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Abstract[*]

Using a standard trust game, we elicit trust and reciprocity measures in a representative sample of adult players in Montevideo, the capital city of Uruguay, a country that exhibits relatively better levels of tolerance towards migrants than other Latin American countries. We find no statistically significant differences in trust levels of Uruguayans towards countrymen versus migrants. In reciprocity, we find only marginally significant differences attributable to the nationality of the players.

JEL classifications: C9, J15
Keywords: Trust, Reciprocity, Experimental games, Migrations

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1. Motivation

Within Latin America, the external image of Uruguay is of a homogeneous and Europeanized society, mostly the result of Spanish and Italian immigration, with a small Afro-descendant population and no indigenous people. Indeed, Uruguay is a small country with a 3.5 million population, half of it concentrated in Montevideo, the capital city. In the last decades, population growth has been slow due to a low birth rate and several waves of emigration for political and economic reasons that represent a diaspora of about 600,000 Uruguayans (Pellegrino and Koolhaas, 2008) and no significant influx of immigrants since World War II. According to INE[1] (2006), 87 percent of Uruguayans are white, with only 9 percent identifying as being of African descent, 3 percent of native descent and 1 percent of other ethnic groups. At the beginning of the nineteenth century, Blacks accounted for almost 30 percent of the population of Montevideo but, after slavery was abolished and successive waves of European immigrants arrived, their share of the population decreased considerably. A national census conducted in 1860 registered 223,000 inhabitants, a third of them foreign-born. In 1889, a census of Montevideo revealed that 47 percent of its population was not born in Uruguay, and the proportion among young people was even higher (Arocena, 2009).

Even though Uruguay has been the recipient of only a small fraction of the more than three million Venezuelan moving to other Latin American countries, the number of Venezuelan immigrants has been steadily and significantly increasing since 2014. Half of the permanent residencies in 2018 were granted to Venezuelans, and they are projected to soon become the second-largest foreign community in the country. Immigration from Cuba has also been consistently increasing, with migrants from these two countries receiving work permits immediately upon arrival.

The recent Venezuelan and Cuban immigration wave has been noticeable in the general population. Though the general climate is not of overt xenophobia, there are signs of dissatisfaction from some Uruguayans considering that the newcomers are taking relatively low-skilled jobs in an economy with increasing unemployment rates, as well as concerns regarding the potential burden they might impose on the country's social security system in a context of record budget deficits. On the other hand, there is a public perception that these waves of immigrants, both

[1] National Institute of Statistics (*Instituto Nacional de Estadística* in Spanish).

Venezuelan and Cuban, are in general hard workers, under-employed, and good-natured. The 2018 Latinobarómetro survey asked whether the arrival of immigrants to the country had been beneficial or harmful to respondents and their families. In Uruguay, 45 percent of those surveyed considered that the arrival of immigrants had harmed them. Although this is an alarming figure, Paraguay is the only Latin-American country in which immigration is seen in better relative terms. In Argentina, 61 percent of those interviewed think immigrants are harmful, and in Peru, 72 percent. The greatest concern occurs in Colombia and Ecuador, with more than 80 percent of the population declaring that immigrants negatively affect them.

In this context, we aim to determine whether there are varying levels of trust between locals and migrants, as well as to find possible avenues to mitigate these differential effects. We conduct the standard version of the Berg et al. (1995) investment game to elicit trust,[2] test differences in trust towards immigrants and test whether allowing for prior communication can help diminish any such differences.

Over the last decades there has been an increasing body of literature concerned with explaining behavioral deviations from material selfishness. One approach emphasizes other-regarding preferences (Andreoni and Miller, 2002; Bolton and Ockenfels, 2000; Fehr and Schmidt, 1999) positing that non-selfish choices echo people's intrinsic concern for others' payoffs. On the other hand, the identity utility approach (Akerlof and Kranton, 2010; Akerlof and Kranton, 2000; Bénabou and Tirole 2011) views human behavior as a tradeoff between material selfishness and the desire to comply with some normative ideal. Thus, the literature on identity economics emphasizes the importance of social categories (groups to which individual belong either by objective indicators or self-perception), norms by which interaction is accepted as appropriate and identity utility.

The empirical literature has showed that differences in group identity can cause a decrease in interpersonal trust levels (e.g., Chen and Li, 2009), and lower trust towards immigrants and between people of different ethnic groups (Fershtman and Gneezy, 2001; Cameron et al., 2015; Cox and Orman, 2015); though these effects seem to be at least mitigated in certain contexts (Bouckaert and Dhaene, 2004) and with increased exposure/communication between natives and immigrants (Stolle et al., 2008; Finseraas and Kotsadam, 2017). The literature based on self-

[2] See Johnson and Mislin (2011) for a meta-analysis of the trust game and a discussion of variations in its implementation.

declared trust levels also finds a negative relation between group identity and trust. Using the European Social Survey (ESS) for 21 countries, Van der Linden et al. (2017) find that trust is negatively related to anti-immigrant sentiments. Dinesen and Sønderskov (2015), combining the ESS with contextual data on ethnic diversity in Denmark, argue that residential exposure to ethnic diversity reduces social trust. Dinesen, Schaeffer and Sønderskov (2020) review the literature on the relationship between ethnic diversity and social trust through a narrative review and a meta-analysis, and they find a statistically significant negative relationship between ethnic diversity and social trust across all studies.

On the other hand, Gereke et al. (2018), based on a trust game implemented within the German Socio-Economic Panel (GSOEP), report that after controlling for income Germans and non-Germans participants are equally trusting. In contrast, Cettolin and Suetens (2018) measure trustworthiness in a sample of the Dutch population and find that trustees reciprocate trust less if the trustor is an immigrant. Suggestively, they entitle their paper "Return on Trust Is Lower for Immigrants." We implement a similar interaction where nationals have to decide how much they trust fellow countrymen or immigrants.

Within Latin American individuals, the most comprehensive study of trust based on experimental games is Cárdenas, Chong and Ñopo (2009). They report that distances between players (for instance, measured as differences in education level) limit the extent of trust and cooperation.

We contribute to the literature by considering the case of a recent immigration wave in the least unequal and most homogenized country in South America, where most of its population can trace its descendants to Europe. Based on the reviewed previous literature we hypothesize:

H1: Trust towards migrants is lower than trust towards locals.
H2: Reciprocity of migrants is lower than reciprocity of locals.
H3: Communication between players increases trust and its effect is higher for migrants
H4: Communication between players increases reciprocity and its effect is higher for migrants.

As shown in the results section, we find no statistically significant differences in trust levels of Uruguayans towards countrymen versus migrants (reject H1). In reciprocity, we find only marginally significant differences that could be attributed to the nationality of the players, and then only for the cases of very high or very low transfers (reject H2). Moreover, the implemented form

of written communication proved ineffective in changing the trust levels of those receiving the communication or the reciprocity of those writing it (reject H3 and H4). These results are in line with Kesler and Bloemraad (2010) who, using data from the World Value Survey, argue that in more economically equal societies (and also in more multicultural countries) the negative effect of immigration on trust is mitigated or even reversed.

2. Experimental Design

2.1 The Game

We implemented a trust game following Berg et al. (1995). At the start of the session, participants were assigned roles (either player 1 or player 2) and played four rounds always in the same assigned role. Migrants were assigned as players 2 (receivers) so that we can measure trust towards them. Uruguayans were assigned randomly.

Before each round, each player received an initial endowment of $300 (300 Uruguayan pesos, approximately 8 US dollars). Player 1 (entrustor) was asked how much to send to player 2 (trustee). The options given corresponded to 0%, 25%, 50%, 75% or 100% of their endowment. The amount chosen by player 1 was tripled and sent to player 2. In a separate room, player 2 was asked to decide how much to return to player 1 for each possible amount sent by player 1.[3]

After each round, pairs were re-matched. The outcomes of each round were not revealed to the participants until the end of the session, after which one of the rounds was randomly selected for payment.

The experiment consisted of two between subject treatments (two types of sessions):

- Demographics without communication: Participants received the following demographic information of their counterpart: gender, age, education level, neighborhood of residence and nationality.
- Demographics with communication: Participants received the same information as before, and player 2 was able to send a written message to player 1 before they choose their actions. Players 2 received the following instruction

[3] The strategy method followed here asks player 2 for the full strategy of behavior instead of responding to the actual offer of player 1. The benefit of this procedure is that it provides much more information. On the other hand, some people may find it more difficult to think in these terms (Güth, Tietz and Muller, 2001). Brandts and Charness (2011) and Johnson and Mislin (2011) in their literature surveys report no differences in results due to the strategy method.

regarding the message: "Before the start of the game, you have the option to send a written message to player 1. You will write this message before receiving any information about the players you match with, and this message will be used in all 4 rounds you play. Player 1 will read this message before making his decision. Do not mention your name in the message. You could write something about yourself, share something about your life or whatever you think could help player 1 make his decision. Please write the message in the sheet of paper in front of you and signal one of the assistants when you have completed it."[4]

In summary, by design, within each type of session there were two types of pairs: (Player 1=Uruguayan, Player 2=Uruguayan) and (Player 1=Uruguayan, Player 2=Immigrant).
The following matrix shows the possibilities for each round of the game.

Demographics (no communication)	Uruguayan-Uruguayan Uruguayan-Immigrant
Demographics (communication)	Uruguayan-Uruguayan Uruguayan-Immigrant

Since we did not use a student subject pool, we could not count on having technologically savvy participants. Therefore, all sections of the experiment were conducted using pen and paper.

2.2 Statistical Power, Sampling and Recruiting

In the research design phase of this project, we performed a statistical power analysis for sample size estimation for the trust game, based on the Montevideo data from Cárdenas et al. (2009).[5] In that study, the average that player 1 sent to player 2 was 45 percent of their initial endowment (s.d.=0.25). For N=400, we would have N1=200 subjects in the role of player 1 (50 subjects per treatment), each of them playing the game 4 times. Clustering at the subject level, this yield 50 clusters per treatment with a cluster size of 4. Thus, we should be able to identify a medium effect size (d=0.5) with 88.5% power at a 5% significance level in a clustered two-sided, two-sample means test.

[4] Translated from Spanish.
[5] Also used in Barrios and Gandelman (2015).

Sessions were conducted between February 15 and March 5, 2020, half of them at 4PM and half at 7PM. All sessions were conducted in the same rooms of Universidad ORT Uruguay (Montevideo, Uruguay).[6]

Players were recruited based on a sample aimed at obtaining an empirical distribution of the population of Montevideo. Sampling quotas were defined considering three dimensions: age brackets, gender composition, and education. The only caveat is that migrants were oversampled.

To recruit participants, we posted targeted (by age and gender) ads on Facebook and Twitter and in the online edition of the largest national-coverage newspaper. Interested individuals had to fill a pre-game survey that was used to monitor sampling quotas before coordinating participation in each session.

We ended up with 394 players who participated in 20 sessions. Half of the sessions had an odd number of participants, therefore one player 1 had to play twice. This adds up to the total of 404 "players." As originally planned, migrants were oversampled, totaling 32.6 percent of players 2. The sample distribution by gender and age is very close to the ideally targeted distribution and has a slightly lower share of the less educated bracket (Table 1).

Table 1. Sampling Quotas

		Population distribution (%) *	**Sampling target**	Player's distribution (%)	**Effective participation**
Gender:	Male	47	**191**	49	**199**
	Females	52	**209**	51	**205**
Age:	18-32	32	**130**	34	**138**
	33-49	34	**136**	33	**132**
	50 and more	33	**134**	33	**134**
Education level	Some high school	53	**216**	41	**166**
	High school degree	23	**93**	31	**126**
	More than High school	23	**91**	28	**112**
Total			**400**		**404**

Note: * based on National Institute of Statistics - Household Survey (2018) for Montevideo residents between 18 and 72 years old.

[6] The field work was successfully finished one week before the emergence of the first COVID-19 cases in Uruguay.

3. Results

Figure 1 reports the average amount sent by players 1 in each round as a percentage of their endowment. As evident from the confidence intervals there were no statistical differences across them that could suggest changes in behavior produced by the dynamics of the activities.[7]

Table 2 shows the average amounts sent and returned by the players for each of the main variables of interest. All amounts are expressed as a percentage of the total endowment of the player that she transfers to her matched player. The first two rows present the trust measure of Uruguayan players to Uruguayan or migrant partners. Migrants received a slightly lower proportion of the initial endowment of players 1, 55.1 percent. Statistically, we find no significant difference between the amount sent to Uruguayans and migrants (p=0.73).[8] Also, as seen in Figure 2, the distribution of trust responses of players 1 is very similar for Uruguayans and Migrants.[9]

Rows 3 and 4 report the reciprocity measures named Ret1 though Ret5. Each represents the five contingent decisions players 2 made, with Ret1 being the amount returned to player 1 in the case he sent $0 and Ret 5 being the return when player 1 sent his full endowment ($300). For both Uruguayans and Migrants there is an increasing pattern: the more player 1 sent the more he received (even in percentage terms) of the disposable income of player 2. Without further controls, there are no statistically significant measures by nationality.

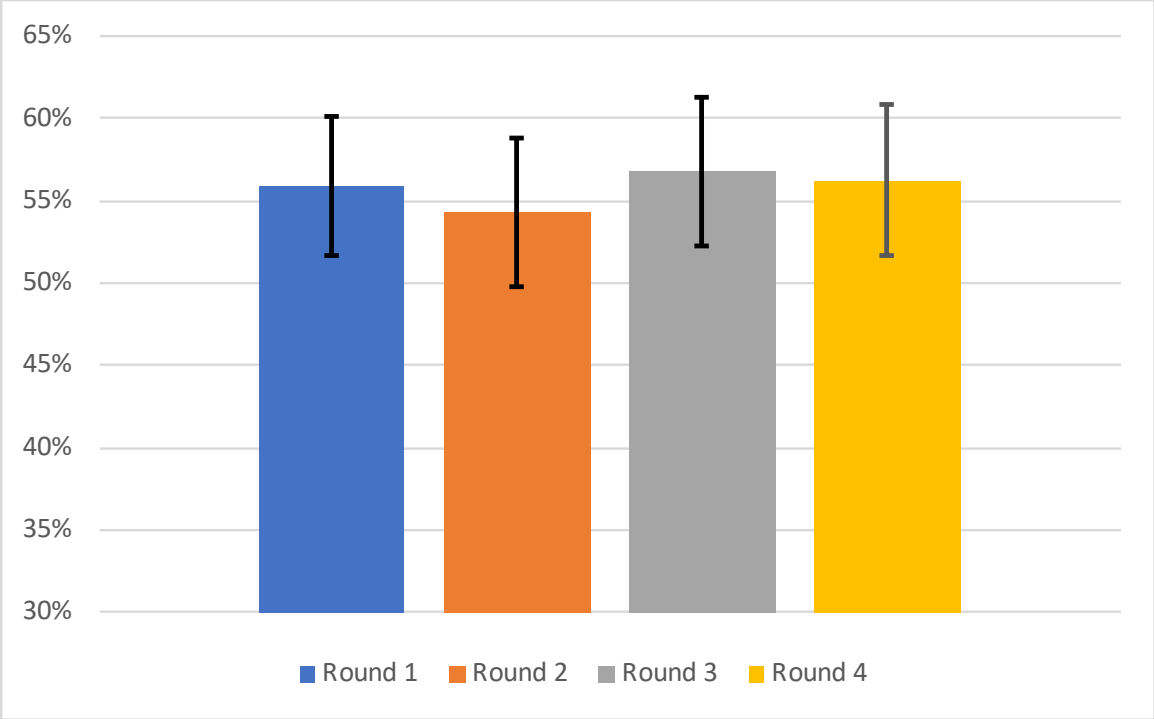
The limited communication made available in half the sessions had no significant effect in the amount sent by players 1 and seems to decrease the amount returned by players 2. This difference, however, is statistically significant only in the case when player 1 sends all of her endowment (p=0.07).

We asked our participants a series of questions about general trust and interpersonal trust The wording was: “Generally speaking, how much would you say most people can be trusted?” and “How much do you agree or disagree with the following statement? ‘I believe people always have good intentions.’” This Likert scale questionnaire (1 to 7) was administered after the games, but before revealing their results to the participants.

[7] Figure A1 in the Appendix presents for each round a vertical box plot showing the median, 25th and 75th percentile, minimum and maximum of the percentage of endowment sent.
[8] All p-values are from two-tailed t-tests clustered at the subject level.
[9] Using nonparametric techniques, we also reject differences in trust towards Uruguayans and Migrants. We implement the Kolmogorov-Smirnov equality of distributions test (p=0.99) and the Wilcoxon rank-sum test (p=0.67).

Players 1 who reported a higher trust in people in general, and that people have good intentions in general, sent a significantly higher proportion of their endowment. This is in line with Aksoy et al. (2018), who report that the lack of correlation between experimental and reported trust measures of Glaeser et al. (2000) is due to their implementation not endowing the receiver and therefore contaminating the trust measure with fairness and inequality aversion concerns. Self-reported trust towards immigrants is also highly correlated with in-game trust towards that group, with an average end-to-end increase of 37 percent points in amount sent. We find no such correlation with other interpersonal trust variables.

Figure 1. Average Endowment Sent by Round



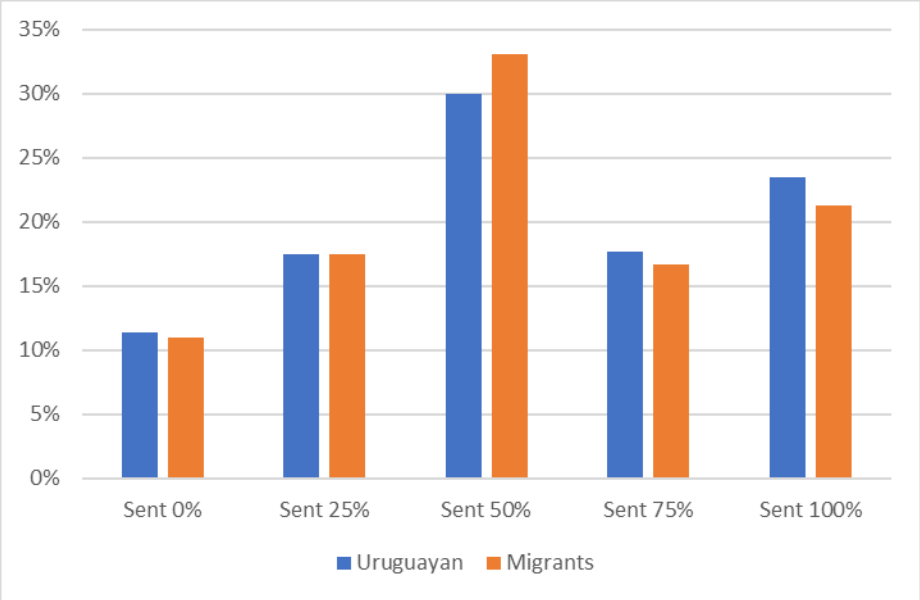
Note: Vertical segments represent 95% confidence intervals.

Table 2. Average Trust and Reciprocity

	Trust		Reciprocity					
	N	% Sent	N	% Ret 1	% Ret 2	% Ret 3	% Ret 4	% Ret 5
Match is Uruguayan	537	56.1 % (0.32)						
Match is Migrant	263	55.1 % (0.32)						
Uruguayan			537	17.1 % (0.24)	24.9 % (0.18)	28.0 % (0.17)	29.6 % (0.18)	32.2 % (0.19)
Migrant			263	22.3 % (0.28)	26.0 % (0.20)	28.5 % (0.20)	29.0 % (0.21)	30.8 % (0.23)
No Communication session	392	56.3 % (0.33)	392	20.2 % (0.25)	24.8 % (0.16)	29.0 % (0.16)	31.0 % (0.17)	34.1 % (0.19)
Communication session	408	55.3 % (0.32)	408	17.5 % (0.27)	25.7 % (0.21)	27.4 % (0.20)	27.9 % (0.20)	29.4 % (0.22)

Note: Standard errors in parenthesis. Two Migrants played as players 1, and they are not considered in the empirical analysis.

Figure 2. Percentage of Endowment Sent by Partner's Nationality



Next, we show the average transfers depending on the player's individual characteristics, distinguishing between those of the decision-maker (Table 3) and those of the partner (Table 4). In line with the trust literature (Croson and Gneezy, 2009; Garbarino and Slonim, 2009), we find that men send a larger proportion of their endowment; but contrary to previous evidence, we find that men also returned more than women in our sample. That is to say, men revealed more trust than women (60.4 percent vs. 51.5 percent) and also revealed more reciprocity. The gender reciprocity gap is increasing in the hypothetical amount sent by player 1 from 2.8 percentage points to 8.3 percentage points. On the other hand, trust towards women is slightly higher (56.0 percent vs. 55.6 percent) but not statistically significant. Reciprocity towards women is also larger for the five reciprocity measures.

Players from high-income neighborhoods make smaller transfers in both roles, i.e., they trust less, and they reciprocate less. On the other hand, players from lower-income neighborhood are less trusted (52.7 percent to low vs. 57.6 percent to medium and 58.1 percent to high-income neighborhoods).

The higher the educational level of player 1, the larger his/her revealed trust of others. High school dropouts send 52.3 percent of their endowment, while high school graduates send 57.6 percent and those with at least some university education send 60.3 percent. There is no clear pattern related to education in reciprocity, nor do average amounts show a clear pattern with respect to age.

Table 3. Average Trust and Reciprocity by Demographic Characteristics of Player Making the Decision

	Trust		Reciprocity					
	N	% Sent	N	% Ret 1	% Ret 2	% Ret 3	% Ret 4	% Ret 5
Male	388	60.4% (0.33)	399	20.2% (0.28)	28.5% (0.22)	31.4% (0.21)	33.2% (0.22)	35.9% (0.23)
Female	412	51.5% (0.31)	401	17.4% (0.23)	22.0% (0.14)	24.9% (0.14)	25.6% (0.14)	27.6% (0.17)
Incomplete High school	360	52.3% (0.31)	299	23.7% (0.27)	26.6% (0.20)	28.4% (0.20)	29.4% (0.20)	30.2% (0.22)
High school diploma	272	57.6% (0.32)	226	11.9% (0.21)	23.3% (0.18)	28.4% (0.19)	30.1% (0.19)	33.2% (0.19)
College degree	168	60.3% (0.34)	275	19.1% (0.26)	25.4% (0.17)	27.7% (0.16)	28.9% (0.18)	32.1% (0.20)
Age 18-29	232	53.3% (0.35)	217	7.0% (0.15)	19.0% (0.13)	23.4% (0.15)	25.5% (0.16)	27.9% (0.19)
Age 30-45	232	55.8% (0.35)	278	25.6% (0.29)	29.0% (0.22)	30.5% (0.21)	31.9% (0.23)	34.5% (0.23)
Age 46-60	196	60.1% (0.30)	207	18.8% (0.27)	24.3% (0.18)	28.5% (0.18)	29.4% (0.18)	32.4% (0.20)
Age 61+	140	53.8% (0.26)	98	25.5% (0.24)	30.3% (0.17)	31.2% (0.15)	31.3% (0.16)	30.7% (0.18)
Low-income Neighborhood	336	56.0% (0.33)	318	21.1% (0.26)	27.2% (0.20)	30.1% (0.19)	31.6% (0.19)	33.5% (0.22)
Mid-income Neighborhood	176	58.9% (0.28)	231	20.9% (0.28)	26.6% (0.20)	29.0% (0.20)	29.4% (0.21)	32.0% (0.21)
High-income Neighborhood	288	53.6% (0.34)	251	14.0% (0.22)	21.5% (0.15)	24.8% (0.16)	26.7% (0.17)	29.2% (0.19)

Note: Standard errors in parenthesis.

Table 4. Average Trust and Reciprocity by Demographic Characteristics of Player's Partner

	Trust		Reciprocity					
	N	% Sent	N	% Ret 1	% Ret 2	% Ret 3	% Ret 4	% Ret 5
Match is Male	399	55.6% (0.32)	388	16.8% (0.24)	24.4% (0.18)	26.8% (0.17)	28.0% (0.17)	30.9% (0.19)
Match is Female	401	56.0% (0.33)	412	20.7% (0.27)	26.0% (0.19)	29.4% (0.19)	30.8% (0.21)	32.4% (0.22)
Match with Incomplete High school	299	56.5% (0.32)	359	21.3% (0.27)	26.3% (0.20)	28.5% (0.18)	29.8% (0.19)	32.1% (0.21)
Match with High school diploma	226	54.6% (0.32)	272	16.2% (0.25)	24.9% (0.19)	28.5% (0.19)	29.6% (0.20)	32.8% (0.21)
Match with college degree	275	55.9% (0.32)	169	17.8% (0.24)	23.6% (0.16)	26.9% (0.18)	28.2% (0.19)	29.1% (0.19)
Match Age 18-29	217	54.7% (0.34)	232	16.1% (0.26)	25.1% (0.20)	28.1% (0.19)	30.1% (0.20)	32.4% (0.22)
Match Age 30-45	278	56.7% (0.32)	231	19.6% (0.24)	24.7% (0.17)	26.7% (0.16)	28.6% (0.18)	30.4% (0.19)
Match Age 46-60	207	56.5% (0.32)	197	21.7% (0.26)	25.2% (0.19)	28.7% (0.17)	28.9% (0.19)	31.1% (0.20)
Match Age 61+	98	54.1% (0.30)	140	18.0% (0.27)	26.5% (0.20)	29.9% (0.20)	30.3% (0.20)	33.6% (0.22)
Match from Low-income Neighborhood	318	52.7% (0.32)	335	21.0% (0.27)	26.0% (0.19)	28.7% (0.18)	29.4% (0.18)	31.9% (0.21)
Match from Mid-income Neighborhood	231	57.6% (0.32)	176	20.3% (0.26)	27.3% (0.19)	29.3% (0.18)	30.5% (0.20)	33.3% (0.20)
Match from High-income Neighborhood	251	58.1% (0.33)	289	15.3% (0.24)	23.1% (0.18)	26.7% (0.18)	28.8% (0.19)	30.5% (0.21)

Note: Standard errors in parenthesis.

For a controlled analysis, we regress the percentage of disposable income sent and returned on the dummy variables corresponding to each treatment dimension and their interaction and controlling for the personal characteristics of the subject and of the subject's match.

The regression models are given by the following equations:

$$T_{ij} = \alpha_0 + \alpha_1 M_j + \alpha_2 C_{ij} + \alpha_3 M_j \times C_{ij} + \gamma Z_{ij} + \epsilon_{ij}$$
$$R_{ji} = \beta_0 + \beta_1 M_j + \beta_2 C_{ij} + \beta_3 M_j \times C_{ij} + \delta Z_{ij} + \theta_{ij}$$

where T_{ij} is trust given by the percentage of the initial endowment sent by player i to player j, R_{ji} is reciprocity given by the percentage of disposable income returned by player j to player i. M_j is

a dummy variable that takes a value of 1 if player 2 is an immigrant, C_{ij} is a dummy variable for the communication treatment, and Z_{ij} is a vector of personal characteristics of the player pair.

Tables 5 and 6 report the results of these OLS regressions.[10] Even including controls, neither player's 2 nationality nor the possibility of communication affected trust in our experiment. This is evidence against the four hypotheses stated in the first section of this paper.

The regression analysis confirms that only the gender and education level of the entrustors predict their decisions. Women send 10 percent less of their endowment than men, and subjects with a high school or college degree send about 13 percent more than those without a diploma.

The effect of our variables of interest on reciprocity is nonlinear. Migrants seem to have a flatter response to the amount they receive compared to the locals, sending back 7.6 percent more when they receive nothing and 8.6 percent less when player 1 send them the full endowment. Surprisingly, we see in general a negative effect of communication on reciprocity, though it is only statistically significant when player 2 receives the full endowment.

As with trust, women in our sample are less reciprocal than men, and increasingly so the more they receive; and subjects with completed formal education are also more reciprocal. Finally, middle-aged subjects are also more reciprocal than both younger and older participants.[11]

[10] Similar results hold for ordered dependent models; we present OLS since their coefficients give a direct interpretation. Also, similar results are found in round-by-round estimations.

[11] Other combinations of control variables do not affect the main results of the paper. For instance, this includes cross-controls to reflect in group-out group effects by education level and neighborhood of residence.

Table 5. Regression Analysis Controlling for Demographic Characteristics of Player Making the Decision

	Trust	Reciprocity				
	% Sent	% Ret 1	% Ret 2	% Ret 3	% Ret 4	% Ret 5
Communication	-0.00413	-0.0242	0.00160	-0.0249	-0.0398	-0.0697***
	(0.0391)	(0.0354)	(0.0248)	(0.0243)	(0.0249)	(0.0259)
Migrant		0.0762*	-0.00880	-0.0268	-0.0436	-0.0856**
		(0.0457)	(0.0293)	(0.0307)	(0.0359)	(0.0387)
Comm x Migrant		-0.0148	0.0316	0.0412	0.0442	0.0788
		(0.0658)	(0.0478)	(0.0485)	(0.0511)	(0.0552)
Match is Migrant	-0.00661					
	(0.0381)					
Comm x Match is Migrant	-0.0109					
	(0.0524)					
Female	-0.0982***	0.0132	-0.0390*	-0.0368*	-0.0463**	-0.0504**
	(0.0358)	(0.0303)	(0.0204)	(0.0207)	(0.0215)	(0.0233)
Age	0.00902	0.0133**	0.00616	0.00698*	0.00732*	0.0116***
	(0.0067)	(0.0054)	(0.0037)	(0.0038)	(0.0039)	(0.0041)
Age^2	-0.00009	-0.0001*	-0.00005	-0.00006	-0.0001*	-0.0001***
	(0.00007)	(0.00006)	(0.00004)	(0.00004)	(0.00004)	(0.00004)
High-income Neighborhood	-0.0874*	-0.0252	-0.0363	-0.0414*	-0.0413	-0.0442
	(0.0483)	(0.0352)	(0.0237)	(0.0244)	(0.0254)	(0.0281)
Mid-income Neighborhood	-0.0225	-0.0397	-0.0190	-0.0216	-0.0321	-0.0287
	(0.0417)	(0.0406)	(0.0291)	(0.0294)	(0.0297)	(0.0305)
College degree	0.133***	-0.0263	0.0282	0.0392	0.0466*	0.0784**
	(0.0501)	(0.0404)	(0.0279)	(0.0273)	(0.0276)	(0.0326)
High school diploma	0.130***	-0.0741*	0.0197	0.0526	0.0578*	0.0880***
	(0.0466)	(0.0414)	(0.0339)	(0.0340)	(0.0340)	(0.0332)
Constant	0.293**	-0.193*	0.0266	0.0467	0.0785	0.0245
	(0.143)	(0.113)	(0.0850)	(0.0894)	(0.0935)	(0.0981)
Observations	800	800	800	800	800	800

Note: All regressions are OLS clustered at the subject level. Standard errors in parenthesis.

Table 6. Regression Analysis Controlling for Demographic Characteristics of Player's Partner

	Trust	Reciprocity				
	% Sent	% Ret 1	% Ret 2	% Ret 3	% Ret 4	% Ret 5
Communication	-0.0169	-0.0151	0.00780	-0.0210	-0.0406	-0.0683**
	(0.0392)	(0.0362)	(0.0258)	(0.0254)	(0.0264)	(0.0284)
Migrant		0.0530	-0.00836	-0.0213	-0.0382	-0.0614
		(0.0430)	(0.0278)	(0.0296)	(0.0346)	(0.0382)
Comm x Migrant		-0.0328	0.0200	0.0326	0.0441	0.0753
		(0.0659)	(0.0477)	(0.0487)	(0.0511)	(0.0559)
Match is Migrant	-0.0134					
	(0.0420)					
Comm x Match is Migrant	-0.00164					
	(0.0545)					
Match is Female	0.00823	0.0324*	0.0114	0.0179	0.0223	0.00890
	(0.0229)	(0.0184)	(0.0146)	(0.0136)	(0.0144)	(0.0153)
Match's Age	0.00394	0.00457	-0.00090	-0.00071	-0.00067	-0.00114
	(0.0054)	(0.0032)	(0.0022)	(0.0022)	(0.0023)	(0.0025)
Match's Age^2	-0.00005	-0.0001	0.00001	0.00001	0.000007	0.00001
	(0.00006)	(0.00003)	(0.00002)	(0.00002)	(0.00002)	(0.00002)
Match from High-income Neighborhood	0.0547**	-0.0384	-0.0213	-0.0178	-0.00076	-0.0100
	(0.0258)	(0.0272)	(0.0177)	(0.0186)	(0.0186)	(0.0180)
Match from Mid-income Neighborhood	0.0437	-0.0098	0.0133	-0.00326	0.00527	0.00262
	(0.0291)	(0.0224)	(0.0148)	(0.0146)	(0.0174)	(0.0174)
Match with college degree	-0.0277	-0.0351	-0.0244	-0.0150	-0.0306	-0.0374*
	(0.0336)	(0.0257)	(0.0183)	(0.0199)	(0.0209)	(0.0196)
Match with High school diploma	-0.0298	-0.0404	-0.0137	-0.00124	-0.0210	-0.00846
	(0.0312)	(0.0246)	(0.0168)	(0.0175)	(0.0184)	(0.0205)
Constant	0.396***	0.0164	0.180***	0.201***	0.235***	0.283***
	(0.113)	(0.0708)	(0.0492)	(0.0480)	(0.0512)	(0.0560)
Observations	800	800	800	800	800	800

Note: All regressions are OLS clustered at the subject level. Standard errors in parenthesis.

To further analyze potential effects of communication on trust and reciprocity, we categorized the messages written by players 2 in the communication sessions. We identified four main (non-mutually exclusive) categories that could have a differential effect on trust and reciprocity:

- Collaboration: Player 2 makes an explicit or implicit suggestion to collaborate with player 1 to maximize earnings.
- Empathy: Player 2's message appeals to player 1's empathy.

- Introduction: Player 2 uses the message to introduce herself to player 1.
- Long: The message is at least 4 lines in length.

Table 7 shows the average endowment sent or returned for each category. We find no significant effects on trust or reciprocity by the different message types, though longer messages that emphasize collaboration seem to do slightly better than other types of communication. Nevertheless, the highest levels of trust and reciprocity occurred in the "No Communication" sessions.

Table 7. Communication

	N	Trust	Reciprocity				
		% Sent	% Ret 1	% Ret 2	% Ret 3	% Ret 4	% Ret 5
No Communication	392	56.3%	20.2%	24.8%	29.0%	31.0%	34.1%
		(0.330)	(0.245)	(0.155)	(0.156)	(0.174)	(0.190)
Communication	408	55.3%	17.5%	25.7%	27.4%	27.9%	29.4%
		(0.316)	(0.269)	(0.214)	(0.204)	(0.205)	(0.219)
Comm - Collaboration	165	56.2%	19.5%	26.8%	27.9%	28.3%	29.9%
		(0.303)	(0.286)	(0.220)	(0.199)	(0.202)	(0.207)
Comm - Empathy	100	55.8%	14.3%	23.3%	24.9%	26.1%	27.0%
		(0.320)	(0.262)	(0.158)	(0.165)	(0.169)	(0.181)
Comm - Introduction	191	55.4%	14.4%	23.3%	25.7%	27.2%	28.1%
		(0.323)	(0.257)	(0.193)	(0.192)	(0.195)	(0.215)
Comm - Long	258	55.0%	17.9%	25.5%	27.8%	28.8%	29.4%
		(0.308)	(0.286)	(0.216)	(0.216)	(0.216)	(0.231)

Note: Standard errors in parenthesis.

4. Discussion

Uruguay is the least unequal and most homogenous South American country. Nevertheless, Latinobarómetro shows that a sizeable proportion of the population is concerned with the impact of migrants on their wellbeing. Those same statistics show that in relative terms Uruguay is among the most welcoming countries in the region. Our field experiment showed no differences in trust or reciprocity that could be attributed to the nationality. We conjectured that this is due to most of the Uruguayan population being itself of foreign descent or simply because it has not recently received immigration in the amounts other countries had. This interpretation is in line with Kesler and Bloemraad (2010), who suggest that in more economically equal societies, the negative impact

of immigration on trust (reported in other papers) is mitigated or even reversed; likewise, Cox and Orman (2015) find no difference in trust towards migrants and US citizens.

On the other hand, we cannot rule out that the specifics of the experimental design could have had an effect in our findings, though we followed standard experimental practices for all our design decisions. Glaeser et al. (2000), for instance, report a lack of correlation between survey measures of trust and a variation of the Berg et al (1995) game. In their implementation only the first mover is endowed, and the receiver of the game has zero endowment. Aksoy et al. (2018) argue that this variation from the standard implementation with both players being endowed is behind the lack of correlation between the outcome of the game and the self-reported trust measures. The first player's decision to send money reflects her trust in the second mover, but it might also be affected by altruism or inequality aversion. Aksoy et al. (2018) implement a traditional trust game with both players endowed and the variation endowing only the first mover and find a significant correlation between the traditional incentivized trust game and survey questions. That is why in this paper we endowed both players.

We had all participants play four rounds to increase our statistical power and to include a within-subject dimension in our data. Since we only pay one (random) round, however, there is no possibility for hedging, and since we did not reveal the results of each round until the end of the session, there is no effect of past results on later rounds.

In their meta-analysis, Johnson and Mislin (2011) discuss the effects of additional variations in experimental protocols. They report that the amount sent by the first mover is significantly affected by whether payment is random (instead of paying each player what they "earned," only a random sample of players is awarded the outcome of the game and the rest are paid a fixed amount). In our implementation all players are paid according to the game results.

Johnson and Mislin (2011) also find that experimental trust measures can differ according to whether play is with simulated instead of real counterparts. In our implementation there is no deception, and variations in demographics correspond to real life players characteristics. Nationality was only one of the personal characteristics that we revealed to participants, which undoubtedly made it less salient, but had we only reported the partner's country of origin, we would have run the risk of implicitly revealing the experimental design to the participants and thus possibly severely biasing their decisions. In any case, all the characteristics we revealed in the

experiment are to a certain degree noticeable when meeting someone personally, so it is arguably more in line with a natural experience.

Finally, Johnson and Mislin (2011) report that trustworthiness is significantly affected by whether players are students instead of a representative sample of the population. Student samples are convenient for university behavioral laboratory experiments, but their external validity is often criticized. We used a representative sample of the city's population, which should not have the pro-immigration bias that can be expected in university students.

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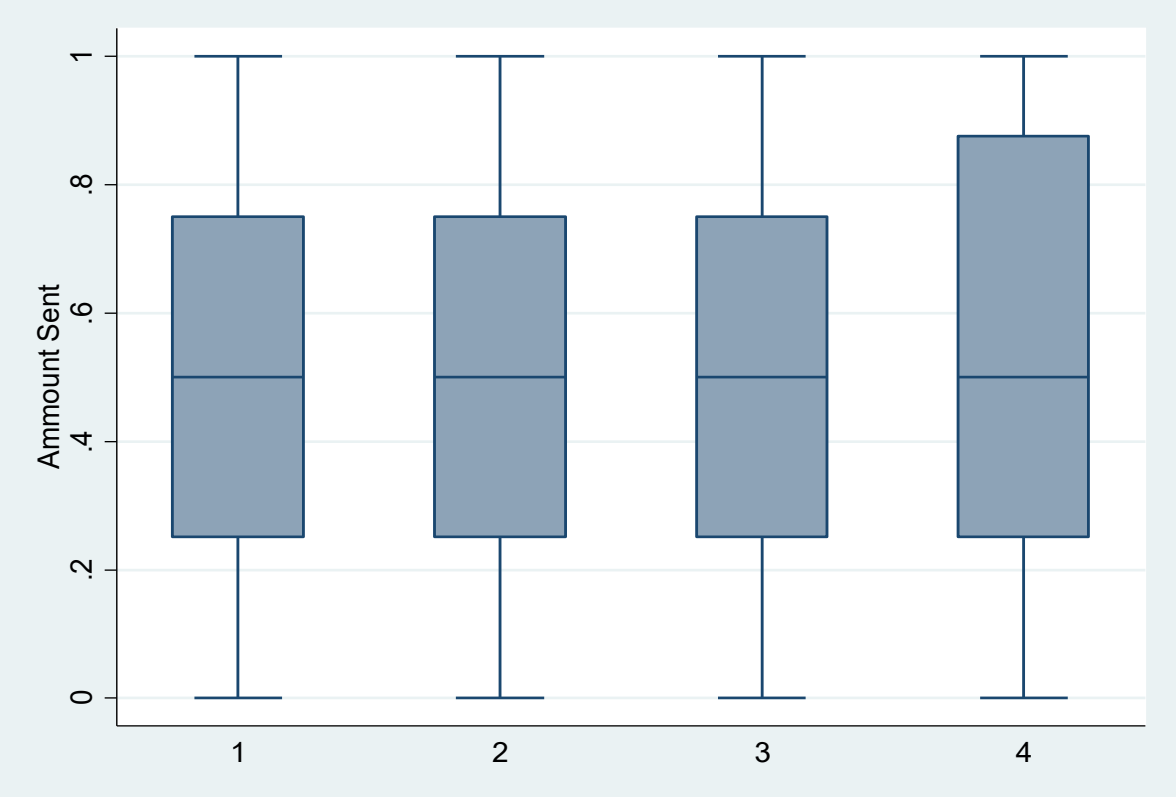
Appendix

Figure A1. % Boxplot of Endowment Sent by Round



Note: Reported statistics correspond to the minimum, 25th percentile, median, 75th percentile and maximum.

The rest of the Appendix shows results restricted to Cuban and Venezuelan migrants.

Figure A2. % of Endowment Sent by Partner's Nationality

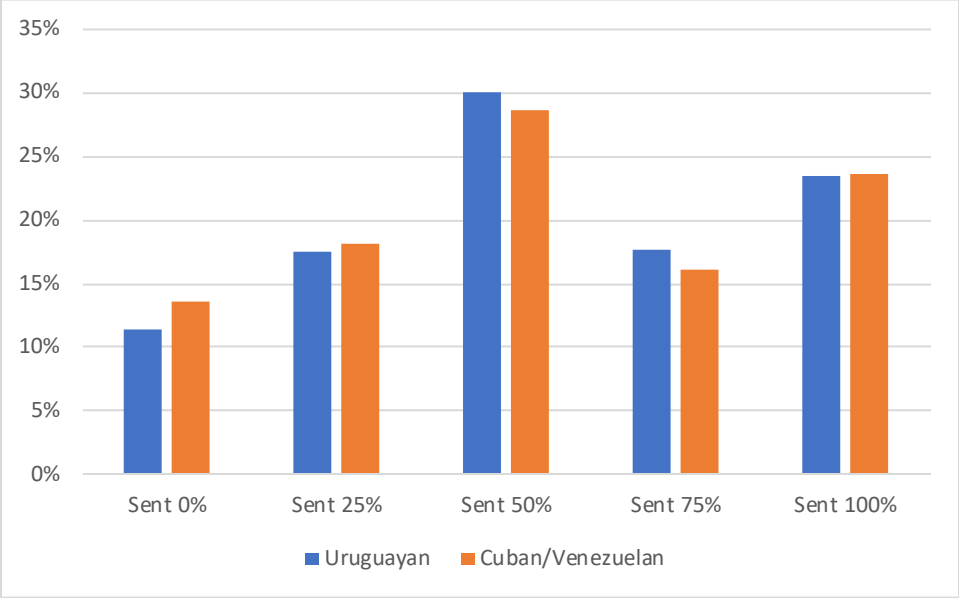


Table A1. Regression Analysis Controlling for Demographic Characteristics of Player Making the Decision (only Cuban and Venezuelan Migrants)

Variable	Trust	Reciprocity				
	% Sent	% Ret 1	% Ret 2	% Ret 3	% Ret 4	% Ret 5
Communication	-0.00760	-0.02680	0.00067	-0.02563	-0.03985	-0.0701***
	(0.846)	(0.450)	(0.979)	(0.290)	(0.110)	(0.007)
Cuban/Venezuelan		0.0835*	-0.01266	-0.02794	-0.03354	-0.0719*
		(0.098)	(0.711)	(0.428)	(0.420)	(0.095)
Comm x Cub/Ven		-0.03985	0.01718	0.01725	0.00556	0.02491
		(0.609)	(0.774)	(0.773)	(0.929)	(0.697)
Match is Cub/Ven	-0.02616					
	(0.541)					
Comm x Match is Cub/Ven	0.02352					
	(0.684)					
Female	-0.0993***	0.01624	-0.0404*	-0.0389*	-0.0502**	-0.0592**
	(0.009)	(0.604)	(0.061)	(0.075)	(0.026)	(0.012)
Age	0.00877	0.0101**	0.00569	0.0065*	0.0070*	0.0114***
	(0.196)	(0.038)	(0.153)	(0.100)	(0.085)	(0.010)
Age^2	-0.00009	-0.00008	-0.00004	-0.00006	-0.00007	-0.0001**
	(0.238)	(0.170)	(0.363)	(0.205)	(0.122)	(0.011)
High-income Neighborhood	-0.0878*	-0.03312	-0.0438*	-0.0527**	-0.0504*	-0.0585**
	(0.082)	(0.383)	(0.083)	(0.038)	(0.058)	(0.036)
Mid-income Neighborhood	-0.02709	-0.02234	-0.01847	-0.02689	-0.04204	-0.03916
	(0.550)	(0.598)	(0.554)	(0.390)	(0.174)	(0.207)
College degree	0.1183**	-0.02035	0.03950	0.0555**	0.0608**	0.0980***
	(0.026)	(0.626)	(0.161)	(0.038)	(0.027)	(0.002)
High school diploma	0.1217**	-0.06506	0.02495	0.05817	0.0643	0.1007***
	(0.012)	(0.137)	(0.487)	(0.105)	(0.072)	(0.002)
Constant	0.2975**	-0.16329	0.03027	0.04735	0.07456	0.02010
	(0.043)	(0.151)	(0.735)	(0.613)	(0.448)	(0.846)
Observations	736	736	736	736	736	736

Table A2. Regression Analysis Controlling for Demographic Characteristics of Player's Partner (only Cuban and Venezuelan Migrants)

Variable	Trust	Reciprocity				
Variable	% Sent	% Ret 1	% Ret 2	% Ret 3	% Ret 4	% Ret 5
Communication	-0.01905	-0.01431	0.00904	-0.01927	-0.03915	-0.0666**
	(0.626)	(0.694)	(0.728)	(0.451)	(0.142)	(0.020)
Cuban/Venezuelan		0.05684	-0.01743	-0.02809	-0.03666	-0.05425
		(0.226)	(0.585)	(0.402)	(0.353)	(0.208)
Comm x Cub/Ven		-0.05058	0.02554	0.02931	0.02765	0.04323
		(0.511)	(0.661)	(0.617)	(0.649)	(0.504)
Match is Cub/Ven	-0.04607					
	(0.329)					
Comm x Match is Cub/Ven	0.05517					
	(0.343)					
Match is Female	0.02156	0.0368*	0.01252	0.01691	0.02217	0.00557
	(0.385)	(0.066)	(0.434)	(0.255)	(0.159)	(0.736)
Match's Age	0.00490	0.00330	-0.00100	-0.00091	-0.00096	-0.00127
	(0.374)	(0.329)	(0.671)	(0.695)	(0.685)	(0.625)
Match's Age^2	-0.00007	-0.00004	0.00001	0.00002	0.00001	0.00002
	(0.285)	(0.298)	(0.601)	(0.511)	(0.673)	(0.558)
Match from High-income Neighborhood	0.0550**	-0.03027	-0.01677	-0.01681	0.00366	-0.00812
	(0.047)	(0.306)	(0.397)	(0.417)	(0.859)	(0.680)
Match from Mid-income Neighborhood	0.04800	-0.00137	0.01882	0.00048	0.00982	0.00575
	(0.128)	(0.954)	(0.248)	(0.976)	(0.608)	(0.757)
Match with college degree	-0.04350	-0.03636	-0.02307	-0.00924	-0.02743	-0.03180
	(0.210)	(0.190)	(0.249)	(0.670)	(0.227)	(0.129)
Match with high school diploma	-0.04205	-0.04012	-0.00911	0.00723	-0.01620	0.00141
	(0.175)	(0.135)	(0.618)	(0.703)	(0.414)	(0.949)
Constant	0.3809***	0.03266	0.1717***	0.1927***	0.2280***	0.2752***
	(0.001)	(0.660)	(0.001)	(0.000)	(0.000)	(0.000)
Observations	736	736	736	736	736	736