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Stated social behavior and revealed actions: Evidence from six Latin American countries☆

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ABSTRACT

Do attitudinal surveys and incentivized experiments predict actual behavior? We answer this question using data on trust and pro-sociality from experiments and surveys conducted on six Latin American cities. Individuals in agreement with a set of pro-social statements who also either are willing to trust others more or are interested in risk-pooling, end up investing more in maintaining their social capital in the form of social organizations such as charities, religion, politics, sports and culture. Both, experiments and surveys carry useful information to understand motivations and intentions in pro-social behavior and social capital formation.

1. Introduction

Whereas several of the findings derived from laboratory economic experiments have become widely accepted, it is unclear the extent to which they are linked to the responses that individuals provide in surveys, especially in regard to their predictive power about real life situations. In this paper we study the link between people's stated preferences regarding pro-sociality, their actions and participation in pro-social activities, and their corresponding actions when exposed to laboratory experiments on the same issues with the aim to test whether surveys and experiments carry useful complementary information to understand what people actually do.

To our knowledge, the complementarity of surveys and experiments with representative samples has not yet been broached in the literature. Typically, the experimental literature has placed great emphasis on design but less so on sampling issues. By contrast, household and individual surveys measuring attitudes and preferences have placed considerable focus on sample representativeness, but the credibility of the responses is frequently put in doubt due to the hypothetical nature of the questions and the potential sensitivity to different biases. In this paper we combine the virtues of both tools to explore the potential of their complementarities for economic analysis.[1]

In this paper, we collect data for a sample of 3100 individuals from different backgrounds, socio-economic levels, age cohorts, and both sexes, from six Latin American capital cities (Bogotá, Buenos Aires,

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[1] The literature has devoted important efforts to link the result from economic experiments to real life situations (Benz and Meier, 2008; Carpenter and Knowles Myers, 2007; Karlan, 2005; Neill et al., 1994). However, most of these efforts have been based on data gathered among particular populations, for example, college students. For instance, this is the case of the highly-regarded research by Glaeser et al (2000) who explore the linkages between experimental and survey measures of trust and trustworthiness. Another well cited paper is Burks et al. (2003) who explore the links between a measure of Machiavellian behavior with trust and trustworthiness measures.

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Caracas, Lima, Montevideo and San Jose) and have the individuals participate in three well known and commonly applied incentivized economic experiments, namely (i) a trust game, to measure the basis on which social capital is built, (ii) a voluntary contribution game, in order to capture willingness to cooperate; and (iii) a risk sharing game, to measure propensity to form an income pooling group when facing uncertain outcomes.[2] On the other hand, we capture information on participants' attitudes towards pro-social behavior using a survey about stated preferences on pro-sociality. Furthermore, actual behavior is measured by asking participants whether they are involved in social organizations, as well as their degree of attendance, dedication, and involvement in the decision making process. The latter allows us to go beyond the mere counting of membership, providing a more complete picture of what people do when building their social capital.

We use experimental behavior as a predictor of actions taken for building and maintaining social capital, including stated preferences regarding pro-sociality. Such empirical strategy, as discussed in Carter and Castillo (2011) and Cárdenas and Carpenter (2005), may provide insights about the complementarities of experimental methods with surveys as they can increase the power of explaining variation in the data collected in surveys, and help solve some of the endogeneity problems that remain in the social capital literature when trying to link economic outcomes and social capital survey questions.

Our findings suggest that trusting in our incentivized experiments predicts individuals' participation in building and sustaining social capital through membership, attendance and volunteering in social organizations, along with stated preferences regarding pro-sociality. On the other hand, we find that trustworthiness (the responder's behavior in the trust game), risk sharing and voluntary contributions do not explain variation regarding building and sustaining social capital, although stated preferences keep having predictor power. All in all, the results presented here are telling on the complementarities of experiments and surveys to enhance the value of surveys in development studies and, most importantly, how they help to predict actual behavior.

The paper is organized as follows. The next section describes the sample and the experimental design. Section 3 describes the methodological approach to measure the link between what people say and what people do. Section 4 presents our main findings, including robustness checks for our variable of interest. Finally, Section 5 concludes.

2. Sample and experimental design

Individuals who participated in this study were recruited in an attempt to fulfill strata quotas at the city level for six capital cities of Latin America. The strata were chosen on the basis of education, average family income of the districts or the territorial units that make up each city (in either quartiles or quintiles, depending on data availability), gender and age.[3]

Individuals were invited to the study in a way that the empirical distributions of individuals within these combinations of characteristics resembled those of the populations in the cities (i.e., representative samples for the observable characteristics that make the strata). They were recruited on the streets and neighborhoods and then invited a few days before the experimental sessions to receive information about the expected gains from participating in the experiments (which included a show-up fee and potential gains as a result of their decisions). At that stage, we gathered information regarding participants' socio-economic background, which was used as an input in the experimental sessions. The day before the experimental session, participants received a phone call or a visit to be reminded about the invitation and to coordinate transportation arrangements.

We conducted a series of approximately 25 experimental sessions per city. The sessions were arranged so that at least three sessions per city included individuals from high-income strata only, and at least other three sessions included individuals from low-income strata only. The rest combined individuals from all strata. Around 30 individuals were invited for each session, under the assumption that approximately one third would not show up, thus allowing each experimental session to go forward with roughly 20 to 25 participants.

Each experimental session lasted between 2 and 3 h, following the exact same protocol,[4] with the exact same sequence of activities. A team of researchers with experience in survey and field methods was selected to undertake the sample design and conduct the experiments and surveys in each city. In order to guarantee homogeneity in the application of experimental protocols, the field teams participated in a training workshop at the launching of this project in Bogotá during the first quarter of 2007. This workshop provided a uniform approach to implementation and related fieldwork details such as sampling procedures, writing style and jargon in the Spanish protocol, timing of actions (i.e., invitations, pre-survey, experiments, post-surveys), elements to be included in experimental sessions and the construction of questionnaires.

The participants met throughout the session in one room where they were able to see each other, although they were not allowed to communicate during the session. During the recruitment process we avoided having two people who knew each other within the same session. In each session participants made decisions in four activities related to trust, public goods-voluntary contributions, and risk sharing. As the sessions progressed, participants received information about their peers, depending of the particular activity. Social heterogeneity on individuals' decisions in each particular session was made as salient and clear as possible using the information collected on the socio-economic composition of the groups.

Right after the experiments were conducted, the participants were asked to fill a survey collecting additional socio-demographic information and statements and beliefs regarding the issues of social exclusion, discrimination and pro-sociality.[5] To reduce idiosyncratic measurement error due to the individuals' reading ability, the surveys were administered by the experiment coordinators and supported by a group of pollsters especially trained for these purposes. After the participants completed the surveys, the payoffs from the experiments were computed and the participants received their payments.

2.1. Experiment 1 (trust game)

The first activity in a session was a trust game (Berg et al., 1995), using the strategy method. As it is well known, in this game participants are randomly assigned in pairs: half assume the role of player 1 and the other half that of player 2. Both groups are simultaneously located in different rooms, and identities of the pairs are never revealed, although each player receives information on key demographic characteristics of their counterparts (sex, age, schooling level, and socio-economic stratum). Both players receive an equal endowment and player 1 is then asked to decide how much of this endowment he or she wants to send to player 2, knowing that player 2 will then receive three times that amount on top of the initial endowment everyone initially receives, and that player 1 will receive an amount back from player 2. In another room, player 2 is asked to decide the amount to be returned to player 1 for each possible offer received from him or her, from a discrete set of fractions of amounts sent (0%, 25%, 50%, 75% and 100%). Immediately before making their decisions, individuals are also asked to predict the

[2] Our results provide a case for external validity along the lines of what Harrison and List (2004) call "artifactual experiments" in the field.

[3] The age groups were: (i) 17–27; (ii) 28–38; (iii) 39–59 and (iv) 60–72.

[4] The experiments are based on now widely tested designs by Berg et al. (1995), Binswanger (1980), Holt and Laury (2002), Barr (2003), Marwell and Ames (1979), Isaac and Walker (1988), and adaptations to field experiments discussed or reported in Carpenter et al. (2005), Harrison and List (2004), Cárdenas (2003), and Cárdenas and Carpenter (2008).

[5] The pro-social attitude questions are based on Fong (2007) as well as on indicators of humanitarian–egalitarian indices and protestant work ethic indices from Katz and Hass (1989).