

Are Preferences Stable Across Domains? An Experimental Investigation of Social Preferences in the Field

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Abstract:

Our research investigates whether social preferences are stable across contexts in the field. We build a unique data set by recruiting participants from a low-income urban neighborhood to participate in a series of laboratory experiments. Their decisions are used to demonstrate the stability of cooperative actions across multiple decision contexts. We show that choices in a laboratory VCM predict giving in donation experiments, as well as self-reported donations and volunteering outside the lab. These results have important implications for modeling a general preference for cooperation, measurable in the lab and in the field, and for public policy regarding the voluntary provision of public goods.

JEL Classification Codes: H41, C93, D01, Z13

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1. Introduction

Economists model individuals as utility maximizers, under a maintained assumption of stable preferences. Recently, economic researchers have challenged this assumption, arguing that preferences may be contingent on the context in which they are expressed (Levitt and List, 2007a, 2007b). This argument echoes an older claim made by psychologists that preferences are constructed from details of the situation (e.g. Tversky and Kahneman, 1981; Payne, Bettman and Johnson, 1993).

We contribute to this discussion by examining the stability of social preferences, in particular the preference to contribute to public goods. Previous research has shown that individuals can be altruistic, caring primarily about the level of the public good provided (Becker, 1974); motivated by warm glow, caring primarily about their own contribution to the public good (Andreoni, 1989, 1990); reciprocal, responding to others' levels of giving (Camerer and Fehr, 2004); or motivated by fairness or inequality aversion (Camerer and Fehr, 2004).

We conduct a field experiment in a culturally and ethnically distinct low-income, urban neighborhood in Dallas, Texas. We first measure the preference to contribute using a linear Voluntary Contributions Mechanism (VCM) in a small-group lab setting (albeit with a field population). Next, we compare choices in the VCM to behavior a different context, also in the lab: the decision to contribute to local charitable organizations. We find that VCM behavior predicts giving in a series of donations experiments where subjects are given the opportunity to contribute to a variety of local charitable causes. Finally, we compare VCM giving with self-reported charitable and volunteering activities and find a similar correlation. We conclude that at

least some portion of social preferences are stable, and can thus be safely modeled, estimated and used to predict related decisions of individuals across contexts.

Note, we are not claiming that all preferences are stable, or that context is irrelevant in predicting individual decisions. In our data, choices are neither identical nor perfectly correlated across contexts, indicating that context also plays a role in these decisions. Indeed, many preferences (including social preferences) often require information about the context in order to be expressed as actions. For example, if an individual has a preference for reciprocity, then his actions will vary depending on the actions of his counterpart (the context). Similarly, if an individual prefers to choose the second-largest piece of cake, her particular choice will vary based on the choice set provided (Sen, 1993). Understanding how preferences are affected by elements of the relevant contexts is critical to telling us when we can use actions in one domain to predict actions in another, and when we cannot.

Understanding the stability of preferences across multiple domains also has important policy implications. Stability would indicate that when we measure preferences in one domain, that the resulting insights can be applied to different but related areas. It would also support the use of appropriately designed experiments to test-bed economic policies (e.g. Plott, 1994).

This debate over preference stability is by no means new. Stigler and Becker (1977) lay out the argument for *stable preferences*, the notion that tastes do not “change capriciously” (p. 76). The *constructed preference* viewpoint is nicely summarized by Plott (2001): “The construction [of preferences] depends upon the mode in which a response is called. Task and context are thought to influence the construction and, as a result, preferences are thought to be labile if, indeed, they can be said to exist at all” (p. 227; see also Lichtenstein and Slovic, 2006). The recent work of Levitt and List (2007a) finds evidence of context-specificity. Reviewing prior

literature, they conclude that “the context that actors themselves brought to the game and that the experimenters cannot control—like past experiences and internalized social norms—proved centrally important in the outcome of play” (p. 163).

An intermediate case is proposed by Hoeffler and Ariely (1999) and Plott’s (2001) *discovered preferences*. In Hoeffler and Ariely (1999), individuals construct preferences when they are faced with a new type of decision, and then these preferences stabilize over time. In Plott (2001) preferences are stable but unknown to the individual and are “discovered” through repetition and learning.

The stability of social preferences across decision environments has been explored in several prior studies. Karlan (2005) shows stability in trustworthiness across contexts: behaviors in laboratory trust games are good predictors of loan default in Peru. Benz and Meier (2008) show stability in charitable behavior across contexts: donations in a modified dictator game (where the recipient is a charity rather than a person, see e.g. Eckel and Grossman, 1996) significantly predict donations to the University’s social funds. Carpenter and Seki (2006) show that cooperative preferences, measured with a public goods game, relate to labor productivity among Japanese fisherman. Laury and Taylor (2008) find mixed evidence for stability of cooperative preferences between lab provision of public goods and one particular charitable organization: Trees Atlanta, which plants shade trees in urban areas. Social preferences are exhibited by subjects in a lab setting but not in a market setting in List (2006).¹

¹ In addition to the stability of social preferences, studies have focused on the stability of time and risk preferences. For example, Ashraf *et al* (2006) find that individuals who are hyperbolic discounters have a higher demand for savings commitment devices, and Meier and Sprenger (2007) show that individuals who are present-biased have higher credit card balances. Eckel *et al* (2005) compare short-term (2-28 days) and long-term (7 years) investment decisions using a population of low-income Canadians and find that, while short term elicited discount rates are higher in magnitude than their long-term counterparts, the short-term decisions reliably predict the long term decisions. Additional studies include: Eckel *et al* (2007), Slovic (1964), MacCrimmon and Wehring (1985), Andersen *et al* (2008), and Dave *et al.* (2008).

Our study makes several contributions to the study of preference stability. First, our study targets a new, policy relevant sample – low-income African Americans – rather than the traditional convenience sample of undergraduates. We compare revealed preferences for cooperation in the lab across several different decision contexts, rather than just one context. Finally, we collect data on activities outside the lab, enabling us to compare lab-based decisions with related self-reported behavior.

Generally our results support the stability of social preferences. Preferences for contributing to a public good are relatively stable and robust across decision environments. We also support reciprocity or inequality-aversion motivations for giving in a new and unique sample; low-income African American subjects. The remainder of the paper is organized as follows. In section 2 we discuss our experimental design and implementation. In Section 3 we discuss the results from each task independently, and sections 4 and 5 present the relationships between them. Section 6 concludes.

2. Experimental Design and Implementation

Experimental sessions were run in June, 2007 in the Fair Park neighborhood of Dallas, Texas. Our results are based on 190 participants who were recruited via flyers at their homes and in local stores. The flyers described key aspects of the experiment, and included a phone number to call to register. Participants called the number, registered for a session, and arrived at our site.

Upon arrival, subjects were asked to read and sign a consent form and were paid the show-up fee. Participants worked through an activity booklet containing a number of incentivized tasks: a risk-preference elicitation (Eckel and Grossman, 2002, 2008); a time-preference elicitation (similar to Eckel, Johnson and Montmarquette, 2005); a laboratory public

goods game (VCM); and three versions of a donation game which were developed for this study. In half of the sessions participants completed a short survey eliciting their connection to the community before completing the VCM and donation experiments; in the other half the survey is administered post-experiment.²

The decision tasks and resulting forms and instructions were explicitly designed for a low-literacy population, with the games presented in pictorial form with minimal text. The experimenter followed a pre-tested script to explain each task, and answered questions before each one. At the end of the session, one of the tasks was randomly chosen for payment, as was fully explained to the participants.³

Once the activity booklet was completed, subjects were given a five-minute snack break. When the participants returned, they completed a social network activity and a detailed post-experimental survey designed to collect information on demographics, identity, housing, financial sophistication, and financial donations to non-profits as well as volunteer work. This paper focuses on the results from and relationship between the linear VCM, the donation experiments, and self-reported donations/volunteering.

In the VCM, participants were randomly assigned into anonymous groups of three and given an endowment of \$60 which they could allocate either to an individual or a group account. In order to simplify the game, participants were given four discrete options. They could choose to: (1) keep all \$60, (2) keep \$40 and donate \$20, (3) keep \$20 and donate \$40, or (4) donate all \$60. Since clarity was of utmost importance for this subject pool, in the experiment we described

² There are no significant differences in mean or distribution for the VCM or any of the charities, so the data is pooled for this analysis: VCM (t: $p=0.46$; k-s: $p=1.00$), Health (t: $p=0.51$; k-s: $p=0.43$), Child Education (t: $p=0.16$; k-s: $p=0.32$), Job Training (t: $p=0.26$; k-s: $p=0.09$).

³ Full instruments and instructions are available online at <http://cbees.utdallas.edu/projects.php#nhs>. The choice of one task for payment (sometimes called the random lottery incentive mechanism) is to avoid portfolio effects and has been validated in a variety of studies (see e.g. Cubitt, Starmer and Sugden, 1998; Hey and Lee 2005a, 2005b). One of the particular advantages of this mechanism for our sample is that we are able to increase the payoffs for each decision, making the incentive of the games particularly salient.

individuals deciding how much they wanted to “put in their wallet” and how much they wanted to “put in the group account,” rather than the more abstract “allocate” language often used in instructions with undergraduate students. This was done to minimize confusion among the subjects and had the added advantage of creating parallelism between this and the donation experiments, described below. Money in the individual account (the wallet) was kept by the individual. Money in the group account was doubled, and then divided equally among the three members of the group, regardless of their decisions (MPCR = .66).

We intentionally excluded the option to give half of the endowment. First, we wanted to move people away from the focal 50/50 split to ensure variability in the data, and second, since we displayed everything in a visual manner, this design choice enabled us to depict all of the choices pictorially using \$20 bills.

In the donation experiments participants were arranged into different groups of three and again faced with a decision involving the allocation of \$60 – three \$20 bills. In this game, however, money placed in the group account was not doubled and distributed to the participants but instead doubled and donated to an organization that provides a public good for the neighborhood. We conducted three donation experiments, one for each of the following: The Martin Luther King, Jr. Family Clinic (health services), The Dallas Bethlehem Center (educational services for children), and The Inner-City Community Development Corporation (job training services).⁴

Beliefs were elicited at the end of the experimental activity booklet, but before the networks and post-experiment surveys. For each of the activities, individuals were asked to state how much of the endowment they thought each of the other two individuals in their group contributed to the group account. Additional data used in the analysis was collected in the post-

⁴ We chose organizations that were well known and respected in the community.

experiment survey, including asking each individual to list all of the organizations where they volunteer or donate money.

Experimental sessions lasted on average 2 hours, and participants were paid a \$20 show-up fee plus their earnings from the experiment. The median per capita income in this neighborhood is approximately \$10,700⁵ and median household income is approximately \$19,600 (Williams Institute, 2006). Note that in the VCM, if everyone played the dominant strategy, earnings would be $\$60 + \$20 = \$80$, equal to nearly two days' wages (15.5 hours). If everyone played the social optimum, earnings would be $\$120 + \$20 = \$140$, more than 3 days' wages (27 hours). Thus we believe that the stakes were large enough to ensure that participants thought carefully about the problems. Average earnings were \$79 (\$108 if you include payments to the charities), with a minimum of \$20 (the show-up fee) and a maximum of \$280.

3. Subject Pool and Descriptive Results

In this section, we describe our sample and descriptive results from each of our measures independently: VCM, Donations experiments, and self-reported donations of time and/or money. Sections 4 and 5 describe the relationship between them and thus provide our test of stability of preferences.

Most previous experimental research on cooperation has focused on a convenience sample of university undergraduates (see e.g. the papers reviewed in Ledyard, 1995) or samples from other countries (see e.g. Carpenter *et al*, 2004; Henrich *et al*, 2001, 2004). We begin by extending the experimental literature with a new, policy-relevant population sample; participants from a low-income, predominantly African-American neighborhood.

⁵ Note that for a 40-hour per week, 52 weeks a year job, this is equivalent to \$5.15 an hour.

The sample and neighborhood characteristics are described in Table 1. These participants are very different from the typical student sample; they are older, tend to have children, and to be the main wage-earner in their homes. The sample is almost completely African American, with low levels of income and other financial assets.

[Table 1: Description of the Sample about here]

Figure 1, below, shows the distribution of contributions to the group account for the VCM and Donations experiments. We see a substantial level of cooperation in the VCM. Note that the mean contribution is 41.1% of the endowment, which is within the normal contributions range for prior studies of 40 to 60% (Ledyard, 1995), giving us confidence that our protocol was reasonable, and suggesting that our results are comparable to other samples.

[Insert Figure 1: Amount sent to the group account, VCM and Donations Experiments]

For the Donations Experiments, we see a reduction in donations to the group account as compared to the VCM.⁶ However, this shift is not as strong as might be expected given the differences in the MPCR (0.66 for the VCM, and approximately 0.00 for the charities). We see that individuals contribute on average 30.4% of their endowment to the Health charity, 31.1% to the Children's Education charity and 27.2% to the Job Training organization.

Since the Donations experiment protocol has not been tested with other populations, we cannot directly compare behavior among individuals in this population to other studies. The closest studies are the modified dictator experiments where the recipient is a charity. The first study to do this was Eckel and Grossman (1996); in their study individuals gave on average 30.1% of their \$10 endowment. This is very similar to behavior in our sample, although we have

⁶ We fully blocked the order of the real charities. The blocking order was not significant for average session contributions to the VCM or any of the Donations experiments. The following are from the Pearson's χ^2 contingency table test of blocking order and average session contributions: VCM Pr=0.360, Health Pr=0.189, Children Pr=0.458, Jobs Pr=0.277.

a larger endowment and a doubling of donations. In a previous study of giving to hurricane-relief organizations, Eckel, Grossman, and Milano (2007) include a treatment with a \$50 endowment and a 100% match (doubling of donations). They find that student subjects send on average 46.7% of their endowment – substantially more than our sample.

There is a significantly higher proportion of individuals choosing to contribute zero in the Donations Experiments than to the VCM (using a one-tail test: Health, $p=0.033$; Childcare, $p=0.026$; Job Training, $p=0.002$). While average contributions are lower in the donations experiments, there are no significant differences in giving among the charitable organizations. We further find no differences in contributions for any of the donations experiments for gender, home ownership, employment status (unemployed in the last year, temporary work, part-time, full-time), highest education achieved, age, marital status, number of children, or the number of years an individual has lived in the neighborhood. We also find no differences in the mean contribution to the charities by whether or not the individuals needed assistance with written materials, or the number of people they recognize, know by name, or consider friends in the session.⁷

In sum, we see a significant amount of cooperative behavior in this low-income population. There is less cooperation in the Donations experiments than in the VCM, but it is still substantially greater than zero. Further, the observed level of cooperation does not vary with demographic characteristics.

Examining self-reported charitable activity, 72.6% of our subjects donate time or money to charitable causes. We find no gender differences in these contributions, but home owners (t-test, $p=0.002$), those employed full-time in a permanent job (t-test, $p=0.04$) and those who have

⁷ All p-values greater than 0.20, except Years in Neighborhood (Job Training only, $p=0.156$), Number of children (Health = 0.142, Education = 0.135).

at least some college are more likely to contribute (t-test, $p=.02$). These variables may proxy for income (we have no direct measure of income). We find no differences by age, number of children, or years lived in the neighborhood. Demographics seem to have a more substantial role in the self-reported charitable contributions than in the Donations experiments. Particularly, people who are more stable and attached to the community (home owners, permanently employed, better educated) are more likely to report that they contribute time and/or money to charitable causes in their everyday lives.

4. Stability of Preferences: Donations Experiments

We now turn to an examination of the relationship between the choices made in the VCM, a revealed social-preference for cooperation, and choices made in the Donations experiments. We treat behavior in the VCM as an explanatory variable, with Donations as the dependent variable. Recall that the two tasks are presented in a similar manner to the subjects. In both cases they are in groups of three, and contributions are doubled by the experimenter. The difference is that the multiplied contributions to the group account go to a charity instead of being divided among the group members.⁸ If a preference for contributing to public goods as measured by the VCM is a good predictor of donations to local public goods, then we should see large and statistically significant coefficients in these regressions.

In addition to cooperative or social preferences (as measured by VCM behavior), we know that other factors may affect the decision to contribute to charitable organizations. For example, we hypothesize that preferences for risk and time will also be related to the decision to contribute. For example, contributions to local public goods may be viewed as an investment in

⁸ Note that in this case we are giving ourselves the best possible change of finding a relationship between charitable giving and the measured preference for cooperation. We will go on to explore self-reported behavior in the next section.

the community. Individuals could use the money today, but if they contribute to the public good it will help them (and other people in the neighborhood) in the future. If this is the case, then patient people will be more willing to contribute, and should contribute more on average, to the public good. This logic has been confirmed for the case of common pool resources by Fehr and Leibbrandt (2008). However, this probability that this investment in the public good will translate into future services is not one; that is, a particular individual might never use the organizations' services. If this is the case, then investment in the public good is a risky decision (paying now for something which may not generate any benefit) and individuals who are more risk averse will be less willing to contribute (and will contribute less) to the public goods. We will thus include our measures of risk and time preference as covariates in our analysis. This is similar to Eckel *et al.* (2007), who found that risk tolerance and patience were positively related to an individual's own human capital investment.

In addition to preferences for risk and time, it is reasonable to assume that factors that increase an individual's value for the public good (such as needing a job or having children) will increase the amount that they are willing to contribute to the public good. Previous studies of volunteerism often find this type of demographic variation in the willingness and amount of contributions to charitable causes (see e.g. Freeman, 1997). These measures are also included as covariates.

Other factors that could impact the amount and willingness to contribute to the charitable causes are how much individuals think the neighborhood needs an increase in that local public good and how much they trust that type of organization. These measures are also included as controls in our analysis.

Another set of variables can potentially impact the amount that individuals are willing to contribute to the local public good: beliefs about other people's donations and perceptions about their neighbors. Individuals could view the donation decision as a type of coordination game, where they want to donate an amount close to what they believe others are donating. This could be because of a desire to conform to a social norm which transforms payoffs as in Rabin (1993), because of a desire to reciprocate giving by others as in Croson (2007), or because of inequality aversion (Fehr and Schmidt, 1999; Bolton and Ockenfels, 2000). On the other hand, if individuals are purely selfish, the coefficient on beliefs should be zero, while if individuals are altruistic (Becker, 1974), the coefficient should be negative.⁹

In addition to collecting information about *how much* participants expect others to give to the organizations, we also collected information on their perceptions of other individuals in their neighborhood using modified World Values Survey questions for the fairness, helpfulness, and trustworthiness of their neighbors. If subjects care only about the level of the public good, then these factors will not impact provision. Further, even if people only care about how much others will give, then these perceptions will not matter.¹⁰ Only if the participants place some value on the deservingness of the recipients of their donations will perceptions impact provision, controlling for beliefs. Since donations provide local, neighborhood-level public goods, we expect that when the subjects perceive that individuals in their neighborhood are more fair, helpful, and trustworthy that they will donate more to the local public goods.

We thus describe the donation decision as:

⁹Replicating previous research, we find that individuals are, on average, optimistic about others' donations (e.g. Croson 2007). On average, beliefs of how much others will contribute are significantly higher than the actual contributions of others (\$21.39 versus \$18.21, t-test, $p=.02$ for the health organization, \$21.07 versus \$18.63, t-test, $p=.08$ for the childcare organization, and \$20.32 versus \$16.32, t-test, $p=.004$ for the entrepreneurship organization).

¹⁰We call these perceptions rather than beliefs because we are not conforming to the standard definition of beliefs, which generally requires either an expressed amount or probability.

$$\begin{aligned} \text{Donation} = f(\text{VCM Contribution, Risk Preferences, Time Preferences,} \\ \text{Need for the Public Good, Demographics, Beliefs, Perceptions of Neighbors,} \\ \text{random error}) \end{aligned} \quad (1)$$

Recall that subjects have the choice of donating \$0, \$20, \$40, or \$60. Since the choices of donations are discrete, we estimate f using an ordered probit regression. In Table 2, we present results from two different approaches to the analysis. First, we estimate three equations, one for each organization, using seemingly unrelated regression (SUR). Second, we estimate a single equation, pooling all three decisions. For the SUR, we jointly estimate three ordered probit equations in order to generate robust standard errors, and cluster around the individual, since each individual is making three decisions. For the pooled model we present the results of a random effects ordered probit. The interpretation of these models differs slightly. For the seemingly unrelated model, the correlation between the decisions is interpreted as coming from the similarity of the decisions, whereas for the random effects model, the correlation is coming from the fact that the same person is making the three decisions.

We provide full descriptions of all of the variables, along with their descriptive statistics, in Appendix Table 1. Table 2 provides a comparison of results across the three local public goods organizations as well as the pooled model. We include as controls demographics,¹¹ the perception of the need for the service that the organization provides in the neighborhood, trust in providers of this type of service, proxies for valuation of the service, and location in our target area. The estimates of these controls are omitted for sake of brevity, but are available upon

¹¹ Including gender, education, age, employed, number of children in the household, and frequent church attendance.

request from the authors. They are rarely (if ever) significant in the analysis and dropping them does not alter the results.¹²

[Insert Table 2: Ordered Probit for the Donations Experiments about here]

In all three of the individual regressions, as well as the pooled data, the VCM choice is positively and significantly related to donations behavior, revealing the stability of cooperative preferences in these domains. This is true even controlling for individual beliefs about how much others will contribute to the organizations.

As predicted, individuals who are more risk averse contribute less to all of the public goods, though the result is not as strong for the job training organization. Further, individuals who are more patient contribute more to the organization in all cases. This extends the result in Fehr and Leibbrandt (2008) to the case of public goods, and is similar to Eckel *et al.* (2007), who find that risk tolerance and patience are positively related to an individual's own human capital investment. We argue that subjects view donations to these organizations as an investment in their neighborhood – and subjects who are less risk averse and more patient are more willing to invest.

As expected, beliefs about the laboratory contributions of others are positively and significantly related to behavior. Further, we see that individuals contribute more to the local charities when they perceive their neighbors as being more fair.

A second way to address the issue of the stability of cooperative preferences across contexts is to look at the number of organizations to which a subject donates (0 to 3) as a function of VCM giving. Table 3 provides two specifications of this model. Model 1 uses the ordinal VCM data, just as in the previous specification. Model 2 uses a dummy variable equal to

¹² The primary exception to this is that individuals who attend religious services once or more per week contribute less to the charities in all cases.

one if the subject made a positive contribution to the VCM's group account. We see that in both cases, the contribution to the VCM group account is positively and highly significantly related to the number of organizations to which a subject donates, providing further confirmation of the stability of social preferences. People who contribute more to the VCM not only donate more to the local public goods, but they also donate to more organizations.

[Insert Table 3: Ordered Probit for the Donations Experiments: Positive Contributions to an Organization about here]

Once again, we see that beliefs and patience are positively related to the contribution decision, whereas here risk aversion is not statistically significant. In addition, we see that individuals who view others in their neighborhood as being fair contribute more frequently.

5. Stability of Preferences: Self-Reported Local Public Good Provision

In this analysis, we examine the correlation between contributions to the VCM and self-reported provision of public goods – the decision to contribute money and/or time to charitable causes outside of the laboratory environment. The relationship between the VCM and the decision to contribute outside of the lab provides a further test of the stability of cooperative preferences.

In our survey, subjects self-report the number of organizations to which they donate either money or time. Specifically, we ask subjects to list, by name, each of these organizations. We then create a variable equal to one if the subject donates time and/or money to charitable causes, combining the decision to donate time and/or money.¹³ We argue that some people who would donate money may volunteer their time instead if they have particularly low income, and

¹³ Freeman (1997) finds a strong positive relationship between charitable giving and volunteer work while Menchik and Weisbrod (1987) show the impacts of price and income on volunteerism.

thus either type of activity is a signal of cooperative preferences. In addition, individuals frequently contribute both time and money. Since our interest is in cooperative behavior in general, we pool these self-reported activities. We include the same controls as above for socio-demographic characteristics. We estimate a probit model of the decision to donate time and/or money, reported in Table 4, below.

[Insert Table 4: Probit of the Determinants of Donations/Volunteer Work about here]

We again observe a positive relationship between VCM behavior and donations/volunteering (although the relationship between the measures is weaker than it was for the Donations experiments). This result further suggests that cooperative preferences are stable across these domains, but that there is also an impact of context on the contribution decision.

Based on this model, we see that individuals who contributed \$0 to the group account have a probability of 0.68 of donating/volunteering, whereas individuals who contributed a positive amount to the group account have a probability of 0.85 (with other variables evaluated at their means). Contrary to our results from the Donations experiments, neither risk nor or time preferences are significant explanatory variables in donations/volunteering.

We also see that the perceptions of individuals in the neighborhood are related to donations behavior, but in a more complex manner than we previously observed. As predicted and previously observed, if the individual perceives their neighbors as fair and/or trustworthy, the likelihood of contributing increases. However, contrary to our initial hypothesis, individuals who view others in their neighborhood as being helpful are *less* likely to contribute.

We note that the impacts of perceptions of one's neighbors on self-reported cooperative activities are stronger than the impacts on donations to the local organizations. Recall that for the Donations experiments we have direct information regarding the individuals' beliefs about

others' contributions. We believe that the impact is stronger in the former case because these perceptions are providing information to individuals about the deservingness of their neighbors, as well as information regarding the likelihood they will contribute.

6. Conclusion

We find that preferences for contributing to public goods are strongly related across decision contexts. Our measure of cooperative preferences from the lab setting (VCM) significantly predicts the amount that individuals are willing to contribute to local charities in Donations experiments, the number of charities they contribute to, and whether they report contributing time and/or money to local charitable causes in their day-to-day lives. Taken together, this evidence lends support to the argument that preferences for contributing to public goods are stable across decision contexts.

However, context clearly plays an important role in these decisions as well. Although behavior in the VCM predicts these other decisions, it does not perfectly explain the data. Beliefs about others' giving and perceptions of neighbors are also important factors in the decision to contribute. Thus we have direct evidence that these features of the context affect the decision. Although we have good explanatory power for cross-sectional data, there is still substantial variation that we are not able to explain, leaving room for other factors, such as unmeasured context, to affect decisions.

Our results support the idea that preferences are stable, but also context-dependent. For example, individuals may have a stable but context-specific preference (e.g. to 'do the right thing'). Even though the preference is stable, observed behavior may vary by context (measured and unmeasured) because an individual's perception of the 'right thing' would change. This

suggests that preferences may appear to be either constructed or discovered as individuals learn the contextual details.

Overall, however, our results provide support for the generalizability of preferences across at least a limited domain. This is good news for policymakers, who can elicit preferences in one domain and remain confident that they will at least partially predict preferences in another. More theoretically, our data also sheds light upon (but does not resolve) the theoretical and philosophical debate about the stability of preferences.

A great deal of work, by a great number of well-respected researchers, has attempted to unify data, concepts and contributions from economics, psychology, sociology and other related fields. By focusing on what our theories of preference stability have *in common*, rather than their differences, we can move economics, as well as the remainder of the social sciences, forward toward a consistent, realistic, and tractable model of human decision making.

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Tables

Table 1: Description of the Sample*				
Demographic	Whole Neighborhood**	Our Sample		
Female	49%	61%		
Ethnicity	76% African American 20% Hispanic 4 % Other	98% African American 2% Other		
Marital Status	38.6% Single, never married 34.1% Married 13.0% Divorced 11.9% Widow/er	56.8% Single, never married 16.3% Married 21.1% Divorced 5.3% Widow/er		
Highest Education Achieved	50% did not finish high school, 28% finished high school 15% had some college 7 % finished college, or higher	23.7% did not finish high school, 34.2% finished high school, 31.6% had some college 10.0% finished college, or higher		
Employment Status ^a	46% in the labor force (employed or unemployed)	21.6 % full-time, permanent job 76.4% part-time, temporary job, or looking for work		
Unemployed last 12 months?		61.1 %		
Chief Wage Earner?		52.1 %		
Home Owners	33.3%	15.3 %		
Financial Assets		66.3 % Checking Account 55.3 % Savings Account 16.3 % IRA, 401K, other retirement account 8.4 % Mutual funds, other assets		
		Min	Max	Average
Age		18	64	40.1 Years
Years Lived in Neighborhood		0	62	17.7 Years
Children at Home		0	7	1.25 Children

*n = 190. Some percentages may not sum to 1 due to rounding or missing observations.

**Data taken from the Analyze Dallas website, 2004:

<http://www.analyzedallas.org/AnalyzeDallas/Pages/BrowseDataSets.aspx>

^aPercentages do not sum to 1 because categories are not mutually exclusive.

Table 2: Ordered Probit for the Donations Experiments Dependent Variable: Ordinal Contribution to the Charity 0 = \$0, 1 = \$20, 2 = \$40, 3 = \$60				
	<i>Health</i>	<i>Children's Ed.</i>	<i>Job Training</i>	<i>Pooled</i>
	<i>SUR, Individual Clusters</i>			<i>Random Effect</i>
	Coef.	Coef.	Coef.	Coef.
Ordinal VCM	0.377 (3.57)***	0.371 (3.13)***	0.464 (4.29)***	0.778 (3.92)***
Ordinal Ave. Beliefs by organization	0.426 (2.80)***	0.471 (3.46)***	0.605 (4.39)***	0.659 (4.26)***
Risk	0.194 (2.79)**	0.164 (2.13)**	0.150 (1.72)*	0.411 (2.06)**
Time	0.098 (1.88)*	0.140 (2.62)***	0.154 (3.59)***	0.282 (3.19)***
Helpful	-0.513 (-2.65)***	-0.182 (-0.96)	-0.036 (-0.26)	-0.396 (-1.42)
Fair	0.413 (2.30)**	0.553 (3.08)***	0.722 (4.44)***	1.15 (3.18)***
Trustworthy	0.067 (0.44)	0.058 (0.33)	-0.170 (-1.15)	-0.106 (-0.41)
Demographics	Yes	Yes	Yes	Yes
Need this type of organization?	Yes	Yes	Yes	Yes
Trust this type of organization?	Yes	Yes	Yes	Yes
Organization controls	No	No	No	Yes
LnL	-133.45	-127.08	-110.12	-297.48
Pseudo-R ²	0.22	0.23	0.30	
Rho	-	-	-	0.751
χ^2	75.88	77.02	96.48	85.24

z-stats in parentheses

*, **, *** denote significance at $p < 0.10$, $p < 0.05$, and $p < 0.01$ respectively

Table 3: Ordered Probit for the Donations Experiments: Positive Contributions to an Organization Dependent Variable: Number of Organizations (0-3) to which an Individual Contributes		
Variable	<i>Model 1</i>	<i>Model 2</i>
	Coef.	Coef.
Ordinal VCM	0.444 (4.03)***	-----
VCM>0	-----	1.140 (4.62)***
Beliefs: # Orgs >0	0.710 (7.51)***	0.686 (7.16)***
Risk	0.054 (0.64)	0.075 (0.89)
Time	0.167 (2.94)***	0.166 (3.00)***
Helpful	-0.054 (-0.34)	-0.151 (-0.92)
Fair	0.505 (2.21)**	0.607 (2.63)***
Trustworthy	0.084 (0.49)	0.037 (0.21)
Demographics	Yes	Yes
LnL	-129.60	-127.00
Pseudo R ²	0.33	0.34
Obs	172	172
χ^2	125.63	130.83

z-stats in parentheses

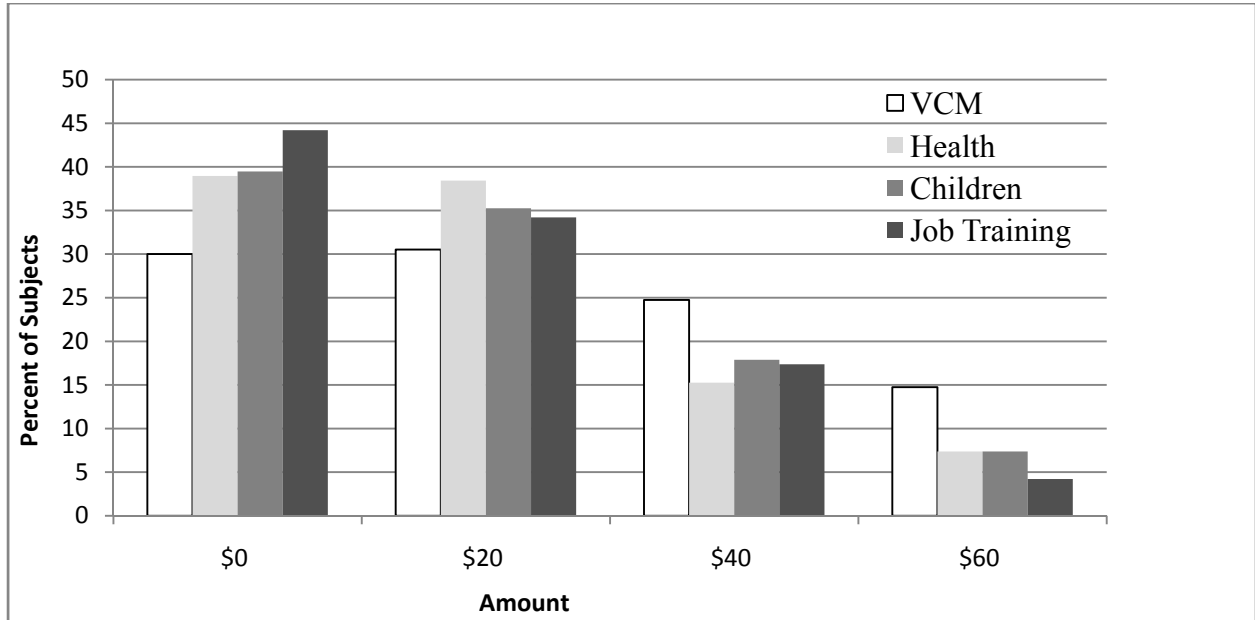
*, **, *** denote significance at p<0.10, p<0.05, and p<0.01 respectively

Table 4: Probit of the Determinants of Donations/Volunteer Work Dependent Variable =1 if the subject donates Time &/or Money to Charitable Causes, 0 otherwise			
	Variable	Coef.	Marginal Effect
Preferences	VCM>0	0.541 (2.02)**	0.162 (1.91)*
	Risk	-0.127 (-1.38)	-0.035 (-1.39)
	Time	0.033 (0.53)	0.009 (0.53)
Perceptions/ Beliefs	Helpful	-0.487 (-2.39)**	-0.134 (-2.46)**
	Fair	0.550 (2.52)**	0.152 (2.55)**
	Trustworthy	0.350 (1.85)*	0.097 (1.87)*
Demographics		Yes	
	Constant	-2.473 (-1.45)	
	LnL	-76.42	
	Obs	170	
	Pseudo R2	0.21	
	χ^2	41.57	

z-stats in parentheses; *, **, *** denote significance at $p < 0.10$, $p < 0.05$, and $p < 0.01$ respectively

Figures

Figure 1: Amount sent to the group account, VCM and Donations Experiments



Appendix Table 1: Variable Descriptions					
Variable	Mean	S. D.	Min	Max	Description (n=170)
Ordinal VCM	1.24	1.04	0	3	Contribution to the group account in the VCM, 0=\$0, 1=\$20, 2=\$40, 3=\$60
VCM>0	0.70	0.46	0	1	Dummy Variable =1 if VCM contribution is greater than zero, 0 otherwise
Health	0.89	0.90	0	3	Contribution to the group account in the Real VCM for the Martin Luther King, Jr. Health Clinic, 0=\$0, 1=\$20, 2=\$40, 3=\$60
Children's Ed.	0.92	0.94	0	3	Contribution to the group account in the Real VCM for the Dallas Bethlehem Center, 0=\$0, 1=\$20, 2=\$40, 3=\$60
Job Training	0.81	0.88	0	3	Contribution to the group account in the Real VCM for the Inner-City Community Development Corporation, 0=\$0, 1=\$20, 2=\$40, 3=\$60
# Organizations >0	1.76	1.37	0	3	The number of organizations where the subject made a non-zero contribution in the Donations experiments
Ordinal Ave. Beliefs	1.19	0.97	0	3	Average of the answer to the question: "How much money do you think the other two people donated to [Charity]?" for the VCM. 0 = \$0, 3 = \$60
Beliefs: # Orgs. >0	2.09	1.29	0	3	Belief about the number of organizations where the other subjects made a non-zero contribution in the Donations experiments
Risk	2.08	1.35	1	6	Gamble Choice. 1 = \$80/\$80, 2 = \$60/\$120, 3 = \$40/\$160, 4 = \$20/\$200, 5 = \$0/\$240, 6 = -\$20/\$260
Time	1.37	2.41	0	10	Total number of patient choices, out of a total of 10 possible
Helpful	3.01	0.73	1	4	The perception about how helpful people in the neighborhood are: 1 = very unhelpful, 4 = very helpful <i>Source: Modified, World Values Survey</i>
Fair	2.85	0.63	1	4	The perception about how fair people in the neighborhood are: 1 = very unfair, 4 = very fair <i>Source: Modified, World Values Survey</i>
Trustworthy	2.59	0.80	1	4	The perception about how trustworthy people in the neighborhood are: 1 = very untrustworthy, 4 = very trustworthy <i>Source: Modified, World Values Survey</i>