

Article

Social Distance Matters in Dictator Games: Evidence from 11 Mexican Villages

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Abstract: We examine the impact of social distance in dictator game giving. The study is conducted in a field setting with high stakes (two days' wages). The sample is a representative sample from eleven low-income Mexican villages. Subjects make multiple dictator decisions simultaneously, in a comparative dictator game. We show the relationship between social distance and giving using several family members, a member of the same village, and a stranger from a different village. Dictator giving shows substantial variation across recipient types and varies directly with social distance. We find higher giving towards family members than towards community members and strangers. Furthermore, our results indicate that giving to community members and to strangers is not different. In light of our results, it is important to consider the impact of social distance on inter- and intra-household transfers in policy interventions that alleviate poverty, e.g., conditional transfers.

Keywords: charitable giving; social distance; development; lab-in-field experiment; comparative dictator game

1. Introduction

Economic studies separately show that inter-household and intra-household transfers generate economic assistance and facilitate risk-sharing within low-income communities [1–5]. Still, little is known about the willingness to share of individuals within and between households, and how the amount they are willing to share varies with the social distance of the recipient. Both inter- and intra-household transfers entail different connections within a social network, and recent studies suggest that social networks might play a key role in the extent of resource sharing within these communities [6–9]. Following the social networks literature, this study reveals that social networks significantly affect the extent of sharing within low-income societies.

Social networks exert their influence in the social and economic decisions of individuals [10,11]. These decisions range from consumption [12], applying for welfare programs [13], migrating to other countries [14], sharing information [9], among others. Thus, excluding a social network analysis in many economic settings can lead to a lack of understanding of critical results (for an overview of this discussion see [15]). As a result, we examine resource sharing within social networks. We distinguish two main types of members within social networks: close and distant social members [16]. In our setting, close members are family members, who are generally associated with intra-household transfers; distant members are community members and strangers, who are generally associated with inter-household transfers.

We report the results of a lab-in-the-field experiment in which a subject faces four traditional dictator games simultaneously: we term this protocol the Comparative Dictator Game. In a dictator game, a subject decides how much of an endowment to share with a passive recipient. In our study, each of the four dictator games has a different recipient. This design is called the Comparative Dictator Game because it compares how sharing changes depending on the recipients' characteristics. The main characteristic for comparison in this study is social distance within a subject's social network (i.e., a family member, a community member, or a stranger). (See also [17] for a similar approach). We argue that subjects' giving within social networks varies, and impacts differently inter-household and intra-household transfers. Decisions involve substantial transfers to all targets—from spouses to strangers—but subjects give more money to the most relevant members within their social network, and those members have a higher likelihood of alleviating their economic distress.

To the best of our knowledge, our contributions are unlike previous research [1,2,4,5,18], in that we are the first to use the same sample to compare simultaneously inter-household and intra-household giving. Second, while previous studies exploring giving in small-scale societies use small samples, we use a large representative sample from 11 low-income Mexican villages (i.e., 1274 participants).

We selected this sample for several reasons. First, the relevance of this paper is to predict how social networks impact resource sharing in the form of transfers between individuals for the purpose of reducing economic distress. Consequently, we use a sample of individuals in small-scale societies who have repeated interactions and are more aware of the members of their social networks. Second, intra-household transfers help to alleviate poverty in emerging economies [1]. Thus, the 11 low-income villages in Mexico are pertinent in order to explore our questions.

This rest of the paper contains the following sections: Section 2 describes the details of the lab-in-the-field experiment; Section 3 exposes the hypotheses; Section 4 discusses the results; and Section 5 concludes.

2. Experimental Design

2.1. Participants

Our participants live in 11 small low-income rural villages in Mexico with a predominantly mixed race population whose native language is Spanish. The villages are in the states of Guanajuato and Michoacan. Our sample is drawn from the sample used for a large longitudinal survey across Mexico that selects participants through a random selection of households. Therefore, our 1274 participants constitute a representative sample from these 11 villages.

Our sample is 57% female, 48% married, and 30% head of household. Our participants are, on average, 35 years old. Fifty-one percent of subjects completed primary school and 39% consider themselves being among the poorest households in Mexico. We use these variables as controls in the regression analysis of Section 4.

2.2. Study Implementation

This lab-in-the-field experimental study was conducted in Fall 2005. Our research team recruited the participants via door-to-door visits. Each individual received an appointment to participate in the study at a local public school in the corresponding village. Experimental sessions were scheduled between 6:00 a.m. and 6:00 p.m., every day of the week. Each session lasted approximately an hour and a half. Subjects received 50 Mexican pesos as a show-up fee. On site, they gave us oral consent to participate. On average, subjects were paid an additional 200 Mexican pesos (about US\$17, or approximately a day's wage) in cash according to the decisions made in the experiments.

Subjects made decisions in five experimental activities from which one activity was randomly selected for payment at the end of their session. The order of the activities was always the same: risk

preference elicitation, time preference elicitation, dictator game, ultimatum game, and trust game.¹ There was no feedback between activities. Given our low-literacy population, our instructions were simple, verbal, and followed a script that is available upon request. At the end of the experimental session, a trained surveyor interviewed each subject individually for a post-experiment survey; this ensured consistent comprehension regardless of the literacy level of the subject.

2.3. Experimental Design: Comparative Dictator Game

The Comparative Dictator Game elicits the intra-household and inter-household altruistic preferences of our subjects by varying the social distance of real recipients. In this task, a participant simultaneously makes decisions in four separate dictator games. In each dictator game, a participant faces a different real recipient. Participants know that only one of these four decisions is randomly selected for payment if this activity is selected for payment at the end of the experimental session.

Figure A1 in Appendix A shows a sample of a decision form for this activity. In each dictator game, a subject decides how much of an endowment X to keep and send to a recipient. We vary this endowment X per subject (i.e., it could be 200, 250, or 300 Mexican Pesos). The subject knew that the real recipient would not be told any information about him or her. Instead, as shown in Figure A1, a subject observes the names of the recipients, except in the first decision where she observes a picture of the recipient. She also knows that the recipient is participating in the study but might not be in the room. From the perspective of a subject, we randomly selected four recipients from three types of recipients, individuals who belong to: (1) a different village; (2) their village (i.e., neighborhood); and (3) their family. For the main experiment, we distributed these recipients within the comparative dictator form (See Figure A1 in Appendix A) in the following order: the first decision (baseline) is always a stranger from other village; the second decision is always a community member from the same village; the third decision is either a community member or a family member; the fourth decision is always a family member. Subjects also answer whether they know the recipient or not in each decision. The majority of our subjects did not know the recipient from the other village but recognized the recipients who live in their village and belong to their family.

In order to test for robustness, we randomly gave to 168 participants two different decision forms that we called the stranger decision form and the community decision form. In the first decision of both forms, the first recipient is identified by a picture of an individual from a different village. In the rest of the decisions, the stranger decision form only includes recipients from other villages, and the community form only includes recipients from the same village.

Table A1 in Appendix A describes the recipients' characteristics (i.e., identifying information provided about the real recipient: name or picture; type of recipient) per form and decision.

In each dictator game, the amount of money sent by a subject to a recipient reveals how much this subject cares about the consumption of this recipient. A higher amount of money sent indicates that the subject cares more about the consumption of the specific recipient. For example, a subject who does not share any of the endowment X with the recipient, does not care about the consumption of the recipient. Because we allow for simultaneous multiple distributions to different types, this activity allows us to compare altruistic behavior in intra-household and inter-household transfers.

Typically, researchers use pre-tests and pilots in finalizing an experimental design which may or may not be revealed in a final manuscript. In his keynote address to the Economic Science Association (San Diego, 2017), Joel Sobel called for experimentalists to provide greater detail about the early process

¹ The field work for this study, from its conception, was carefully orchestrated to collect data on several different research questions. This is a fairly common practice in lab-in-the-field experiments because of the large fixed cost of going into the field. Along with our comparative dictator game design, we decided to implement other games in the field that were testing orthogonal questions with respect to the main question in this paper. For example, the trust game, the lottery game and the time preferences task address immigration issues which are not related to the current paper (e.g., [19] uses the ultimatum data from our field work). None of the other games addresses social distance.

of experimental design. In accordance with these sentiments, we describe our pre-testing process in Appendix B.

3. Hypotheses

Using previous literature, we develop our hypotheses. We use a lab-in-the-field experiment to examine giving within social networks. We compare three recipients of monetary transfers: family members (close), community members (near), and strangers (distant).²

Individuals who are strongly connected care more about each other's welfare [10]. Thus, individuals care more about the consumption levels of contacts who are closer to them than those who are farther [6,7]. In fact, previous studies have shown that altruism in dictator games is higher toward closer social contacts than distant social contacts [18,20–23]. This would predict that individuals' giving to close social contacts is higher than to distant social contacts. This leads to our first hypothesis.

Hypothesis 1. *When giving money in a social network, individuals will be more likely to send more money to close contacts (i.e., family members) than distant contacts (i.e., community members and strangers).*

The in-group favoritism literature suggests that altruism is stronger among community members than strangers [24,25]. An individual cares more about the welfare of a fellow villager than of a stranger when she identifies with her village. In addition, providing small social cues that indicate a considerable social distance between the donor and the recipient (e.g., picture vs. names) decreases giving in dictator games [26]. Thus, this body of research predicts that a participant's giving to a community member is higher than to a stranger when the participant strongly identifies with her village. This leads to Hypothesis 2.

Hypothesis 2. *When giving money, individuals will be more likely to send more money to community members than strangers.*

4. Results

In this section, we examine the impact of social distance on altruistic preferences by presenting the results of the Comparative Dictator Game. Our main variable of analysis is the percentage of the endowment sent to the recipient (e.g., giving hereafter).

First, Table 1 below shows the descriptive statistics of giving by forms and recipients' characteristics. Figure 1 shows the corresponding distributions. On average, subjects give 34% of the endowment to recipients. We also observe hyper-fair donations: 17.6% of the subjects give more than half of the endowment to recipients. These two results are similar to other low-income populations in the U.S. (See [17] for more details).

Next, as can be seen in Table 1, when subjects were presented with a full menu of recipients (main decision form) representing strangers, own village residents, and family members, average giving depends on the social distance of the recipient. There is no significant difference between giving to strangers represented with a picture and to community members (main decision form: t -test $p = 0.893$, Mann–Whitney $p = 0.458$).³ If having family members as recipients in the decision form reduces the opportunities for the community members, we would expect to see a different result with our robustness check. However, we find the same result by using the community decision form (t -test $p = 0.848$, Mann–Whitney $p = 0.515$). Another potential explanation might be that a picture of a stranger could create a feeling of social closeness from the donor which compares favorably to the

² Family members are shown to be closer than friends using a different sample of Mexicans (See [9]).

³ This result also indicates the absence of order effects.

social closeness felt with a community member. Yet, we find that there is no significant difference between giving to strangers represented with a picture and to strangers represented with a name (t -test $p = 0.527$, Mann–Whitney $p = 0.334$).

Table 1. Summary of comparative dictator donations, by recipient characteristic.

Information ^a	% Amount Sent		
	Mean	Std. Dev.	Obs. ^b
Overall ^c	33.9	25.7	5096
<i>Main Decision Form</i>	35.2	26.1	4424
Picture	26.3	21.2	1106
Name of community member	26.2	22.5	1426
Name of family member	47.3	26.3	1892
Spouse	47.8	27.1	529
Mother	54.5	25.1	346
Father	51.7	25.8	257
Child	43.6	26.0	442
Other family member	40.1	24.3	318
<i>Robustness Checks</i>			
<i>Stranger Decision Form</i>	26.5	20.5	428
Picture of a stranger	27.6	19.2	107
Name of a stranger	26.1	20.9	321
<i>Community Decision Form</i>	23.5	22.3	244
Picture of a stranger	24.0	19.3	61
Name of community member	23.3	23.3	183

Notes:^a Table A1 in the appendix shows the combinations of recipients per form. ^b This column, named “Obs.,” displays the number of times a particular recipient characteristic was shown in decision forms. ^c 1274 subjects make four allocations in separate dictator games which results in a total of 5096 individual decisions.

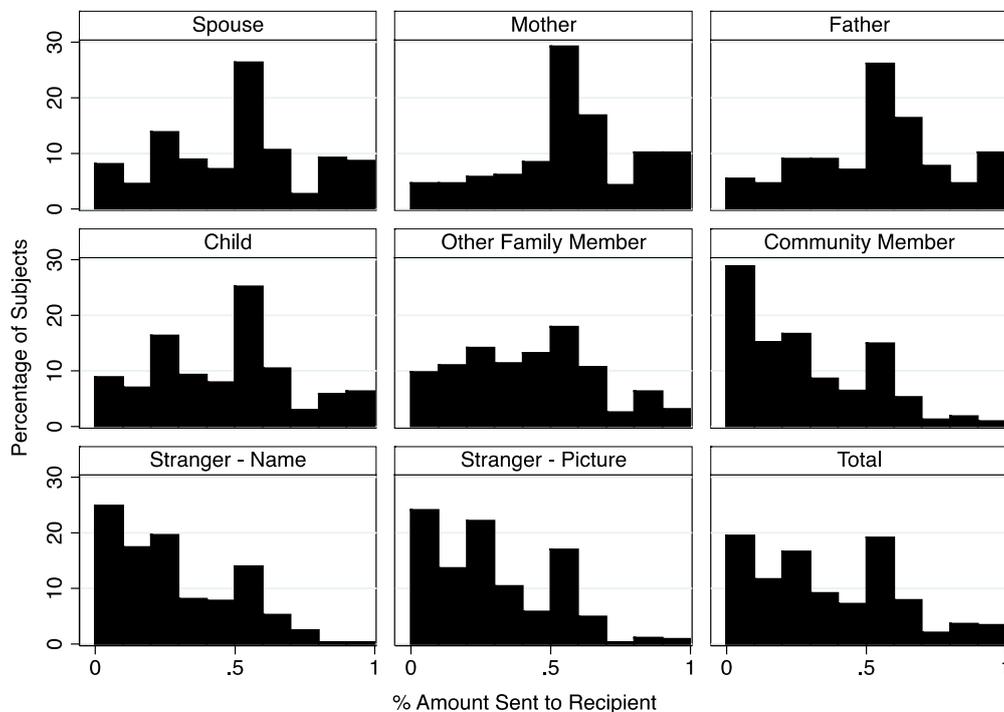


Figure 1. Distribution of giving by recipient characteristic. Note: Each panel displays the distribution of giving per recipient characteristic.

Even though we find that social distance at the community level (near and distant) does not impact giving, we find evidence that giving to family members is significantly higher than to community

members (t -test $p = 0.001$, Mann–Whitney $p = 0.001$) and to strangers (t -test $p = 0.001$, Whitney $p = 0.001$); the distributions are also different (Kolmogorov–Smirnov, $p = 0.001$).

Furthermore, social distance within the family also affects giving. Giving to parents is higher than to spouses, children, and other family members (all t -tests indicate $p = 0.001$, all separate Mann–Whitney tests indicate $p = 0.001$); the distributions are also different (all corresponding pairwise comparisons Kolmogorov–Smirnov tests indicate $p = 0.001$). In the latter analysis, we clustered parents, mothers, and fathers, into a single variable because we do not find a significant difference between giving to mothers and to fathers (t -test $p = 0.174$, Mann–Whitney $p = 0.159$), and the distributions are not different (Kolmogorov–Smirnov, $p = 0.441$).³

Moreover, social distance also plays a role within the family at lower levels of the hierarchy. Giving to spouses is higher than to children and other family members (for children t -test $p = 0.014$, Mann–Whitney $p = 0.014$; for other family members t -test $p = 0.001$, Mann–Whitney $p = 0.001$). Subjects also give marginally more to children than to other family members (t -test $p = 0.066$, Mann–Whitney $p = 0.075$) but give more to other family members than to community members (t -test $p = 0.001$, Mann–Whitney $p = 0.001$).

The next random effects model will help us evaluate more formally how social distance has an impact on individual's giving.

$$G_{ij} = \alpha + \beta_1 \text{Mother}_j + \beta_2 \text{Father}_j + \beta_3 \text{Spouse}_j + \beta_4 \text{Child}_j + \beta_5 \text{Ofamily}_j + \beta_6 \text{Community}_j + \gamma X_i + \varepsilon_{ij} \quad (1)$$

The dependent variable, G_{ij} , is the percentage of the endowment sent to the recipient j by the subject i in the Comparative Dictator Game. The independent variables of interest indicate the recipient j 's social distance from the perspective of the participant. These variables are measured by dichotomous variables that take the value of 1 if the recipient j is: a family member (i.e., Mother_j ; Father_j ; Spouse_j ; Child_j ; other family member, Ofamily_j), a community member (Community_j), or a stranger (omitted variable); 0 otherwise. The rest of variables on the right-hand side of Equation (1) are: X_i , a vector of the participant i 's sociodemographic characteristics as gender, age, education, perception of poverty, marital status, and head of household status; α , a constant; ε_{ij} , the error term. Table 2 below presents the estimates of Equation (1).

Table 2. Percentage of the endowment sent to the recipient.

Dependent Variable: % Sent	(1)	(2)
Recipient's Type of Social Contact:		
Mother, β_1	0.272 *** (0.011)	0.281 *** (0.022)
Father, β_2	0.236 *** (0.013)	0.246 *** (0.024)
Spouse, β_3	0.216 *** (0.009)	0.233 *** (0.024)
Child, β_4	0.181 *** (0.010)	0.197 *** (0.020)
Other family member, β_5	0.143 *** (0.012)	0.153 *** (0.021)
Community member, β_6	−0.0003 (0.007)	0.005 (0.011)
Constant, α	0.263 *** (0.007)	0.309 *** (0.028)

³ This result also indicates the absence of order effects.

Table 2. Cont.

Dependent Variable: % Sent	(1)	(2)
<i>Community Controls</i>	No	Yes
<i>Subject's Sociodemographic Controls</i>	No	Yes
R^2 —Within	0.302	0.302
Between	0.044	0.099
Overall	0.173	0.201
No. of Observations	4424	4424
No. of Subjects	1106	1106

Notes: *** $p \leq 0.001$. Standard errors are in parentheses. Random effects models are used in columns 1–2. The specifications in columns 1 and 2 have 4 observations per individual. In column 2, the specification includes the following controls: the participant's gender, age, marital status, education level, perception of poverty, and head of household status; community dummies; the order of the four dictator decisions. We do not find order effects ($p = 0.497$). Using the overall standard deviation (i.e., 0.27) of Engel's meta-analysis for dictator games [27], we found that a design with only 385 subjects should be able to detect a treatment effect of 0.5 of that standard deviation with a significance level of 0.01 and a power of 0.99. We conclude that our sample of 1106 subjects detects such a result with at least 99% power.

We expect that giving decreases with social distance. Thus, participants care more about the consumption of family members than both the consumption of community members and the consumption of strangers. That is, family members will receive larger amounts of money than community members and strangers.

Specification (1) in Table 2 above shows that the base giving to strangers is 26% of the endowment similar to [17]. Furthermore, we confirm the impact of social distance within the family because giving increases 27%, 23%, 21%, 18%, and 14% when the recipient is a mother, a father, a spouse, a child, and other family member, respectively ($p = 0.001$). However, we do not find evidence of social distance inside communities: giving to community members is not different from giving to strangers ($p = 0.960$). Our results are robust to the inclusion of control variables in specification (2).⁵

5. Discussion

We examine simultaneously inter-household and intra-household transfers using a lab-in-the-field experiment within 11 low-income Mexican villages. Our findings indicate that giving depends on the social closeness of subjects and recipients: participants share more money with family members than with community members and strangers. However, giving to community members is not different from giving to strangers which suggests that there is no in-group favoritism at the village level. Furthermore, there is a clear hierarchy in giving within the family: parents (spouses/children) receive more money than spouses (children/other family members).

Our research is based on a large representative sample from which we could explore close and distant social contacts in the form of family members, community members and strangers from other communities. We believe that exploring a wider spectrum of social contacts within the community (i.e., friends) with a comparative dictator game may explain why we do not find a difference in giving to community members and to strangers. While we also suggest that this latter result reveals the absence of in-group community favoritism, we consider that future studies could test our suggestion with extra measures of identity. In addition, although we recruit a large representative sample from rural areas in an emerging economy, it is important to replicate our results not only in urban areas where informal safety nets are weaker, but also in other emerging economies with different social and institutional contexts. For example, our results are based on a sample of Mexicans who share the

⁵ To explore how individual characteristics impact giving, sociodemographic characteristics of donors and recipients are included in a regression analysis in Appendix C.

same race and language, and there could be value in future research that replicates our results with populations that are embedded in different identities.

A body of research in development shows that inter-household transfers within low-income communities are not a perfect substitute for economic assistance, while intra-household transfers are. Our results highlight that individuals’ altruism toward different social contacts is a key explanation for this difference. Then, policy interventions that aim to foster economic growth in rural areas could be successful by differentiating the effect of intra- and inter-household transfers. Policy makers could reduce economic stress in rural areas by injecting resources through families and facilitating intra-household transfers. Our research will guide future programs that aim to reduce poverty in low-income communities by stressing that community members share resources as strangers do.

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Appendix A. Experimental Forms

<div style="border: 1px solid black; padding: 5px; text-align: center;">Decision 1</div> <p style="text-align: center;">Photo of a person from other village</p> <p style="text-align: center;">Do you know this person? _Yes _No</p> <p style="text-align: center;">Amount Amount you you send keep</p> <p style="text-align: center;"><input style="width: 50px; height: 20px;" type="text"/> + <input style="width: 50px; height: 20px;" type="text"/> = \$X</p>	<div style="border: 1px solid black; padding: 5px; text-align: center;">Decision 2</div> <p style="text-align: center;">Name of a person from the village</p> <p style="text-align: center;">Do you know this person? _Yes _No</p> <p style="text-align: center;">Amount Amount you you send keep</p> <p style="text-align: center;"><input style="width: 50px; height: 20px;" type="text"/> + <input style="width: 50px; height: 20px;" type="text"/> = \$X</p>
<div style="border: 1px solid black; padding: 5px; text-align: center;">Decision 3</div> <p style="text-align: center;">Name of a Family Member</p> <p style="text-align: center;">Do you know this person? _Yes _No</p> <p style="text-align: center;">Amount Amount you you send keep</p> <p style="text-align: center;"><input style="width: 50px; height: 20px;" type="text"/> + <input style="width: 50px; height: 20px;" type="text"/> = \$X</p>	<div style="border: 1px solid black; padding: 5px; text-align: center;">Decision 4</div> <p style="text-align: center;">Name of a Family Member</p> <p style="text-align: center;">Do you know this person? _Yes _No</p> <p style="text-align: center;">Amount Amount you you send keep</p> <p style="text-align: center;"><input style="width: 50px; height: 20px;" type="text"/> + <input style="width: 50px; height: 20px;" type="text"/> = \$X</p>

Figure A1. Sample decision form (main decision form).

Table A1. Decision forms summary.

Decision ^b	Decision Forms ^{a,c}															
	Stranger				Community				Main Decision Form I ^d				Main Decision Form II ^d			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	Recipient Identifying Information Given															
Picture Name	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Type of Recipient															
Stranger Same village	*	*	*	*	*	*	*	*	*	*	*		*	*		
Family ^e												*			*	*
												* 51			* 20	* 358
Spouse Mother Father												* 17			* 150	* 178
												* 8			* 101	* 148
Child												* 23			* 335	* 84
Other in household												* 20			* 230	* 68
Subjects per Decision Form	107				61				269				837			

Notes: ^a Our subjects randomly made decisions in one of these decision forms. ^b A decision form contains four separate dictator games. ^c An asterisk * indicates the recipients' information provided per form and decision. ^d The main decision form is divided into two types: Main Decision Form I only has family members as recipients in the decision 4; Main Decision Form II has family members as recipients in decisions 3 and 4. ^e In the specification of the family member, the numbers beside the asterisks indicate the number of observations per decision/form.

Appendix B. Development of the Comparative Dictator Game

Our main idea was to develop a game that allowed subjects to consider giving to different recipients distinguished by some specific characteristic to assess altruistic preferences along a specific dimension. In particular, the focus of the study in Mexico was an investigation into how resources are shared within the family. The dictator game is the main incentivized behavioral measure of altruism, but using this game in the field posed a major methodological concern. When dictator games are played with one recipient, far too many subjects cluster on the 50/50 split. Multiple dictator games of this kind may well not yield a meaningful measure of relative altruism across targets. Even more troubling for our purposes, this 50/50 norm is particularly evident in studies that use adult subjects. Our conjecture was that an explicit comparison of recipients should increase variation, improving the ability of the game to accurately assess relative altruism. We wanted to get subjects to think more slowly, in the Kahneman thinking-fast-and-slow sense, and make the dictator decisions more deliberately.

To that end, we designed a new experimental protocol with multiple games, each with a different recipient, to be made simultaneously on the same decision sheet. The multiple recipients on the same sheet induce subjects to explicitly compare recipients, and, we conjectured, would move subjects off the intuitive (or knee-jerk perhaps) 50/50 split. We were particularly concerned about observing 50/50 splits in games with a stranger. We paid randomly one of the games at the end of the task to encourage adequate attention to each potential recipient. We varied social distance in the new game to include family members, friends, and strangers to closely approximate our potential design in the field (See Figure A2 below).

Sender Decision Form



Friend:
Name:
Address:

Relative:
Name:
Address:

Decision 1: Please indicate how much you want to keep for yourself and how much you want to send to the Receiver. Note these two amounts must add up to \$20.

Amount I keep	_____
Amount I send to the Receiver	_____
Total	\$20

Decision 2: Please indicate how much you want to keep for yourself and how much you want to send to the Receiver. Note these two amounts must add up to \$20.

Amount I keep	_____
Amount I send to the Receiver	_____
Total	\$20

Decision 3: Please indicate how much you want to keep for yourself and how much you want to send to the Receiver. Note these two amounts must add up to \$20.

Amount I keep	_____
Amount I send to the Receiver	_____
Total	\$20

Figure A2. Decision sheet for pilot comparative dictator game.

Thirty-nine adult subjects were recruited from the subject pool at the CIRANO lab in Montreal in March 2005. Subjects were asked to bring the name and address of a friend and of a family

member. Photos of participants were used to identify the “stranger” real recipients in other sessions. All donations were mailed to recipients.

The results from the pre-test were encouraging. They indicated that the norm of the 50/50 split might not be the dominant result of dictator donations with adults. We suspect we got subjects to think harder about their decisions. Figure A3 below shows the distribution of donations to the three types. The distributions are significantly different (Kolmogorov–Smirnov tests: strangers vs. family $p = 0.001$; strangers vs. friends $p = 0.031$; friends vs. family $p = 0.066$).

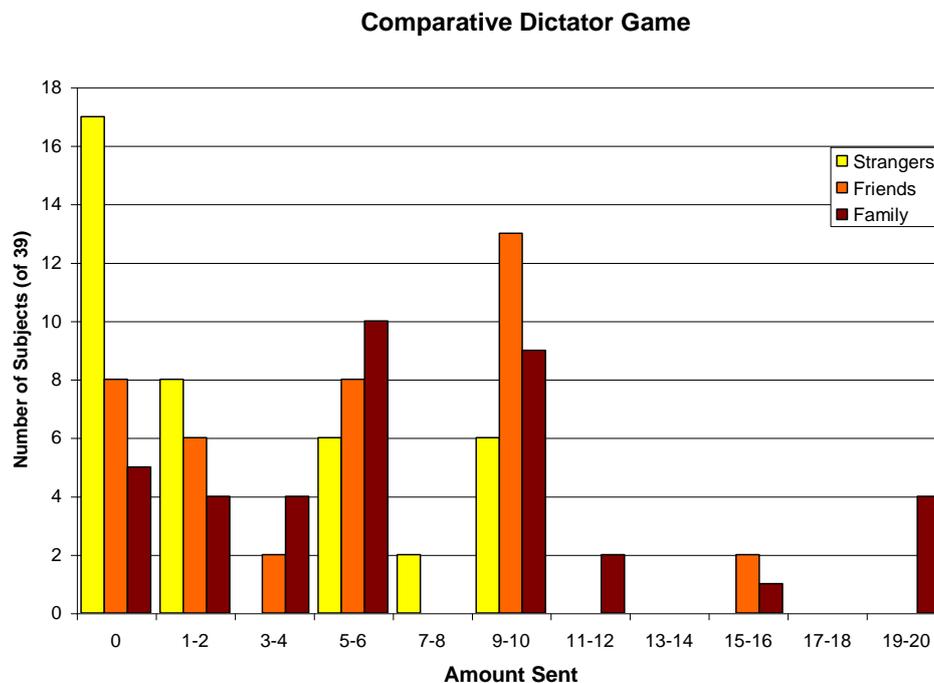


Figure A3. Donations in the comparative dictator game.

We added another decision, increasing the number of recipients to four for the actual field work. That protocol is explained in Section 2.3.

Appendix C. Impact of Donor’s and Recipient’s Sociodemographic Characteristics on Giving

Controlling for social distance, the results are summarized in Table A2 below.

In terms of subjects’ sociodemographic characteristics, Table A2 shows that the determinants of giving vary with the type of recipient. In fact, specification (1) indicates that giving to family members significantly increases with the subject being head of household (6%, $p < 0.01$), and having at least primary school (5%, $p < 0.01$). However, specifications (2) and (3) show that giving to community members and to strangers significantly decrease with the subject being a female (−6%, $p < 0.001$; −3%, $p < 0.05$; respectively).

In terms of recipients’ characteristics, Table A2 shows that only the recipient’s gender plays a significant role. Giving to family members (strangers) significantly increases (decreases) with the recipient being female (6%, $p < 0.01$; −3%, $p < 0.05$; respectively). Furthermore, it is worth mentioning that giving to community members does not depend on the recipients’ characteristics.

Table A2. Percentage of the Endowment Sent to the Recipient by Type of Recipient.

<i>Dependent Variable: % Sent</i>	(1)	(2)	(3)
Type of Recipient	Family Member	Community Member	Stranger
Donor's Sociodemographic Characteristics:			
Female	−0.019 (0.019)	−0.058 *** (0.018)	−0.032 * (0.016)
Head of household	0.062 ** (0.024)	0.0005 (0.020)	0.015 (0.020)
Married	−0.0003 (0.007)	0.004 (0.016)	−0.027 + (0.016)
Age	−0.002 ** (0.0008)	−0.001 + (0.0006)	0.0004 (0.0006)
Having at least primary school	0.049 ** (0.017)	0.007 (0.017)	0.012 (0.015)
Among poorest households	−0.025 (0.016)	−0.012 (0.015)	0.009 (0.014)
Recipient's Sociodemographic Characteristics:			
Female	0.049 ** (0.016)	0.015 (0.016)	−0.030 * (0.014)
Head of household	−0.016 (0.019)	0.024 (0.020)	
Married	0.010 (0.020)	0.007 (0.016)	
Age	0.001 + (0.0007)	0.0001 (0.0006)	
Having at least primary school	−0.019 (0.013)	−0.018 (0.015)	
Constant	0.405 *** (0.044)	0.315 *** (0.045)	0.264 *** (0.037)
<i>Family Controls</i>	Yes	No	No
<i>Community Controls</i>	Yes	Yes	Yes
R ² —Within	0.105		
Between	0.092		
Overall	0.092	0.053	0.041
No. of Observations	1595	1046	1043
No. of Subjects	1001		

Notes: + $p \leq 0.10$, * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$. A random effects model is used in column 1. OLS models are used in columns 2–3. Standard errors are in parentheses.

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