receiver* from the pool to play the third round.

Joint Evaluation: *Senders* in this group are randomly matched with two of the pre-selected *receivers*. Since the intention is to introduce variation in gender and trustworthiness, there are two possible pairs: (*High Trustworthiness-Male*, *Low Trustworthiness-Female*), or (*High Trustworthiness-Female*, *Low Trustworthiness-Male*). The experimenter then reveals the following information-set: 1) gender of both matched *receivers*, 2) male *receiver's* trustworthiness, and 3) female *receiver's* trustworthiness, and 4) average trustworthiness of all *receivers*. The *sender* is asked to select one of the two matched players for the final round of lab games, or reject them both. If the *sender* rejects both players, they have to randomly draw another anonymous *receiver* from the pool.

[13] Since *receivers* use the strategy method to indicate the amount returned for each contingent amount sent to them, the formula used to calculate mean trustworthiness is: $Mean\ Trustworthiness = \frac{Total\ Amount\ Returned - Total\ Amount\ Received}{Number\ of\ Contingent\ Choices}$

These selection decisions are used to analyse the impact of randomly matched *receivers'* gender and trustworthiness on *senders'* selection decision. Specifically, I test the following hypotheses separately for both evaluation settings: 1) randomly matched *receiver's* gender has no impact on the selection-decision by *senders*; 2) randomly matched *receiver's* trustworthiness has no impact on the selection-decision by *senders*. If these hypotheses are rejected, we can determine *senders*' preferences over *receivers*' salient characteristics. Failure to reject these hypotheses under separate evaluation will be consistent with the default-choice effect, i.e. participants' prefer to stick with the offered choice. Failure to reject under joint evaluation will indicate that the evaluation nudge does not have its hypothesized impact.

2.2.3 Phase III: Demographic Survey

In the final Phase III, a short survey is used to record all participants' demographic characteristics. The total sample comprises of an equal ratio of male and female participants with household heads or their spouses comprising 93% of *senders*. The average age is 41 years and a large majority of participants are married. A little more than half are literate, i.e. able to read and write a simple text. A significant majority of *senders* belong to the other backward castes (OBC) category. This is characteristic of the overall population in the study region which predominantly consists of OBC population. Similarly, the agricultural sector is the major source of employment with 73% of *senders* working as either wage-labourers or self-employed in agriculture. Land ownership is low equalling 1.2 acres on average. Only 27% of *senders* responded positively to a survey question on generalized trust in strangers, indicating a relatively low level of social capital among the sample. On average, *senders* rejected 1.41 risky gambles in the risk lottery which indicates that the sample is risk neutral. Finally, 61% of the sample agreed with a survey measure of self-assessed gender discriminatory attitudes. These descriptive statistics are reported in Table 5 in Appendix A, alongside a balance check between *senders* randomly matched with female vs. male *receivers*. There are no statistically significant differences in these observed characteristics across both groups.

3 Empirical Analysis

In this section, I report the lab summary statistics and empirically test the study hypotheses. The summary statistics for Phase I lab games are reported in Table 1. Columns (1) and (2) report the number of player-pairs and mean (with standard deviations) amounts sent in the gender-anonymous setting. Columns (3) and (4) report the same information for the gender-salient setting. Column (5)

reports the results from a two-tailed *t-test* for significant differences in means. Summary statistics indicate there is no significant difference in the mean amount sent by *senders* to *receivers* in the trust games. However, there is a statistically significant reduction in mean trust amount sent by both male and female trustors to female trustees after their gender-identities are made salient (Rs 9.69 vs Rs 7.70, p-value=0.00). In particular, male *senders* send less to female *receivers* (Rs 10.21 vs Rs 7.80, p-value=0.03). There are no significant differences in the dictator games.

Table 1: Summary Statistics: Phase I Lab Games, by *Sender* - *Receiver* gender

	Round One: Gender-Anonymous		Round Two: Gender-Salient		*t-test* for
	Number of Pairs	Mean (Std. dev.)	Number of Pairs	Mean (Std. dev.)	difference in means (p-value)
	(1)	(2)	(3)	(4)	(5)
Trust (Rs.)	472	9.58	472	8.78	0.19
		(9.36)		(9.27)	
Female-Female	121	9.17	119	7.61	0.12
		(8.67)		(6.95)	
Male-Female	118	10.21	116	7.80	0.03**
		(8.85)		(7.73)	
Both-Female	239	9.69	235	7.70	0.00***
		(8.76)		(7.32)	
Female-Male	118	9.66	120	10	0.80
		(9.38)		(10.89)	
Male-Male	115	9.26	117	9.70	0.75
		(10.56)		(10.69)	
Both-Male	233	9.46	237	9.85	0.68
		(9.96)		(10.77)	
Social Preferences (Rs.)	472	4.82	472	4.38	0.34
		(7.01)		(7.17)	
Female-Female	121	4.38	119	3.53	0.30
		(6.97)		(5.50)	
Male-Female	118	4.87	116	4.48	0.65
		(5.93)		(6.99)	
Both-Female	239	4.62	235	4.00	0.29
		(6.47)		(3.19)	
Female-Male	118	4.15	120	4.21	0.95
		(5.96)		(7.48)	
Male-Male	115	5.91	117	5.30	0.59
		(8.80)		(8.39)	
Both-Male	233	5.02	237	4.75	0.70
		(7.53)		(7.94)	

Notes: This table reports the Phase I summary statistics. Columns (1) and (3) report the number of randomly matched player-pairs. Columns (2) and (4) report the mean and standard deviations from the anonymous and gender-salient rounds respectively. Column (5) reports results from a t-test for significant differences in means.

3.1 Statistical or Taste-based Gender Discrimination?

Next, I estimate linear regression models using ordinary least squares (OLS). The following regression equation is estimated separately on cross-sectional data from each of the first two rounds:

$$Y_{ijv} = \beta_0 + \beta_1 F_{ijv} + \beta_2 X_{ijv} + \gamma_j + \delta_v + \epsilon_{ijv} \quad (1)$$

where Y_{ijv} is the outcome variables of interest from the lab-in-the-field games for *sender* i,

interviewed by interviewer j in village v (i.e. trust amount sent, trustworthiness transfers received, social preferences amount sent), β_0 is the constant term, and F_{ijv} is a binary variable equal to 1 if *sender* i is randomly matched with a female *receiver*, and 0 otherwise. The coefficient β_1 is expected to be negative and statistically significant if participants discriminate against female co-players. X_{ijv} is a vector of participant i's demographic characteristics and risk aversion. The equation includes interviewer fixed effects γ_j and village fixed effects δ_v (which correspond to session fixed effects) to control for any interviewer, village, and session-specific effects. Finally, ϵ_{ij} is the error term. Huber-White heteroskedasticity-robust standard errors are estimated for inference.[14] I also report p-values from wild-bootstrap and randomization inference procedures respectively.

Table 2 reports estimation results for Phase I. Panels A and B report the impact of being randomly matched with a female *receiver* in Round 1: Gender Anonymous and Round 2: Gender Salient, respectively. In columns (1) and (2), I report the impact of trustee gender being female on trust, i.e. amount sent in the trust game. In columns (3) and (4), I report the impact of trustee being female on trustworthiness, i.e. share of the amount received by the trustee returned to the trustor. This sample only includes observations where a positive amount was sent in the trust game. In columns (5) and (6) I report the impact of trustee being female on social preferences, i.e. amount sent in the dictator game. All even-numbered columns include *senders'* demographic characteristics and risk aversion as covariates.

In Panel A, there is no statistically significant impact of being matched with a female *receiver* on the amounts sent in the trust and dictator games. However, in panel B, there is evidence of discrimination towards women in terms of trust when gender is made salient in columns (1) and (2). After controlling for risk preferences and demographic covariates, the estimated coefficient indicates that participants send Rs 1.90 less to women (equivalent to 22% of the mean trust amount sent). The coefficients in columns (5) and (6) are negative but not statistically significant, allowing me to confirm that there is no impact of revealing the gender on participants' social preferences. The unilateral transfer by *senders* in the dictator game is low on average (Rs 4.60 across both rounds), however 45% of participants send a positive amount and there is no significant discrimination towards female *receivers*. Finally, the results in columns (3) and (4) indicate that female *receivers* also return significantly lower amounts to the sender.

These results indicate that participants behave differently towards women when they have a

[14] Clustering standard errors is not recommended in this setting since treatment is allocated at the individual level. Furthermore, there are too few *sender* villages to obtain unbiased standard errors.

strategic role in the trust game, i.e. when they have to rely upon their co-operation in order to increase their pay-off. According to the experimental test proposed by Fershtman and Gneezy (2001), this allows me to conclude that participants are statistically discriminating against female co-participants, i.e. they hold negative gender stereotypes. However, it is useful to note that the statistical discrimination appears rational since female *receivers* also return less to the *senders*.

Table 2: Impact of Random Match with Female Receiver

	Dependent variables:					
	Trust Games Amount Sent (Rs)		Trust Games Share Returned (%)		Dictator Games Amount Sent (Rs)	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Gender Anonymous Round						
Matched with Female *Receiver*	0.51	0.10	-0.10***	-0.09***	-0.34	-0.44
	(0.84)	(0.87)	(0.02)	(0.03)	(0.61)	(0.65)
	{0.54}	{0.92}	{0.00}	{0.00}	{0.58}	{0.47}
	[0.53]	[0.91]	[0.00]	[0.00]	[0.58]	[0.49]
Observations	472	471	357	356	472	471
R^2	0.07	0.11	0.09	0.13	0.11	0.14
Mean Dependent Variable	9.58	9.54	0.45	0.45	4.82	4.79
Panel B: Gender Salient Round						
Matched with Female *Receiver*	-1.90**	-1.91**	-0.08***	-0.08***	-0.60	-0.60
	(0.83)	(0.87)	(0.02)	(0.02)	(0.63)	(0.64)
	{0.02}	{0.03}	{0.00}	{0.00}	{0.36}	{0.34}
	[0.02]	[0.02]	[0.00]	[0.00]	[0.35]	[0.35]
Observations	472	471	335	334	472	471
R^2	0.09	0.11	0.07	0.11	0.09	0.14
Mean Dependent Variable	8.78	8.72	0.40	0.40	4.38	4.34
Demographic Covariates	No	Yes	No	Yes	No	Yes
Village & Interviewer Fixed Effects	Yes	Yes	Yes	Yes		

Notes: OLS estimation. Panels A and B report the impact of being randomly matched with a female *receiver* in Round 1: Gender Anonymous and Round 2: Gender Salient, respectively. Columns (1) and (2) report the impact of treatment (= random match with female receiver) on trust, columns (3) and (4) on trustworthiness, and columns (5) and (6) on social preferences. Even-numbered columns include covariates: *risk preferences, household head, scheduled caste, scheduled tribe, other backward caste, age, married, literate, agriculture self-employed, agriculture wage labor, non-agriculture self-employed, non-agriculture wage labour, salaried, land ownership, generalized trust in strangers, and discriminatory attitudes.* One player is dropped from the sample when covariates are added due to incomplete data. Columns (3) and (4) only includes observations where a positive amount was sent in the trust game. All columns include village fixed effects and interviewer fixed effects. Heteroskedasticity-robust standard errors are reported in parentheses. P-values from wild-bootstrap inference are reported in curly brackets. P-values from randomization inference test are reported in square brackets. *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent.

3.2 Separate vs. Joint Evaluation

In this section, I evaluate the impact of matched *receivers*' gender and trustworthiness on the senders' decision to accept or reject their randomly matched *receivers* in Phase II.[15]

First, I estimate the following linear probability model using OLS to test the impact of randomly matched *receiver's* salient characteristics under separate evaluation:

[15]Table 6 in the Appendix reports the balance check between the separate and joint evaluation groups and confirm there are no statistically significant differences.

$$P_{ijv} = \beta_0 + \beta_1 F_{ijv} + \beta_2 T_{ijv} + \beta_3 X_{ijv} + \gamma_j + \delta_v + \epsilon_{ijv} \quad (2)$$

$$P_{ijv} = \beta_0 + \beta_1 F_{ijv} + \beta_2 S_{ijv} + \beta_3 F_{ijv} \times S_{ijv} + \beta_4 T_{ijv} + \beta_5 T_{ijv} \times S_{ijv} + \beta_3 X_{ijv} + \gamma_j + \delta_v + \epsilon_{ijv} \quad (3)$$

In Equation (2), the binary dependent variable P_{ijv} equals 1 if *sender* i, interviewed by interviewer j in village v selects the randomly matched *receiver* (0 if rejects). The explanatory variables of interest are two binary indicators: F_{ijv} which equals 1 if the matched *receiver* is female (0 if male) and T_{ijv} which equals 1 if the matched *receiver* is of high-trustworthiness (0 if low-trustworthiness). X_{ijv}, γ_j, δ_v and ϵ_{ij} are defined similarly as in Equation (1) previously. Huber-White heteroskedasticity-robust standard errors are reported alongside p-values from wild-bootstrap and randomization inference procedures. Equation (3) is defined the same as above, but also includes new interaction terms between the explanatory variables of interest (F_{ijv} and T_{ijv}) and *sender's* gender S_{ijv} to evaluate heterogeneous treatment effects. Most covariates are binary variables, therefore OLS functions similarly to probit and logit in this context while imposing the least structure on the data.

Columns (1) and (2) in Table 3 reports estimation results for Equation (2), while columns (3) and (4) report the results for Equation (3) including interaction effects. Covariates including risk preferences and demographic characteristics are included in even-numbered columns (2) and (4), same as in previous estimations. The results in column (2) indicate that *senders* are on average 12% more likely to select the *receiver* is she is female, and 11% more likely to select a high-trustworthiness *receiver*. A Wald test confirms that the treatment indicators are jointly statistically significant. Moreover, the coefficient of the interaction term in column (4) shows that female senders are primarily driving this results since they are 19% more likely to select a female *receiver* and 25% more likely to select a high-trustworthiness *receiver*, compared to male *senders*. The direct coefficients for male *senders* are not statistically significant, indicating that men are not switching from their default choice.

Next, I estimate the following linear probability models using OLS to analyse impact of *receiver-pairs*' characteristics under joint evaluation:

$$P_{ijv} = \beta_0 + \beta_1 T_{ijv} + \beta_2 X_{ijv} + \gamma_j + \delta_v + \epsilon_{ijv} \quad (4)$$

$$P_{ijv} = \beta_0 + \beta_1 T_{ijv} + \beta_2 S_{ijv} + \beta_3 T_{ijv} \times S_{ijv} + \beta_4 X_{ijv} + \gamma_j + \delta_v + \epsilon_{ijv} \quad (5)$$

Table 3: Phase II: Separate Evaluation Group

	Dependent variable: Matched *Receiver* is Selected			
	(1)	(2)	(3)	(4)
Match with Female Receiver	0.14**	0.12**	0.02	0.03
	(0.05)	(0.06)	(0.08)	(0.08)
	{0.01}	{0.04}	{0.83}	{0.73}
	[0.01]	[0.05]	[0.82]	[0.74]
Match with High Trustworthiness Receiver	0.10*	0.11*	-0.02	-0.01
	(0.06)	(0.06)	(0.08)	(0.08)
	{0.07}	{0.05}	{0.80}	{0.91}
	[0.06]	[0.06]	[0.78]	[0.92]
Match with Female Receiver			0.24**	0.19*
x Female Sender			(0.11)	(0.12)
			{0.02}	{0.09}
			[0.03]	[0.09]
Match with High Trustworthiness Receiver			0.26**	0.25**
x Female Sender			(0.11)	(0.11)
			{0.02}	{0.03}
			[0.02]	[0.03]
Female Sender			-0.19*	-0.15
			(0.11)	(0.12)
			{0.09}	{0.22}
			[0.06]	[0.18]
Observations	235	234	235	234
R^2	0.13	0.20	0.18	0.23
Matched Receivers Selected	0.77	0.77	0.77	0.77
P-value joint significance	0.01	0.03	0.00	0.01
P-value Avg. Trustworthiness Match = Female Match	0.63	0.91		
Demographic Covariates	No	Yes	No	Yes
Village & Interviewer Fixed Effects	Yes	Yes	Yes	Yes

Notes: Linear probability model estimated using OLS. Dependent variable equals 1 if randomly matched *receiver* is selected (else 0). Same as before, covariates are included in even-numbered columns (2) and (4). One player is dropped from the sample when covariates are added due to incomplete data. Heteroskedasticity-robust standard errors are reported in parentheses. P-values from wild-bootstrap inference are reported in curly brackets. P-values from randomization inference test are reported in square brackets. All columns include village fixed effects and interviewer fixed effects. *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent.

Equation (4) represents a linear probability model where the dependent variable P_{ijv} corresponding to *sender* i, interviewed by interviewer j in village v can now take three values depending upon the *sender's* decision. Therefore, each outcome is coded as a binary variable in relation to the others, i.e. 1) $P_{ijv} = 1$ if male *receiver*, else 0, 2) P_{ijv} =1 if female *receiver* is selected, else 0; or 3) P_{ijv} =1 if anonymous *receiver* is selected, else 0.[16] A linear probability model can now be estimated separately for each outcome using OLS. This approach imposes least structure on the data and offers a straightforward interpretation, in comparison to the alternative modelling approach using multinomial logit or probit.

The explanatory variable of interest is a binary treatment indicator T_{ijv} which equals 1 if the matched *receiver*-pair = (*High Trustworthiness-Female*, *Low Trustworthiness-Male*), or 0 if matched with the alternative (*Average Male*, *Below-Average Female*). X_{ijv}, γ_j, δ_v and ϵ_{ij} are defined similarly as in Equation (1) previously. Huber-White heteroskedasticity-robust standard errors are reported alongside p-values from wild-bootstrap and randomization inference procedures. Equation (5) is defined the same as above, but also includes new interaction terms between the explanatory variables of interest (T_{ijv}) and *sender's* gender S_{ijv} in order to evaluate heterogeneous effects.

Panels A and B in Table 4 reports results for Equations (4) and (5) respectively. In columns (1) and (2), the dependent variable is a binary variable equal to 1 if the female receiver is selected (equal to 0 if either female or anonymous receiver is selected). Similarly, in columns (3) and (4) the dependent variable is equal to 1 if male receiver is selected, and in columns (5) and (6), the dependent variable is equal to 1 if the anonymous receiver is selected. The estimates in panel A show that when *senders* are matched with an high-trustworthiness female *receiver*, she is approximately 29% more likely to be selected compared to the low-trustworthiness man and the anonymous option. The corresponding estimate for low-trustworthiness male receiver in column (4) indicates that he is 26% less likely to be selected.

The direct coefficients in panel B indicate male *senders'* being 18% more likely to select an high-trustworthiness female, compared to low-trustworthiness man and the anonymous option. Male *senders* are also 19% less likely to select a low trustworthiness man when there is a high-trustworthiness woman also available. Overall, these results show that participants select *receivers'* with high trustworthiness, irrespective of their gender under joint evaluation. This evidence supports the hypothesis that under joint evaluation, participants make analytic decisions in order to maximize their expected pay-off.

[16]Since these binary variables are coded in relation to each other they sum up to 1 for each participant.

Table 4: Phase II: Joint Evaluation Group

	Dependent variable: Matched *Receiver* is selected					
	Female *Receiver* Selected		Male *Receiver* Selected		Anonymous *Receiver* Selected	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Impact of matched Receiver-pairs' characteristics on Senders' selection decision						
Match with Female-High Trustworthiness Receiver	0.29***	0.29***	-0.26***	-0.26***	-0.03	-0.03
	(0.07)	(0.07)	(0.06)	(0.06)	(0.05)	(0.05)
	{0.00}	{0.00}	{0.00}	{0.00}	{0.50}	{0.47}
	[0.00]	[0.00]	[0.00]	[0.00]	[0.51]	[0.49]
Observations	237	237	237	237	237	237
R^2	0.12	0.23	0.13	0.22	0.09	0.15
Panel B: Treatment interaction with Senders' Gender						
Match with Female-High Trustworthiness Receiver	0.17*	0.18*	-0.20**	-0.19**	0.03	0.02
	(0.10)	(0.10)	(0.09)	(0.10)	(0.07)	(0.07)
	{0.08}	{0.08}	{0.04}	{0.05}	{0.70}	{0.80}
	[0.07]	[0.07]	[0.02]	[0.03]	[0.67]	[0.79]
Match with Female-High Trustworthiness Receiver	0.21*	0.21	-0.10	-0.11	-.11	-.10
x Female Sender	(0.13)	(0.13)	(0.11)	(0.13)	(0.09)	(0.09)
	{0.09}	{0.11}	{0.38}	{0.36}	{0.22}	{0.31}
	[0.10]	[0.12]	[0.38]	[0.36]	[0.23]	[0.31]
Female Sender	0.12	0.13	-0.15	-0.16	0.03	0.03
	(0.10)	(0.10)	(0.10)	(0.10)	(0.06)	(0.07)
	{0.22}	{0.19}	{0.12}	{0.12}	{0.61}	{0.66}
	[0.19]	[0.22]	[0.06]	[0.09]	[0.62]	[0.67]
Observations	237	237	237	237	237	237
R^2	0.18	0.24	0.18	0.22	0.10	0.15
Mean of Dependent Variable	0.56	0.56	0.31	0.31	0.13	0.13
Demographic Covariates	No	Yes	No	Yes	No	Yes
Village & Interviewer Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Linear probability models estimated using OLS. In columns (1) and (2), the dependent variable is a binary indicator equal to 1 if the female *receiver* is selected (else 0). In columns (3) and (4) the dependent variable is equal to 1 if male *receiver* is selected (else 0), and in columns (5) and (6), the dependent variable is equal to 1 if the anonymous *receiver* is selected (else 0). Same as before, covariates including *senders*' risk preferences and demographic characteristics are included in the even-numbered columns (2), (4), and (6). All estimations include village fixed effects and interviewer fixed effects. Heteroskedasticity-robust standard errors are reported in parentheses. P-values from wild-bootstrap inference are in curly brackets. P-values from randomization inference test are in square brackets. *** significant at 1 percent, ** significant at 5 percent, * significant at 10 percent.

4 Concluding Remarks and Implications for Policy

Discriminatory norms are one of the most important drivers of unequal socio-economic participation by women in India. Average female labour-force participation has persisted at a level below half the same rate for men (below 30% for women vs. above 70% for men). Growth in female labour-force participation rates has stalled in urban regions and declined in rural areas since 1999-2000 leading to 35 million 'missing' women in the labour-force (World Bank, 2014). Gender prejudice is also evidenced in the preference for male children. Sex ratio decreased from 927 girls per 1,000 boys to 914 girls per 1,000 boys under age 7 between the last two rounds of the decennial census of India. Infant mortality rates for girls are significantly higher across all major states.[17]

This paper contributes new evidence on the behavioural patterns of gender discrimination from rural India. Economic theory shows that unequal treatment can be characterized either by taste-based discrimination driven by prejudice or statistical discrimination driven by negative stereotypes. I conduct a simple experimental test to distinguish between these competing explanations. Evidence is consistent with statistical discrimination against women driven by negative gender stereotypes. This study also tests an evaluation nudge hypothesized to reduce gender biased decision-making in certain contexts. Findings indicate that participants are more likely to select counterparts based on previous performance, irrespective of gender, asked to compare multiple options. Overall, these behavioural parameters are hard to observe for policy-makers who instead rely on observable indicators to guide policies. I argue that differentiating between the two main economic theories of discrimination can help in the selection of behaviourally-informed interventions to promote gender equality.

In conclusion, these findings indeed have limited generalizability across a large and culturally diverse population. The goal of this research is to provide local evidence of gender discrimination using a sample of participants who are representative of the study region. Similar evidence can be measured more extensively using large-scale demographic surveys. I argue that robust evidence on underlying characteristics of discrimination can help inform the design and selection of effective policy interventions to promote gender equality.

[17] According to data from the National Sample Survey Organization and Census of India, 2011

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Appendix A: Summary Statistics and Balance Checks

Table 5: Balance Check: Phase I - Gender-Salient Setting

	Total Senders Mean (Std. dev.) (1)	Matched with Female *Receiver* Mean (Std. dev.) (2)	Matched with Male *Receiver* Mean (Std. dev.) (3)	*Test for diff. in means* t-statistic (p-value) (4)
Female (%)	0.51	0.51	0.51	0.00
	(0.50)	(0.50)	(0.50)	(0.99)
Head of Household (%)	0.93	0.94	0.91	1.56
	(0.26)	(0.23)	(0.29)	(0.12)
Scheduled Caste (%)	0.13	0.14	0.13	0.30
	(0.34)	(0.34)	(0.33)	(0.76)
Scheduled Tribe (%)	0.11	0.10	0.11	-0.41
	(0.31)	(0.30)	(0.32)	(0.68)
Other Backward Caste (%)	0.76	0.76	0.76	0.16
	(0.43)	(0.43)	(0.43)	(0.87)
Forward Caste (%)	0.02	0.00	0.00	-0.99
	(0.05)	(0.00)	(0.06)	(0.32)
Age (in years)	41.0	41.06	41.02	-0.65
	(12.6)	(13.15)	(12.06)	(0.52)
Married (%)	0.89	0.90	0.88	0.71
	(0.31)	(0.30)	(0.32)	(0.48)
Literate (%)	0.55	0.56	0.55	0.19
	(0.50)	(0.50)	(0.50)	(0.85)
Agriculture: Wage-worker (%)	0.44	0.45	0.43	0.27
	(0.50)	(0.50)	(0.50)	(0.79)
Agriculture: Self-employed (%)	0.29	0.27	0.30	-0.65
	(0.45)	(0.45)	(0.46)	(0.51)
Non-Agriculture: Wage-worker (%)	0.09	0.11	0.06	1.83*
	(0.28)	(0.31)	(0.24)	(0.07)
Non-Agriculture: Self-employed (%)	0.07	0.07	0.06	0.39
	(0.25)	(0.26)	(0.24)	(0.70)
Salaried Employment (%)	0.03	0.03	0.03	-0.53
	(0.17)	(0.16)	(0.18)	(0.60)
Unemployed (%)	0.09	0.07	0.11	-1.26
	(0.29)	(0.25)	(0.31)	(0.21)
Land ownership (acres)	1.20	1.24	1.23	0.06
	(1.70)	(1.75)	(1.58)	(0.95)
Trust Strangers (%)	0.27	0.29	0.25	1.17
	(0.44)	(0.46)	(0.43)	(0.24)
Agrees with Discriminatory Attitudes (%)	0.61	.60	.61	-0.07
	(0.49)	(0.49)	(0.49)	(0.94)
Observations	472	235	237	

Notes: This table reports the summary statistics for all participants (*senders*) in the study in column (1), alongside a balance check of sub-samples who are randomly matched with female vs. male *receivers* respectively. Column (2) reports the means (and standard deviations) for 235 *senders* who are randomly matched with female *receivers*. Column (3) reports the means (and standard deviations) for 237 *senders* who are randomly matched with male *receivers*. Finally, column (4) reports the t-statistics (and p-values) for a statistical test for equality of mean values reported previously. The results indicate no significant differences between both groups at 0.05 significance level.

Table 6: Balance Check: Phase II - Evaluation Groups

	Separate Evaluation Mean (Std. dev.) (1)	Joint Evaluation Mean (Std. dev.) (2)	*Test for diff. in means* t-statistic (p-value) (3)
Female (%)	0.49 (50)	0.53 (0.50)	-0.7 (0.44)
Household-head (%)	0.93 (0.25)	0.92 (0.26)	0.14 (0.89)
Scheduled Tribe (%)	0.14 (0.34)	0.08 (0.28)	1.81* (0.07)
Schedule Caste (%)	0.14 (0.35)	0.12 (0.32)	0.86 (0.38)
Other Backward Caste (%)	0.72 (0.45)	0.79 (0.41)	-1.90* (0.06)
Forward Caste (%)	0.00 (0.00)	0.004 (.064)	-0.99 (0.32)
Age (years)	41.05 (12.76)	41.03 (12.49)	0.01 (0.99)
Married (%)	0.90 (0.30)	0.89 (0.32)	0.40 (0.69)
Literate (%)	0.53 (0.50)	0.58 (0.50)	-1.05 (0.30)
Agriculture: Wage-worker (%)	0.48 (0.50)	0.41 (0.49)	1.33 (0.19)
Agriculture: Self-employed (%)	0.31 (0.46)	0.26 (0.44)	1.21 (0.23)
Non-Agriculture: Wage-worker (%)	0.08 (0.27)	0.10 (0.30)	-0.77 (0.44)
Non-Agriculture: Self-employed (%)	0.05 (0.22)	0.08 (0.28)	-1.43 (0.15)
Salaried Employment (%)	0.03 (0.16)	0.03 (0.18)	-0.52 (0.61)
Unemployed (%)	0.06 (0.25)	0.11 (0.32)	-1.90* (0.06)
Land ownership (acres)	1.36 (1.87)	1.12 (1.44)	1.58 (0.11)
Trust Strangers (%)	0.30 (0.46)	0.24 (0.43)	1.56 (0.12)
Agrees with Discriminatory Attitudes (%)	0.58 (0.50)	0.63 (0.48)	-1.24 (0.22)
Observations	235	238	

Notes: This table reports the balance check in terms of the demographic characteristics of *senders* randomly sorted into either the separate or joint evaluation groups using a random draw before the third round of lab games. Column (1) reports the means (and standard deviations) for 235 *senders* who are randomly sorted into the separate evaluation group. Column (2) reports the means (and standard deviations) for 237 *senders* who are randomly sorted into the joint evaluation group. Finally, column (3) reports the t-statistics (and p-values) for a statistical test for equality of mean values reported in columns (1) and (2). The results indicate no significant differences between both groups at 0.05 significance level.

Appendix B: Experimental Protocol

The following section contains the English translation of the lab protocol used for this study:

Experimental Protocol – Player 1

A. General Instructions for Enumerators

- *Do not read what is written in italics to the villagers, they are instructions for you*
- *Each interview is private between you and one villager, use cardboard screens so that nobody else can observe you*
- *All villagers must play the games under the same conditions: **read the script exactly the way it is written***
    - *If there is any disturbance, note the disturbance in the answer-sheet*
- *You may not influence the villager's decision. If they ask you for advice, then refuse to answer*
- *Villagers can stop the interview if they are not comfortable*
- *After finishing each session, request each villager not to talk about the games before they have been paid in the evening*

B. Timing

- *The meeting place and time will be communicated to the villagers by Sanjay and Rahul*
- *Each interview will take 60 – 90 minutes, do not rush any question*
- *When an interview is finished, give the answer-sheet to Sanjay or Rahul*
- *Take a short break between each interview*

C. Set-up Answer Sheet:

- *Record Date*
- *Record Village Name and Village ID Number*
- *Verify Session Number with Rahul or Sanjay*
- *Record your Name and Enumerator ID Number*

Introduction:

Thank you for coming today. My name is **[…]**. Today we would like to request one hour of your time to participate in our study. In this study, you will play three rounds of games with another player, plus a separate game by yourself. From these games, we wish to study how people make simple financial decisions in different situations. You can earn money in these games. You do not have to use your own money, it will be provided by us.

Please make each decision according to your own best interests, since your total earnings from today will depend upon your decisions. All your responses will remain anonymous. In the evening, you will be paid your earnings from one out of the three rounds of games, plus the separate game which you will play by yourself.

Q1. Do you understand these general instructions and agree to participate in this study?

- o Yes
- o No

Thank you for agreeing to participate in our study. Before we proceed, please confirm the following details for us:
Q2. What is your full name?
Q3. What is your gender (male, female)?

- ✓ *Record the responses:* ***Q1.*** *Permission;* ***Q2.*** *Full name;* ***Q3.*** *Gender*

Round One:

1. Let us now begin the first round where you will play two simple games against another player. You will play as Player 1 and will select a Player 2 using a blind lottery. In this round, both you and Player 2 will remain unknown to each other. This lottery contains the anonymous identification (ID) numbers of people from another village in this region who are participating in our study as Player 2.

Please take out a single number from this blind lottery:

- ✓ *Select the Round One lottery according to the villager's gender (select either lottery box marked* ***Round 1: Male*** *or* ***Round 1: Female****)*
- ✓ *Record the decision:* ***Q4. Lottery decision***
- ✓ *Put the selected paper in a* ***different box for used lottery numbers***

Round One – Game One:

2. Now, let us start the first game. In this game, I will give 50 rupees to you and 50 rupees to the anonymous Player 2. Player 2 does not know who they are playing with; they only know that the game is played with someone from another village in this region.

You must decide how much to send to the other player. You can keep everything, or you can send a positive amount: 5, 10, 15, 20, 25, 30, 35, 40, 45 or 50 rupees. If you send a positive amount, we will triple it before giving it to Player 2. Next, Player 2 will decide how much of this tripled amount to send back to you. Player 2 can decide to keep everything, or send back any amount in multiples of 5 rupees.

You will earn whatever money you kept, plus the amount returned by Player 2. Player 2 will earn the 50 rupees which I gave, plus the amount they do not return back to you.

3. *Play practice games with fake bank-notes:*

- *The villager should send you zero and a positive amount once each*
- *Return an amount that is equal/larger/smaller than the amount sent once each*
- *It is important to show that the final payoff can remain the same, or increase, or decrease if the villager sends a positive amount*
- *Repeat the game rules given above until the villager understands the game*

4.

> Now, you will play this game with **real money**.
>
> Here is 50 rupees for you**.** You can keep this amount, or decide how much to send to the anonymous Player 2. Here are two envelopes: you can put the money you want to send in envelope 2 and put the money you wish to keep in envelope 1. Now, please divide the money between the envelopes 1 and 2.

✓ *Record the decisions:* ***Q5. Amount Sent; Q6. Amount kept***

5.

> You have sent [***amount sent***] rupees and we will triple it to **[*triple of amount sent*]** rupees to give to the anonymous Player 2. Now, please tell us how much of this tripled amount you are expecting Player 2 to send back to you.

✓ *Record the decision:* ***Q7. Amount Expected Back***

Round One - Game Two:

6.

> Now, let us start the second game. In this game, only you will receive 50 rupees from me. No money will be given to Player 2. You must decide how much to send to the anonymous Player 2. You can keep everything, or you can send a positive amount: 5, 10, 15, 20, 25, 30, 35, 40, 45 or 50 rupees. If you send a positive amount, we will triple it so Player 2 receives three times the amount. In this game, Player 2 cannot send you anything back. After you make your decision, the game will end.
>
> You will earn whatever money you kept. Player 2 will earn triple the amount sent by you.

7. *Play practice games:*

- *Play an example - Make sure the villager sends zero and a positive amount at least once each*
- *Repeat the game rules given above until the villager understands the game*

8.

> Now, you will play this game with **real money**.
>
> Here is your 50 rupees for you**.** You can keep this amount, or decide how much to send to the anonymous Player 2. Here are two envelopes: you can put the money you want to send in envelope 2 and put the money you wish to keep in envelope 1. Now, please divide the money between the envelopes 1 and 2.

✓ *Record the decision:* ***Q8. Amount sent; Q9. Amount kept***

Risk Lottery Game

1. Let us now play a different game. You have to play this game alone. In this game, you must choose between receiving a certain amount, or tossing a coin and receiving 0 rupees if it is Head or 100 rupees if it is Tail.

2. *Play the practice game with fake notes:*

- *Put 50 rupees on the left side of the villager*
- *Put 100 rupees on their right side.*
- *Ask the villager to choose:*

Do you prefer to take the 50 rupees for certain, or to toss a coin and earn the 100 rupees if it is tail?

- *Ask him/her to toss the coin and show what happens if it is head and what happens if it is tail*

3. *One by one, add three more rows and ask the villager to choose one option in each row. Show how much they could earn in each row:*

In this case, please note that the certain amount has been decreased by 10 rupees. Now, do you prefer to take the **[40 / 30 / 20]** rupees for certain, or to toss a coin and earn the 100 rupees if it is tail?

4. Now we will play with real money. You will have to make 4 similar decisions. We will then select one row using a blind lottery. This number will indicate which row you will play and receive money for. Remember to make the best decision for each row since you will only be paid for one row selected using a lottery. Please choose between the certain amount and the risky amount in each of these four rows.

Row 1.	Receive 50 rupees for certain		Toss a coin: Receive 0 rupees if Heads and 100 rupees if Tails	
Row 2.	Receive 40 rupees for certain		Toss a coin: Receive 0 rupees if Heads and 100 rupees if Tails	
Row 3.	Receive 30 rupees for certain		Toss a coin: Receive 0 rupees if Heads and 100 rupees if Tails	
Row 4.	Receive 20 rupees for certain		Toss a coin: Receive 0 rupees if Heads and 100 rupees if Tails	

✓ *Record the decision:* ***Q10, 11, 12, 13 – Selected option in each row***

5. *Play the lottery to select one row*

Please draw a single row number from this blind lottery

✓ *Record the row number selected:* ***Q14. Row number chosen***

✓ *If the risky amount is chosen, then toss the coin - record the decision:* ***Q15. Final decision (1: Certain, 2: Lottery won, 3: Lottery lost)***

Gender Priming: For Male Villagers Only

1. Before we start the next round of games, we want you to listen to some statements regarding a man's role within his family and in society. For each of the following statements, please tell us whether you: "**Strongly Agree**," "**Agree**," "**Disagree**," or "**Strongly Disagree**":

Statement 1: As a man, I help my family by earning an income

Statement 2: As a man, I am strong in order to protect myself or my family against outsiders

Statement 3: As a man, I make the important investment decisions in my household, for example: buying land or livestock

Statement 4: As a man, I know how to operate machinery, for example: farm machinery, cycles, motorcycles, cars, etc.

✓ *Record the responses:* ***Q16, 17, 18, 19*** *(**1**=Strongly Agree, **2**=Agree, **3**=Disagree, **4**=Strongly Disagree)*

Gender Priming: For Female Villagers Only

1. Before we start the next round of games, we want you to listen to some statements regarding a woman's role within her family and in society. For each of the following statements, please tell us whether you: "**Strongly Agree**," "**Agree**," "**Disagree**," or "**Strongly Disagree**":

Statement 1: As a woman, I help my family by taking care of the house

Statement 2: As a woman, I maintain good relations with relatives and neighbors

Statement 3: As a woman, I make the daily, household decisions, for example: buying groceries or clothes

Statement 4: As a woman, I know how to sew clothes and cook food

✓ *Record the responses:* ***Q16, 17, 18, 19*** *(**1**=Strongly Agree, **2**=Agree, **3**=Disagree, **4**=Strongly Disagree)*

Round Two:

1. Let us now begin the second round where you will again play two simple games against another player. You will play as Player 1 and will have to randomly select a Player 2 using a blind lottery. In this round, **you will now be told the name and gender of the Player 2 who you select in the lottery**. This lottery contains the names of people from another village in this region who are participating in our study as Player 2.

Please take out a single name from this blind lottery:

- ✓ *Select the Round Two lottery according to the villager's gender (select either lottery box marked **Round 2: Male** or **Round 2: Female**)*
- ✓ *Record the decision: **Q20. Lottery decision***
- ✓ *Put the selected paper in a **different box for used lottery numbers***

Round Two - Game One:

2. You have selected [**selected name**], a [**man/woman**] from another village in this region who is participating in our study. Your earnings in this round will depend upon your decision and the decision made by [**him/her**]

Now, let us start the first game. In this game, I will give 50 rupees to you and 50 rupees to [**selected name**]. [**He/she**] does not know who they are playing with; they only know that the game is played with someone from another village in this region. You must decide how much to send to this [**man/woman**]. You can keep everything, or you can send a positive amount: 5, 10, 15, 20, 25, 30, 35, 40, 45 or 50 rupees. If you send a positive amount, we will triple it so this [**man/woman**] receives three times the amount. Next, [**selected name**] will decide how much of this tripled amount to send back to you. This [**man/woman**] can decide to keep everything, or send back any amount in multiples of 5 rupees.

You will earn whatever money you kept, plus the amount returned by [**selected name**]. [**He/She**] will earn the 50 rupees which I gave, plus the amount [**he/she**] does not

- ✓ *If the villager asks, then refuse to share any more information about Player 2!*

3. Now, you will play this game with **real money**.

Here is 50 rupees for you**.** You can keep this amount, or decide how much to send to [**selected name**], a [**man/woman**] from another village. Here are two envelopes: you can put the money you want to send in envelope 2 and put the money you wish to keep in envelope 1. Now, please divide the money between the envelopes 1 and 2.

- ✓ *Record the decisions: **Q21. Amount Sent; Q22. Amount kept***

4. You have sent [**amount sent**] rupees and we will triple it to **[triple of amount sent]** rupees to give to [**selected name**]. Now, please tell us how much of this tripled amount you are expecting this [**man/woman**] to send back to you.

- ✓ *Record the decisions: **Q23. Amount Expected Back***

Round Two - Game Two:

5. Now, let us start the second game. In this game, only you will receive 50 rupees from me. No money will be given to [**selected name**]. You must decide how much to send to this [**man/woman**]. You can keep everything, or you can send a positive amount: 5, 10, 15, 20, 25, 30, 35, 40, 45 or 50 rupees. If you send a positive amount, we will triple it so [**selected name**] receives three times the amount. In this game, [**he/she**] cannot send you anything back. After you make your decision, the game will end.

You will earn whatever money you kept. [**selected name**] will earn triple the amount sent by you.

6. Now, let us play this game with **real money**.

Here is 50 rupees for you**.** You can keep this amount, or decide how much to send to [**selected name**], a [**man/woman**] from another village. Here are two envelopes: you can put the money you want to send in envelope 2 and put the money you wish to keep in envelope 1. Now, please divide the money between the envelopes 1 and 2.

✓ *Record the decision:* ***Q24. Amount sent; Q25. Amount kept***

Round Three:

Let us now begin the third round where you will again play two simple games against another player. In this round, you will play as Player 1 and will be asked to choose a Player 2 whom you wish to play these games with. Here are two blind lotteries, containing the names of villagers who are participating in our study as Player 2.

Please take out a single paper from one of these two blind lotteries:

- *Offer both the Round 3 blind lotteries – one box will have four options with one name each, and the other will have two options with two names each*
  - *If the* ***lottery with one name*** *is selected:*
    Q26. Lottery decision – ID of Selected Player
    Q26.1. Amount Returned by Selected Player
  - *If the* ***lottery with two names*** *is selected: (Q26.-32. will be left empty in the answer-sheet)*
    Q33. ID number of the Selected Female Player 2
    Q33.1. Amount Returned by the Selected Female Player 2

    Q34. ID number of the Selected Male Player 2
    Q34.1. Amount Returned by the Selected Male Player 2

Round Three – Game One: If Lottery with One Name is Selected

1. From the lottery, you have taken out [**selected name**], a **[man/woman**] from another village. However, you can choose whether to play with this [**man/woman**] or another anonymous Player 2. This anonymous Player 2 can be anybody from the group of Player 2s who are participating in our study.

To help you decide, here is some more information:

- In the first round of games, this **[man/woman**]returned [**as much as (s)he received / Rs. X more than (s)he received / Rs. X less than (s)he received**]
- On average, in the first round, Player 2s returned [**as much as they received / Rs. X more than they received / Rs. X less than they received**]

However, please remember that the Player 2 you select may not return the same amount again. It can be the same, higher, or lower.

You can now make your decision: would you like to play with the [**man/woman]**, or with an **anonymous Player 2**?

✓ *Record the decision:* ***Q27. Evaluation Decision by the Villager*** *(**1** = Selected Player 2, **0** = Anonymous Player 2)*

2. You have chosen to play with [**selected name/anonymous player**], a [**man/woman/unknown**] from another village in this region who is participating in our study.

Now, let us start the first game. In this game, I will give 50 rupees to you and 50 rupees to [**selected name/anonymous player**]. [**He/she**] does not know who they are playing with; they only know that the game is played with someone from another village in this region. You must decide how much to send to this [**man/woman/person**]. You can keep everything, or you can send a positive amount: 5, 10, 15, 20, 25, 30, 35, 40, 45 or 50 rupees. If you send a positive amount, we will triple it so this [**man/woman/ person**] receives three times the amount. Next, [**selected name/anonymous player**] will decide how much of this tripled amount to send back to you. This [**man/woman/person**] can decide to keep everything, or send back any amount in multiples of 5 rupees.

You will earn whatever money you kept, plus the amount returned by [**selected name/anonymous player**]. [**He/She**] will earn the 50 rupees which I gave, plus the amount [**he/she**] does not return back to you.

✓ *If the villager asks, then refuse to share any more information about Player 2!*

3. Now, let us play this game with **real money**.

Here is 50 rupees for you**.** You can keep this amount, or decide how much to send to [**selected name/anonymous player**], a [**man/woman/person**] from another village. Here are two envelopes: you can put the money you want to send in envelope 2 and put the money you wish to keep in envelope 1. Now, please divide the money between

✓ *Record the decisions:* ***Q28. Amount Sent; Q29. Amount kept***

4. You have sent [**amount sent**] rupees and we will triple it to **[triple of amount sent]** rupees to give to [**selected name**]. Now, please tell us how much of this tripled amount you are expecting this [**man/woman/person**] to send back to you.

✓ *Record the decisions:* ***Q30. Amount Expected Back***

Round Three – Game Two: If Lottery with One Name is Selected

5. Now, let us start the second game. In this game, only you will receive 50 rupees from me. No money will be given to [**selected name/anonymous player**]. You must decide how much to send to this [**man/woman/person**]. You can keep everything, or you can send a positive amount: 5, 10, 15, 20, 25, 30, 35, 40, 45 or 50 rupees. If you send a positive amount, we will triple it so [**selected name/anonymous player**] receives three times the amount. In this game, [**he/she**] cannot send you anything back. After you make your decision, the game will end.

6. Now, let us play this game with **real money**.

Here is 50 rupees for you**.** You can keep this amount, or decide how much to send to [**selected name/anonymous player**], a [**man/woman/person**] from another village. Here are two envelopes: you can put the money you want to send in envelope 2 and put the money you wish to keep in envelope 1. Now, please divide the money between the envelopes 1 and 2.

✓ *Record the decision:* ***Q31. Amount sent; Q32. Amount kept***

Round Three – Game One: If Lottery with Two Names is Selected

1. From the lottery, you have taken out two names:

- [**selected female name**], a man from an anonymous village
- [**selected male name**], a woman from an anonymous village

However, you can choose whether to play the next round with the man, or with the woman, or with an anonymous Player 2. This anonymous Player 2 can be anybody from the group of Player 2s who are participating in our study. To help you decide, here is some more information:

- In the first round of games, the [**selected female name**] returned [**as much as she received / Rs. X more than she received / Rs. X less than she received**]
- In the first round of games, the [**selected male name**] returned [**as much as he received / Rs. X more than he received / Rs. X less than he received**]
- On average, in the first round, Player 2s returned [**as much as they received / Rs. X more than they received / Rs. X less than they received**]

However, please remember that the Player 2 you select may not return the same amount again. It can be the same, higher, or lower.

You can now make your decision: would you like to play with the **man**, or with the **woman**, or with an **anonymous Player 2**?

✓ *Record the decision:* ***Q35. Evaluation Decision by the Villager*** *(**1** = Female, **2** = Male, **0** = Anonymous Player 2)*

2. You have chosen to play with [**selected name/anonymous player**], a [**man/woman/person**] from another village in this region who is participating in our study.

Now, let us start the first game. In this game, I will give 50 rupees to you and 50 rupees to [**selected name/anonymous player**]. [**He/she**] does not know who they are playing with; they only know that the game is played with someone from another village in this region. You must decide how much to send to this [**man/woman/person**]. You can keep everything, or you can send a positive amount: 5, 10, 15, 20, 25, 30, 35, 40, 45 or 50 rupees. If you send a positive amount, we will triple it so this [**man/woman/person**] receives three times the amount. Next, [**selected name/anonymous player**] will decide how much of this tripled amount to send back to you. This [**man/woman/person**] can decide to keep everything, or send back any amount in multiples of 5 rupees.

You will earn whatever money you kept, plus the amount returned by [**selected name/anonymous player**]. [**He/She**] will earn the 50 rupees which I gave, plus the amount [**he/she**] does not return back to you.

✓ *If the villager asks, then refuse to share any more information about Player 2!*

3. Now, let us play this game with **real money**.

Here is 50 rupees for you**.** You can keep this amount, or decide how much to send to [**selected name/anonymous player**], a [**man/woman/person**] from another village. Here are two envelopes: you can put the money you want to send in envelope 2 and put the money you wish to keep in envelope 1. Now, please divide the money between the envelopes 1 and 2.

✓ *Record the decisions:* ***Q36. Amount Sent; Q37. Amount kept***

4. You have sent [***amount sent***] rupees and we will triple it to **[*triple of amount sent*]** rupees to give to [**selected name**]. Now, please tell us how much of this tripled amount you are expecting this [**man/woman**] to send back to you.

✓ *Record the decisions:* ***Q38. Amount Expected Back***

Round Three – Game Two: If Lottery with Two Names is Selected

5. Now, let us start the second game. In this game, only you will receive 50 rupees from me. No money will be given to [**selected name/anonymous player**]. You must decide how much to send to this [**man/woman/unkown**]. You can keep everything, or you can send a positive amount: 5, 10, 15, 20, 25, 30, 35, 40, 45 or 50 rupees. If you send a positive amount, we will triple it so [**selected name/anonymous player**] receives three times the amount. In this game, [**he/she**] cannot send you anything back. After you make your decision, the game will end.

6.

Now, let us play this game with **real money**.

Here is 50 rupees for you**.** You can keep this amount, or decide how much to send to [**selected name/anonymous player**], a [**man/woman/person**] from another village. Here are two envelopes: you can put the money you want to send in envelope 2 and put the money you wish to keep in envelope 1. Now, please divide the money between the envelopes 1 and 2.

✓ *Record the decision:* ***Q39. Amount sent; Q40. Amount kept***

7.

This was the last game. As a final task, we want you to draw a lottery to decide which one out of the three rounds you will be paid for.

✓ *Execute payoff lottery:* ***Q41. Record selected round number***

Household Survey:

Can you please give us a further 15-20 minutes of your time to answer a short survey about yourself and your household? All your answers will be kept completely anonymous and will only be used for our research study.

- Yes
- No

✓ ***Record all responses in the answer-sheet***

Last Instructions to end the interview

Thank you for your time and cooperation today. We will now calculate your total earnings which will be paid to you in the evening. **Please do not speak about the games with anybody in the village until all the villagers participating in our study have been paid.** This is very important for our study.

You can now go to Rahul or Sanjay, they will let you know at what time to return in the evening.

Experimental Protocol – Player 2

A. General Instructions for Enumerators

- *Do not read what is written in italics to the villagers, they are instructions for you*
- *Each interview is private between you and one villager, use cardboard screens so that nobody else can observe you*
- *All villagers must play the games under the same conditions:* ***read the script exactly the way it is written***
    - *If there is any disturbance, note the disturbance in the answer-sheet*
- *You may not influence the villager's decision. If they ask you for advice, then refuse to answer*
- *Villagers can stop the interview if they are not comfortable*
- *After finishing each session, request each villager not to talk about the games before they have been paid in the evening*

B. Timing

- *The meeting place and time will be communicated to the villagers by Sanjay and Rahul*
- *Each interview will take 60 – 90 minutes, do not rush any question*
- *When an interview is finished, give the answer-sheet to Sanjay or Rahul*
- *Take a short break between each interview*

C. Set-up Answer Sheet:

- *Record Date*
- *Record Village Name and Village ID Number*
- *Verify Session Number with Rahul or Sanjay*
- *Record your Name and Enumerator ID Number*

Introduction:

Thank you for coming today. My name is **[…]**. Today we would like to request approximately 30-45 minutes of your time to participate in our study. In this study, you will play two rounds of games with different players from other villages in this region, plus a separate game by yourself. From these games, we wish to study how people make simple financial decisions in different situations. You can earn money in these games. You do not have to use your own money, it will be provided by us.

Please make each decision according to your own best interests, since your total earnings will depend upon your decisions. You will be paid your earnings from one out of the two rounds of games, plus the separate game which you will play by yourself.

For all the two-player games, we will allow multiple people to play against you. After you finish playing today, we will go to 11 other villages in this region to play the same games with these people. Your earnings will be calculated according to the decision made by one of these people. This means that your final payment can only be made after 2 weeks when all the other villages have finished playing these games. However, we will pay you Rs.150 in advance for your participation today. We will pay you any additional money that you have earned when we return.

Q1. Do you understand these general instructions and agree to participate in this study?

- ○ Yes
- ○ No

Q2. Do we give us your permission to match you with multiple other players?

- ○ Yes
- ○ No

✓ *Record the decisions:* ***Q1.*** *Permission to play;* ***Q2.*** *Permission for matching with multiple Player 1s*

Thank you for agreeing to participate in our study. Before we proceed, please confirm the following details for us:
Q3. What is your full name?
Q4. What is your gender (male, female)?

✓ *Record the responses:* ***Q3.*** *Full name;* ***Q4.*** *Gender*

Round One:

1. Let us now begin the first round where you will play two simple games against another player. You will play as Player 2 and a person from another village in this district will play as Player 1. In this round, both you and Player 1 will remain completely anonymous to each other. Player 1 does not know who they are playing with; they only know that the game is played with someone from another village in this region.

Round One - Game One:

2. At the beginning of the game, I will give 50 rupees to the anonymous Player 1 and 50 rupees to you. Player 1 must decide how much to send to you. They can keep everything, or send a positive amount: 5, 10, 15, 20, 25, 30, 35, 40, 45 or 50 rupees. If Player 1 sends a positive amount, we will triple it before giving it to you. Next, you will decide how much of this tripled amount to send back to Player 1. You can decide to keep everything, or send back any amount in multiples of 5 rupees.

You will earn the 50 rupees which I gave you, plus the amount you do not return back to Player 1. Player 1 will earn whatever money they kept, plus the amount returned by you.

3. *Play practice games with fake notes:*

- ✓ *Make sure the villager receives zero and a positive amount at least once each*
- ✓ *The villager should return an equal amount, a larger amount, and a smaller amount at least once each*
- ✓ *Show the villager the answer-sheet one row at a time and ask them to decide upon an amount to return for each of the possible amount received*
- ✓ *Repeat the game rules again until it is clear to the respondent*

4. Now, you will play this game with **real money**.

Here is 50 rupees for you. I have also given 50 rupees to the anonymous Player 1. Player 1 will now be asked to decide to send a share of their 50 rupees to you. I will give you triple the amount sent by them.
Now, we want to know how much you would like to return back to the anonymous Player 1 for each possible amount that they can send to you.

- ✓ *Record the decisions:* ***Q5. - Q 14. Amount returned for each possible amount received***

Round One - Game Two:

5. Now, let us start the second game. In this game, only the anonymous Player 1 will receive 50 rupees from me. No money will be given to you. Player 1 must decide how much to send to you. They can keep everything, or send a positive amount: 5, 10, 15, 20, 25, 30, 35, 40, 45 or 50 rupees. If Player 1 sends a positive amount, we will triple it. In this game, you cannot send anything back. After Player 1 makes their decision, the game will end.

You will earn triple the amount sent by the anonymous Player 1. Player 1 will earn whatever amount they keep.

6. Play practice games with fake notes:

- Make sure you send the respondent zero and a positive amount at least once each.
- Repeat the game until it is clear to the respondent!

7.

We will play this game with **real money** with the anonymous Player 1 and record the money they send to you. The tripled amount will be added to your earnings in this round.

Risk Lottery Game

1.

Let us now play a different game. You have to play this game alone. In this game, you must choose between receiving a certain amount, or tossing a coin and receiving 0 rupees if it is head or 100 rupees if it is tail.

2. *Play the practice game with fake notes:*

- *Put 50 rupees on the ground, on the left side of the respondent.*
- *Put 100 rupees on his/her right side.*
- *Ask the villager to choose:*

Do you prefer to take the 50 rupees, or to toss a coin and earn the 100 rupees if it is tail?

- *Ask him/her to toss the coin and show what happens if it is head and what happens if it is tail*

3. *One by one, add three more rows and ask the villager to choose one option in each row. Show how much they could earn in each row:*

In this case, please note that the certain amount has been decreased by 10 rupees. Now, do you prefer to take the **[40 / 30 / 20]** rupees for certain, or to toss a coin and earn the 100 rupees if it is tail?

4.

Now we will play with real money. You will have to make 4 similar decisions. We will then select one row using a blind lottery. This number will indicate which row you will play and receive money for. Remember that you have to take your best decision for each row since you will only be paid for one randomly chosen row. Please choose between the certain amount and the risky amount in each of these four rows.

Row 1.	Receive 50 rupees for certain		Toss a coin: Receive 0 rupees if Heads and 100 rupees if Tails	
Row 2.	Receive 40 rupees for certain		Toss a coin: Receive 0 rupees if Heads and 100 rupees if Tails	
Row 3.	Receive 30 rupees for certain		Toss a coin: Receive 0 rupees if Heads and 100 rupees if Tails	
Row 4.	Receive 20 rupees for certain		Toss a coin: Receive 0 rupees if Heads and 100 rupees if Tails	

✓ *Record the decision:* ***Q15, 16, 17, 18 – Selected option in each row***

5. *Play the lottery to select one row*

Please draw a single row number from this blind lottery

✓ *Record the row number selected:* ***Q19. Row number chosen***

✓ *If the risky amount is chosen, then toss the coin - record the decision:* ***Q20. Final decision (1: Certain, 2: Lottery won, 3: Lottery lost)***

Round Two: Permission to reveal identity

1.

Before we start the second round of games, we have one important request: when we play this round with the people from different villages, we have to tell them your first-name and whether you are a man or woman. Please note that your caste name will not be revealed. The other villagers will be told they are playing this round with **[villager's first-name],** a **[man/woman]** from another village in the district. No other detail about you will be revealed.

We need to reveal your name to study how the people will react to playing with an identified person, as opposed to an anonymous person. This is an important part of our study.

Do you give us permission to reveal this information to your co-players?

❍ Yes
❍ No

✓ *Record the decision:* ***Q21. Permission to Reveal Name and Gender***

✓ *If answer is* ***"No,"*** *then end the session and notify Rahul or Sanjay*

Round Two – Game One:

2. Let us now start the second round. In this round, you will play the same games as before but with one main difference: **your first-name and gender will be revealed to Player 1.** Player 1 is an anonymous person from another village in this region participating in our study.

3. Now, let us start the first game. At the beginning of the game, I will give 50 rupees to the anonymous Player 1 and 50 rupees to you. Player 1 must decide how much to send to you. They can keep everything, or send a positive amount: 5, 10, 15, 20, 25, 30, 35, 40, 45 or 50 rupees. If Player 1 sends a positive amount, we will triple it before giving it to you. Next, you will decide how much of this tripled amount to send back to Player 1. You can decide to keep everything, or send back any amount in multiples of 5 rupees.

You will earn the 50 rupees which I gave you, plus the amount you do not return back to Player 1. Player 1 will earn whatever money they kept, plus the amount returned by you.

4. Now, you will play this game with **real money**.

Here is 50 rupees for you. I have also given 50 rupees to the anonymous Player 1. Player 1 will now be asked to decide to send a share of their 50 rupees to you. I will give you triple the amount sent by them.

Now, we want to know how much you would like to return back to the anonymous Player 1 for each possible amount that they can send to you.

✓ *Record the decision:* ***Q22. – Q31. Amount sent back for each possible amount received***

Round Two - Game Two:

5. Now, let us start the second game. In this game, only the anonymous Player 1 will receive 50 rupees from me. No money will be given to you. Player 1 must decide how much to send to you. They can keep everything, or send a positive amount: 5, 10, 15, 20, 25, 30, 35, 40, 45 or 50 rupees. If Player 1 sends a positive amount, we will triple it. In this game, you cannot send anything back. After Player 1 makes their decision, the game will end.

You will earn triple the amount sent by the anonymous Player 1. Player 1 will earn whatever amount they keep.

6. Play practice games with fake notes:

- Make sure you send the respondent zero and a positive amount at least once each.
- Repeat the game until it is clear to the respondent!

7. We will play this game with **real money** with the anonymous Player 1 and record the money they send to you. The tripled amount will be added to your earnings

8. This was the last game.

As a final task, we want you to draw from two blind lotteries which will be used to calculate your final earnings. The first lottery will decide which out of the two rounds you will be paid for, and the second lottery will decide which other person you will be matched with in order to calculate your earnings.

- ✓ *Execute payoff lottery and record outcome:* ***Q32. Record selected round number***
- ✓ *Execute Player 1 village lottery and record outcome:* ***Q33. Record selected Player 1 village***

Household Survey:

Can you please give us a further 5-10 minutes of your time to answer a short survey? All your answers will be kept completely anonymous and will only be used for our research study.

- Yes
- No

- ✓ ***Record all survey responses in the answer-sheet***

Last Instructions to end the interview

Thank you for your time and cooperation today. You can now go to Rahul or Sanjay for your advance payment of 150 rupees. We will return in two weeks to pay you any additional money earned by you, according to the decisions made by the people in other villages.

Please do not speak about these games with anybody in the village until all the villagers participating in our study have been paid in the evening. This is very important for our study.