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Institute of Economic Research

IRENE Working paper 17-12

I Deserve More!

**An Experimental Analysis of Illusory Ownership
in Dictator Games**

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An experimental analysis of illusory ownership in dictator games

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Abstract

Delineation of someone's ownership typically involves the sense of deservedness: the property right is respected as long as the owner deserve to own the object. Objectively, deservedness is often linked to one's actions or specific attributes that justify the owner's claims. We argue that people might get the sense of deservedness without an objective causal attribution. In our experiment, the pure luck defines the allocation of the roles. Still, compared to a standard setting, in a treatment where actions have no causal effect on the outcome, dictators keep larger share. At the same time, dictators do not compensate recipients for their irrelevant actions. We interpret this asymmetry in reaction towards the procedures of role allocation as 'illusory property': people care about irrelevant procedures only if they favor themselves but not others.

1 Introduction

Imagine a lottery when somebody guessing the right set of numbers wins the prize, and the loser gets nothing. Now imagine a company randomly choosing one of her customer and sending her a discount, while not chosen clients get no special offers.

Assume that in both cases the resulting inequality cannot be attributed to specific features, efforts or skills of the contestants but comes about due to pure luck.

Would you say that the winner in the lottery deserves the prize more compared to those who failed to guess correctly? Would you say that the lucky client deserves the discount more compared to others?

Although in both cases, the random draw defines the allocation, we believe that the cases differ in terms of perceived deservedness. In the first case,

the competition involves an *action*, whereas in the second case, no one has to do anything. We argue that this distinction suffices to produce an illusory sense of ownership that would affect the willingness to share the prize.

2 Related literature

The idea that people respect ownership has a long tradition in experimental literature. The effect of ownership is typically studied by manipulating the procedures behind the endowments in the dictator game. Cherry *et al.* (2002), for instance, allowed dictators to work to earn their initial endowment. They find that dictators who earned their money shared significantly less. Cherry *et al.* conclude that real effort creates the sense of entitlement or deservedness for dictators to keep more. Faillo *et al.* (2016) test this intuition in the stealing context and show that participants refrain from taking from someone who worked hard for their money. As Faillo *et al.* confirm that dictators or takers possess a sense of property. Fershtman *et al.* (2012) brings the idea of the entitlement via real effort into a dictator game with competition. Fershtman *et al.* show that if the ownership can be obtained by being better on a task, people do not seek to reduce inequality.

Further experimental evidence suggests that mere initial allocation of money by a random draw already suffices to induce the respect of ownership. Non-giving is perceived less harmful than taking (List, 2007, Hayashi, 2013, Korenok *et al.*, 2014). This distinction shows that the manipulation of reference points already delineates the property rights over the pie share.

We extend the literature on the deservedness in the dictator games by differentiating between 'passive' and 'active' luck. We argue that despite the absence of the causal link between the action and the outcome, people would assign higher deservedness to action-like outcome that would justify them keeping the larger share. The distinction between commissions and omissions in moral psychology supports our intuition. In this literature, the outcomes caused by actions are judged more harshly than the same outcomes caused by inaction (Spranca *et al.*, 1991, Baron & Ritov, 2004, Royzman & Baron, 2002, DeScioli *et al.*, 2011). This distinction makes people willing to attribute positive outcomes to their actions and negative ones to their inaction (Patt & Zeckhauser, 2000).

We argue that even when there is no causal link between the action (or inaction) and the initial allocation, people might construct the link subjectively. The illusion of control might lead to an incorrect belief about the effect of one's action on resulting outcomes (Langer, 1975).

By making the distinction between active and passive luck we also con-

tribute to the literature of procedure preferences (Frey *et al.*, 2004, Frey & Stutzer, 2005, Bolton *et al.*, 2005). Although both procedures are fair as long as they are exclusively based on the random draw, we suggest that they differ in the sense of deservedness that they evoke over the initial allocation of the pie.

The distinction between 'passive' and 'active' luck that we are making is relevant for the general discussion of ownership and property rights. The subjective overvaluation of the 'actively' won assets might lead to unnecessary increase in number of disputes, and thus to efficiency losses.

3 Experimental Design

We employ a dictator game and manipulate the procedure behind the initial allocation. The design is between-subject.

In the baseline, participants play a standard dictator game: participants are matched in pairs; a randomly chosen player in each pair receives an endowment of 5 EUR, a dictator, and is asked to share an amount between 0 and 5 EUR with the not chosen player, the recipient.

After the participants have decided about the transfer and before they learn their roles, they are asked to judge the deservedness and fairness of the role allocation procedure (RAP).

In the treatments, the aforementioned standard dictator game is preceded by an extra stage, in which the very roles are determined. In this stage, the pair of subjects are presented with a collection of tokens organized in a clockwork fashion (see Fig 1). One of the tokens is randomly selected by the computer (bead '*'), and the goal of the subjects is to guess it. Each can make only one attempt and the winner is determined by the distance between their guess and the bead chosen by the computer. In treatment 'win' the participant with the closer guess becomes a dictator; in treatment 'loss', the participants with the further away guess becomes a dictator ¹.

In the dictator game we employ a strategy method: we elicit transfers from both participants in the pair before they know which role they are assigned to.

At the end of the experiment, a socio-demographic questionnaire is administered.

¹In case of a draw, the roles are allocated randomly.

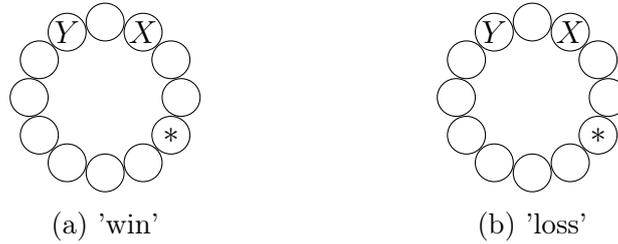


Figure 1: The role allocation in experimental treatments:
 (a) the Person with the bead X is the dictator, the person with the bead Y is the recipient;
 (b) the Person with the bead Y is the dictator, the person with the bead X is the recipient

4 Hypotheses

We expect that dictators care about the procedure of role allocation, but only when the procedure functions in their favor.

If they are the winner of the guessing stage, they feel they deserve to keep more:

Hypothesis 1 *The average sharing in treatment 'win' is lower than in the baseline*

However, if they are the loser of the guessing stage, they do not compensate the recipient equivalently:

Hypothesis 2 *The average sharing in treatment 'loss' is not different from the baseline*

The expected asymmetry would support what we call an 'illusory property': people's desire to attribute the deservedness to their irrelevant actions but not to the irrelevant actions of others.

5 Results

We have run 9 sessions in the experimental lab of the university of Jena in January 2017. In total, 130 participants took part in the experiment: 40 in baseline, 46 in 'win', and 44 in 'loss' treatments. One participant was identified as an outlier according to the Cook's distance procedure². Therefore, the present analysis includes 129 observations.

²Apparently, this single participant was confused: he or she shared 80% of the pie and explained her choice by 'intuition'.

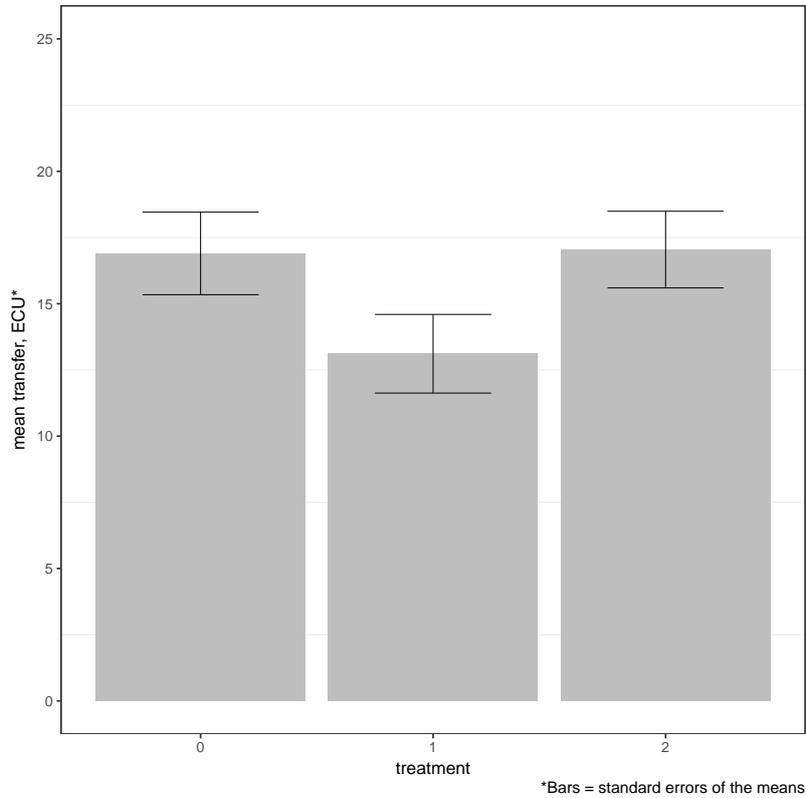


Figure 2: Dictators' transfers by treatment

Each session lasted about 30 min, and the average earnings of the participants was 5 EUR.

The Figure 2 shows the average dictators' transfers by treatment.

As Figure 2 shows, the sharing in the treatment 'win' is lower than in the baseline: 13.1 ECU vs. 16.9 ECU vs. ($p=0.041$, one-sided t-test). There is no significant difference between sharing in the baseline and in the treatment 'loss': 17.0 ECU vs. 16.9 ECU ($p=0.473$, one-sided t-test).

We therefore find support for our Hypothesis 1: dictators who won their role by pure luck through irrelevant action share weakly less than those who were randomly allocated the role of the dictator in the baseline. Moreover, when the procedure favored the recipients, dictators did not seem to compensate for their irrelevant action, which support our Hypothesis 2.

These results are supported by the fairness perceptions. In the treatment 'win' the participants perceive the procedure of the role allocation slightly more fair in comparison with the baseline ($p=0.039$, one-sided t.test). However, they do not consider it less fair in the treatment 'loss' ($p=0.662$, one-sided t.test).

6 Conclusions and Discussion

We investigate how the procedure of roles allocation in the dictator game affects dictators' prosociality. Our main manipulation to the standard procedure is the introduction of irrelevant actions. We find that although the pure luck determines the roles allocations in all the treatments, dictators share weakly less money with the recipient once they have guessed the spot better than their counterpart. Interestingly, dictators do not compensate recipients who were better in guessing. We refer to this asymmetry as 'illusory property', i.e. the readiness to acquire and the unwillingness to recognize deservedness through irrelevant actions. Our findings invite for a more general discussion about self-centered procedural preferences. The biased interpretation of the procedure, e.g. wrong causal attribution, might take place only if the procedure affects the self-interest whereas people are better at discarding irrelevant procedures once their self-interest remains unmarred.

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