

Altruism in the Household

A Pilot Study

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This article reports results from a pilot experiment that evaluates the role of procedural altruism in the household. An allocation game is used to study the choice between joint consumption and private consumption among married spouses. Subjects' consumption decisions over joint and private goods are observed under two treatments – effort and no-effort. Overall, results suggest that the procedure in which the economic resources are earned seem to influence altruistic choices of males more than females.

The recent and burgeoning research suggests that economic decision-making is not only outcome dependent, but depends on the procedure as well. For example, Hoffman and Spitzer (1985), Hoffman et al (1994), Güth and Tietz (1986), find that subjects make more self-regarding choices whenever they put in real effort to earn, or earn the rights to allocate rather than be randomly assigned such a right. In addition, gender seems to matter in the evaluation of the procedure, as Jakiela (2009) and Dasgupta (2011) find that with a more costly procedure of earning, female subjects are less altruistic than males. We extend insights from these findings to evaluate household decision-making in the private, focusing on the issue of procedural altruism. In particular, we ask: “Does the earning procedure affect altruistic decision-making in the household?”. Unlike some of the previous quasi-laboratory experiments that focus exclusively on the efficiency of household decision-making and/or test implications of the unitary household model (Ashraf 2009; Iversen et al 2006; Bateman and Munro 2004; Peters et al 2004; Mani 2011), we focus on eliciting gender difference in procedural altruism in the household.

Subjects in our experiment are randomly assigned to one of the following two treatments – (a) no-effort: where money is earned without effort, and

(b) effort: where money is earned with effort. Subjects are then asked to decide whether to spend the experimental earning on private consumption or joint household consumption. We find that in the effort treatment there is an overwhelming tendency to choose the personal consumption bundle over the joint consumption bundle irrespective of the gender of the participant. However, we find such effects much stronger for men compared to women.

The Allocation Game

To examine consumption choices in the private, we use an allocation game that is devoid of any strategic concerns. In the game, each decision-maker was asked to choose between bundles containing excludable private consumption goods, or bundles containing joint household consumption goods. Personal clothing represents excludable personal consumption, and food items represent joint consumption. The decision-maker was presented with four options and asked to use the money from the experiment to choose one of them. The first consumption bundle consisted of good quality clothes; the second consisted of regular work clothes, the third and the fourth bundle consisted of two different combinations of staple foodgrains. Each consumption bundle was valued at Rs 200. For private consumption, males could choose between a bundle containing a shirt and a pair of trousers for festive wear, or a bundle containing a shirt, a pair of trousers and a Lungi for work wears. Females could choose between a bundle containing a sari for festive wear, and a bundle containing two saris for daily-wear. The joint household consumption bundles consisted of two

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different amounts of staple foodgrains (8 kg rice and one kg lentil, or four kg rice two kg lentils).¹ At the end of the experiment, the decision-maker was given a store credit receipt (from designated stores) specifying their choices.

In the baseline no-effort treatment the subject was told that they are entitled to Rs 200 worth of commodities, and they can choose from any of the four alternatives described above. They were shown samples of items when choosing. In the real-effort treatment, prior to the choice task, the decision-maker participated in a real-effort task. In this task, the decision-maker was presented with two plastic bowls, one empty and the other containing red and white poker chips. The task was to separate the chips into the two bowls, one containing only white chips and the other containing only red chips, in five minutes. If successful, the subject could pick one of the four bundles; otherwise s/he only received the show-up fee of Rs 50. Note that five minutes were sufficient time to complete the task. Our interest was in evoking a sense of real-effort and not a task that requires considerable effort that could not be completed in the required timeframe. All subjects in the real effort task successfully completed the task.

Experiment Procedure

The experiment was conducted in Bhogal, a slum community adjoining Siddharth Extension; the latter, a prosperous residential colony in New Delhi. Women from the Bhogal area typically work as domestic help in the residential colony. In preparation for the experiment we ran a small survey to identify typical consumption spending of the households in the slum community. We also surveyed the local marketplace in Bhogal, which caters mostly to residents of Bhogal to identify and verify common clothing and food choices of the Bhogal residents. We picked two prominent stores in the area to serve the subjects, and procured store receipts from them. We explained to the shopkeepers the nature of the task and the fact that the subjects can only choose to buy the items mentioned in the receipts. We verified at the end of each day that the

protocol was indeed followed by the shopkeepers.

Married couples were recruited with the help of a member residing in Bhogal. Each participant was promised at least Rs 50 for showing up. We used a large residential park in the nearby area as our gathering area for subjects. The subjects were asked to congregate at the park at a pre-specified time. The subjects congregated at one side of the park and a research assistant was in charge of monitoring them and ensuring that there was no communication amongst participating subjects. On the opposite side of the park we marked the two opposite corners of the park as our experiment area. At the start of the experiment a married couple was randomly chosen from the group of waiting subjects, and randomly placed in either the effort treatment or the no-effort. Note, either the husband or the wife from every participating couple were randomly put in the role of the decision-maker. The other person had no role in decision-making. The couple were then separated and escorted to the two opposite corners. At one of the corners, the decision-maker participated in the experiment task and made his/her decisions privately, while in the other corner, their married partner awaited. At the end of the decision-making task, the decision-maker received a store-receipt with their specified choice. The couple also received Rs 50 each as a show-up fee. The husband-wife pair were then asked to leave the park without communicating with the other waiting subjects. We had a pre-decided “random”

Table 1: Treatments, Sessions and Subject Information

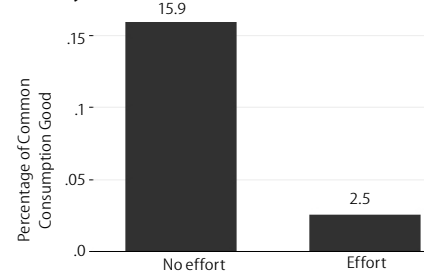
Treatments	No of Subjects	Session
No effort	22 males	1
	22 females	
Effort	20 males	2
	20 females	

order of choosing a male or a female allocator from each subject-couple to ensure balanced gender representation in each treatment. We had 84 couples that participated in the experiments. There were two sessions. Table 1 provides description of all session and subject information.

Results

We find that in the no-effort treatment 16% of the participants chose the joint consumption good, and in the effort treatment 2.5% of the participants chose the joint consumption good (Figure 1).

Figure 1: Choice of Joint Consumption Good by Treatment



When we separate the result by gender we find that in the no-effort treatment both males and females chose similarly. 18% of the males and 14% of the females choose the joint consumption good bundle (Figures 2 and 3). However, in the effort treatment, none of the males chose the joint consumption good (Figure 2), while 5% of the females chose the joint consumption good in that treatment (Figure 3).

Figure 2: Choice of Common Consumption Good, by Treatment: Male Decision-makers

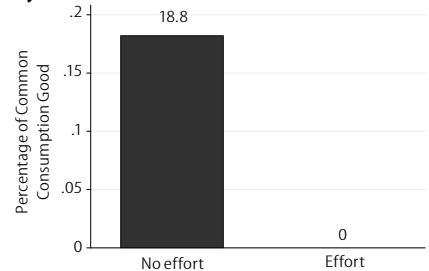
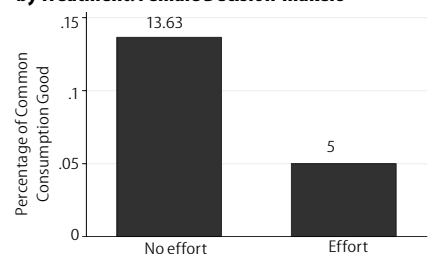


Figure 3: Choice of Common Consumption Good, by Treatment: Female Decision-makers



Our interest is twofold: First, whether in a household consumption choices are procedure dependent or not? Second, do these choices vary by gender? We formally test three hypotheses:

H1: Choices are identical in the effort and the no-effort treatment.

H2: Choices for males are identical in the effort and the no-effort treatments.

H3: Choices for females are identical in the effort and the no-effort treatments.

Table 2: Hypotheses H1-H3

Differences in Common Consumption between Groups	Mean Difference in Common Consumption Good (Std Error)
H1: Effort-no-effort	-0.13** (0.06)
H4: Effort-no-effort (if male)	-0.18** (0.08)
H5: Effort-no-effort (if female)	-0.086 (0.087)

* Significant at the 10% level; ** Significant at the 5% level; *** Significant at the 1% level.

The null of equality in the choice of the joint consumption good under the effort and no-effort treatment (H1) is rejected at the 5% significance level (p-value = 0.037). The null of equality in the choice of the common consumption good for males between the effort and no-effort treatment (H2) is rejected at the 5% significance level (p-value = 0.045). We fail to reject the null of equality in the choice of the joint consumption good (H3) even at the 10% significance level (p-value = 0.34). Our results seem to indicate that in the household, between married couples, subjects whenever assigned to the effort treatment are more likely to choose the private consumption bundle as compared to subjects assigned to the no-effort treatment. Notably, this difference is largely driven by differences in choices exhibited by males across treatments. Female choices of the joint consumption bundle seem to remain independent of the treatment status, reflecting altruistic choices that are procedure independent.

Conclusions

Empirical results indicate that resources in the hands of women in the household are better used for overall family welfare improvements (Quisumbing and Maluccio 2000; Udry, Hoddinott, Alderman, and Haddad 1995; Quisumbing 1996). As a result, over the last decade there has been a greater discussion about the necessity of endowing women in the household with greater decision-making power (Kabeer 1999). Countries as different as UK, Mexico and Sri Lanka have taken purposeful

policy decisions, where aid, such as food coupons, is directed towards women instead of men. Even India's recent step towards making women the head of the household for food distribution purposes seem a positive move towards that direction.² Our experiment results indicate that although altruistic consumption choices in the household depend on the earning procedure typically, women's choice of joint household consumption remains largely independent of the earning procedure. Admittedly, these are small sample results, and more experiments can establish the robustness of our observation. However, such observed behaviour lends support to the purposeful shift towards promoting women's role in the household as the primary decision-maker in targeted welfare policies.

NOTES

- 1 The Indian National Sample Survey's 55th round (2000) estimates the mean monthly per capita consumption of rice and pulses to be respectively 5.5 kilograms and one kilogramme.
- 2 See "Are Men Useless? (Government Says Yes)", NYT, 9 March 2012.

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