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Strategic Interactions and Gender Cues: Evidence from Social Preference Games*

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Abstract

This paper studies trust, reciprocity, and bargaining using a large-scale online experiment in six Latin American countries. Participants were randomly assigned to play trust and ultimatum games under conditions that either disclosed or withheld the gender of their counterpart. On average, gender disclosure did not affect behavior. However, disaggregated results show systematic differences. Men displayed higher levels of trust and reciprocity, particularly when interacting with women, and offered larger shares to women in bargaining. Women, by contrast, reciprocated more when paired with men. These findings show how gendered interactions can influence economic behavior, even when counterpart information is conveyed minimally.

JEL classifications: C92, D91, J16, O54.

Keywords: Trust; Reciprocity; Bargaining; Gender; Latin America.

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1 Introduction

Economic interactions within households, workplaces, or markets depend critically on trust, reciprocity, and the ability to negotiate. Persistent differences in how men and women behave in these domains can generate inefficiencies and sustain inequality, making their origins a central concern for behavioral and experimental economics. Over the last two decades, scholars have argued that these differences often stem not from intrinsic preferences but from context-dependent expectations: how women and men anticipate, interpret, and respond to each other’s behavior (Croson and Gneezy, 2009; Vesterlund, 2013; Exley et al., 2025). Understanding when and why gender influences strategic interaction is thus key to diagnosing behavioral mechanisms behind economic inequality and to designing interventions that promote cooperation and fairness without enforcing uniform behavior.

Identifying these mechanisms in real-world settings is difficult. Individuals self-select into relationships, firms, and organizations shaped by social norms and prior experience, making causal inference nearly impossible. Laboratory experiments, in contrast, allow for clean identification but have mostly been conducted in high-income countries (Henrich et al., 2010; Razzaque, 2009). Whether these findings extend to other contexts (where norms around trust, cooperation, and gender roles differ) remains unclear. Moreover, many existing studies conflate gender with other visible attributes such as age or ethnicity, making it difficult to isolate the causal role of gender itself (Solnick, 2001; Buchan et al., 2008).

We address these limitations through a large-scale online experiment conducted in six Latin American countries: Argentina, Brazil, Chile, Colombia, Mexico, and Peru. Participants played two canonical strategic games—the trust game and the ultimatum game—under randomly assigned conditions that either disclosed or concealed the gender of their counterpart. We refer to this variation as gender disclosure. This design allows us to test how minimal gender cues shape cooperative and bargaining behavior while avoiding the visual or contextual confounders present in face-to-face interactions. It also enables a direct comparison across two domains that capture distinct strategic dimensions: the willingness to cooperate

and the willingness to share resources fairly.

Latin America provides a particularly informative context for this question. Cross-country data position the region between high-trust societies (such as Northern Europe) and lower-trust contexts, yet still below the global average (Falk et al., 2018). Previous studies show that Latin Americans tend to trust and reciprocate less than participants elsewhere (Johnson and Mislin, 2011; Cárdenas et al., 2009), suggesting relatively low levels of social capital. At the same time, gender inequality remains pronounced across labor markets, politics, and households (Castillo et al., 2013; Recalde and Vesterlund, 2023). These conditions make the region an ideal setting to test whether, in low-trust environments, gender cues become especially salient in guiding expectations and behavior.

Existing evidence on gender differences in strategic behavior is fragmented. Meta-analyses of trust games show that men tend to trust more than women, but findings on reciprocity are mixed (Johnson and Mislin, 2011; Aksoy et al., 2018). In ultimatum games, women often receive lower offers and reject more frequently (Solnick, 2001), though other studies find that men offer more to women (Eckel and Grossman, 2001) or detect no systematic differences (Li et al., 2018). Beyond experimental games, research on negotiation outcomes reveals persistent but context-dependent gender gaps in expectations and payoffs (Mazei et al., 2015; Kiessling et al., 2024). Overall, gendered behavior appears conditional and situational—shaped by expectations of others rather than fixed norms.

However, most of this evidence relies on student or convenience samples from North America and Europe, leaving a gap in external validity. Few studies in developing countries examine gender in strategic interactions, and even fewer manipulate gender salience directly. Razaque (2009) and Naeem and Zaman (2014) study Pakistan, while Cárdenas et al. (2009); Cardenas and Carpenter (2013); Cárdenas et al. (2013) focus on Latin American cooperation, but none of these experiments vary gender cues experimentally. Our study fills this gap by combining cross-country representativeness, random assignment of gender disclosure, and two behavioral tasks within a unified framework.

We find that disclosing counterpart gender has no effect on average, but systematic differences emerge when we consider the interaction between player and counterpart gender. Men display higher trust and reciprocity, especially toward women, and offer larger shares to female counterparts in bargaining. Women reciprocate more when paired with men and condition their acceptance decisions on the proposer’s gender. These findings suggest that gender shapes economic interaction in Latin America not through broad stereotypes, but through role-dependent dynamics—patterns that resemble those seen in real workplaces and markets, where trust, cooperation, and negotiation behavior shape hiring, wages, and leadership opportunities (Babcock and Laschever, 2003; Booth and Nolen, 2010; Recalde and Vesterlund, 2023).

Our contributions are threefold. First, we provide large-scale, incentivized evidence from an understudied region, with more than 7,000 participants across six countries; one of the largest cross-national experimental datasets on social preferences to date. Second, we introduce a clean, text-based experimental manipulation that isolates the salience of gender cues. Third, by integrating trust and bargaining within a single design, we connect two core domains of strategic interaction that are typically examined separately. Together, these contributions advance understanding in behavioral economics by shedding light on the universality of social preferences, the mechanisms driving gendered behavior, and the contextual factors that shape trust and fairness. They also illustrate how small behavioral differences in strategic settings can, when aggregated, reinforce broader gender disparities in economic life.

2 Research Design

2.1 Empirical Questions

Building on the mixed evidence reviewed above, our experiment assesses how gender influences strategic behavior in two canonical settings: the trust game and the ultimatum game. By implementing gender-disclosure treatments across both games, we test whether

patterns documented in prior studies generalize to a more culturally diverse, incentivized, cross-country setting. Specifically, we investigate whether the disclosure of counterpart gender and specific gender pairings affects behavior in these games. We organize the analysis around three questions motivated by the literature.

First, does the mere disclosure of the counterpart’s gender affect behavior in trust and ultimatum games? Previous studies in the literature have suggested that revealing gender may activate social stereotypes or signaling behavior, such as increased generosity or strategic discrimination (Eckel and Grossman, 2008; Slonim and Guillen, 2010; Exley et al., 2025). Our design directly tests whether such text-only cues shift average levels of trust, reciprocity, or affect bargaining behavior.

Second, do men and women respond differently once the counterpart’s gender is disclosed? Prior evidence suggests that gender matching can influence trust and reciprocity (Slonim and Guillen, 2010). Based on this literature, we expect men to exhibit higher levels of trust when paired with women, women to trust less on average, and women to adjust their reciprocity depending on the counterpart’s gender: previous studies find that women are generally less trusting (Van Den Akker et al., 2020; Johnson and Mislin, 2011), but that they tend to reciprocate more toward men than toward women. Our design allows us to test whether such differences become more pronounced when gender is explicitly disclosed.

Finally, how do these dynamics compare across domains of social preference games? In the trust game, trust and reciprocity capture willingness to invest in and reward cooperation (Berg et al., 1995), while in the ultimatum game, offers and acceptance decisions reflect bargaining and conflict resolution (Güth et al., 1982). Studying both games in parallel allows us to assess whether gender affects cooperative and bargaining behavior in similar or different ways. In addition, we complement the analysis by examining gendered effects in a standard public goods game to capture cooperation, a dictator game to measure altruism, and a lottery task to assess risk attitudes.

2.2 Outcomes: Trust, Reciprocity, and Bargaining Behavior

We implemented a series of games in which participants in each game were randomly assigned to be player 1 ($P1$) or player 2 ($P2$).

Trust. Following the canonical design of [Berg et al. \(1995\)](#), the trust game involves two players randomly assigned the roles of trustor and trustee. Each participant first received an equal experimental endowment (E) of 10 tokens—this ensures symmetry and helps isolate trust from confounding concerns about initial inequality ([Aksoy et al., 2018](#)). The trustor ($P1$) decides how much of the endowment to send to the trustee ($P2$). As in the standard implementation, the amount x sent by $P1$ is tripled ($3x$) before reaching $P2$, who then chooses how much of this enlarged sum to return to the trustor.

We define *trust* as the amount of tokens sent by $P1$ to $P2$. If the trustor sends nothing, both players keep their original endowments of 10 tokens. If a positive amount is sent, the trustee gains additional resources and must decide whether, and how much, to reciprocate.

Reciprocity. We define *reciprocity* as the amount y returned by the trustee ($P2$) to the trustor ($P1$), after receiving $3x$. Formally, payoffs are given by: $\pi_{P1} = E - x + y$ and $\pi_{P2} = E + 3x - y$. This formulation is consistent with the standard trust-game payoff structure used in the literature.

For analytical purposes, we focus on the normalized measure $\frac{y}{3x}$, which captures the proportion of the received amount that is returned to the sender. This allows us to distinguish between absolute generosity and conditional reciprocation. Throughout the analysis, we refer to x as *trust* and to $\frac{y}{3x}$ as *reciprocity*.

Offers. We also implement the ultimatum game ([Güth et al., 1982](#)). In this task, the proposer ($P1$) decides how to divide a fixed endowment of 10 tokens between themselves and their counterpart, the responder ($P2$). The proposer selects an amount O to offer to the responder and implicitly keeps $10 - O$ for themselves. This choice reflects both strategic and fairness considerations and is commonly interpreted as a behavioral measure of generosity or bargaining stance.

Acceptance. Responders ($P2$) observe the proposer’s offer O and decide whether to accept or reject it. If the offer is accepted, the proposed division is implemented; if it is rejected, both players receive zero. We define the outcome variable *Acceptance* as an indicator equal to one when the responder accepts the offer and zero otherwise.

In our analyses, offers are measured in tokens and represent the share of the total pie allocated to the responder. Whereas the trust game captures risk-taking and reciprocity, the ultimatum game highlights conflict over surplus division, making both roles essential for understanding economic behavior.

2.3 Experimental Manipulation of Gender Cues

To identify the effect of providing gender disclosure information on behavior, we randomized whether participants were told the gender of their counterpart. This *between*-subjects design assigned each individual to one of three treatments in each game: interacting with a male counterpart, interacting with a female counterpart, or with the counterpart’s gender left unspecified.

The gender disclosure treatment in our design is intentionally low salience: participants were informed of their counterpart’s gender in writing, without any visual or face-to-face interaction. In face-to-face settings, factors such as appearance, age, or ethnicity can influence behavior, and natural interactions are further complicated by selection into partnerships, making it difficult to isolate the effect of gender. In our experiment, by contrast, we abstract from these confounding elements and focus solely on whether providing minimal information about counterpart gender directly affects behavior.

Participants were randomly assigned to roles and treatments separately for each task. In the trust game, they could be assigned as either $P1$ (trustor) or $P2$ (trustee), and in the ultimatum game as either proposer or responder. Because treatments were independently randomized across games, a participant could know (*disclosed gender*) or not know (*unknown gender*) the gender of their counterpart in each game. The unit of randomization was the

individual participant.

Figure 1: Experimental Games: Structure



Figure 1 illustrates the sequence of tasks. For each game, participants first read instructions describing the rules and incentives, including examples of the payoffs associated with different decisions. To ensure comprehension, they then answered a short quiz. Within each treatment, all participants received the same instructions and comprehension quiz. These materials were identical for $P1$ and $P2$ and did not highlight whether counterpart gender was known or unknown. Only those who answered all questions correctly (within a maximum of two attempts) were allowed to proceed.¹ After passing the quiz, participants played the game once and then moved on to the next task.

3 Data

3.1 Participant Recruitment and Survey Implementation

The games and the data collection were conducted online in the first semester of 2019 with a representative panel of respondents from Argentina, Brazil, Chile, Colombia, Mexico, and Peru.² A total of 7,229 individuals participated in the study: 3,477 men and 3,752 women. On average, participants spent 42 minutes completing the experimental games and the post-task questionnaire. This duration was longer than a typical online survey but shorter than laboratory or lab-in-the-field experiments. Recruitment was managed through a professional panel provider.³

¹Each quiz contained one or two questions; respondents who failed were not permitted to continue to the next game.

²This was immediately before the COVID-19 pandemic unfolded.

³Appendix B provides additional details on the experiment's implementation: fieldwork, sampling strategy, survey incentives, game instructions, attrition, matching, and a comparison of the final sample with household surveys in each country.

Participants did not make their choices simultaneously. Because the panel provider did not allow for *synchronous* interaction, we implemented a rotating design in which roles were randomly assigned each study day. Counterparts' decisions were drawn from the preexisting distribution of choices, which allowed us to match participants with counterparts of the designated sex when required. In practice, the actions observed by players were randomly selected from previously implemented trust and ultimatum games. This procedure ensured that a *P1* assigned to play with a woman/man was indeed matched with a woman/man in the *P2* role, while maintaining consistency across all sessions. This design also allowed us to scale the experiment to more than 7,000 participants across six countries while ensuring comparability across sessions.

We implemented two safeguards to ensure data quality. First, only participants who correctly completed the comprehension quizzes assessing their understanding of the games were included in the study sample. To capture variation in comprehension, we also include in all regressions three variables indicating the number of attempts required to pass these quizzes. Second, the analysis is restricted to participants who completed the full experimental protocol. By limiting the sample to those who passed the quizzes and completed all interactions, we reduce the risk of measurement error from misunderstanding or inattentiveness and ensure that behavioral differences are not driven by disengagement or noncompliance.

Our study differs from related studies in two important ways. First, we implemented the full questionnaire online using a panel provider, applying the same recruitment protocol across all six countries. This contrasts with earlier work in Latin America that relied on smaller-scale or field-based samples (Cárdenas et al., 2009; Falk et al., 2018). Second, unlike Falk et al. (2018), who also used a panel provider, we incentivized behavior in each game. Decisions were made in *tokens*, which served as the experimental currency. Each token corresponded to a lottery ticket for a prize worth 500 U.S. dollars, giving participants with more tokens proportionally higher chances of winning. To reinforce this incentive, participants were reminded at the start of each game that accumulating tokens increased their probability of

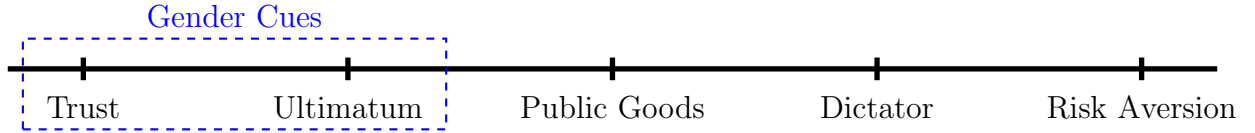
winning.⁴

3.2 Behavioral Control Variables

To improve the precision of our estimates of the effect of gender disclosure on trust and bargaining, we included a set of behavioral control variables commonly used in experimental economics. Elicited after participants completed the main game decisions, these measures capture heterogeneity in expectations, social preferences, and risk attitudes. They are not analyzed as primary outcomes, since they do not involve gender cues; however, they are included in regression models to enhance precision and reduce omitted-variable bias.⁵

Figure 2 shows the sequence of experimental games faced by all participants. Because our primary goal was to study the effect of gender disclosure on trust in the two main experiments, the order of tasks was held constant across participants.

Figure 2: Experimental Games: Sequencing



Cooperation (public goods game). All participants played a framed public goods game with three others. Each decided how much of a 10-token endowment to contribute to a collective pool. Contributions were doubled and evenly redistributed, following the standard linear public-goods mechanism. This decision serves as a proxy for prosocial or collective-oriented behavior and is included as a control for cooperative preferences. Counterpart genders were not disclosed in this task.

Altruism (dictator game). Participants were randomly assigned to play the dictator role in a standard dictator game. Dictators ($P1$) received an endowment of 10 tokens and decided

⁴The prize was awarded in the platform’s currency and had to be redeemed for goods and services offered on the platform. The probability of winning was proportional to the number of tokens accumulated.

⁵Appendix B.4 provides detailed descriptions of the tasks and their implementation.

how much to transfer to a passive recipient ($P2$), who had no choice but to accept. This decision provides a clean measure of unilateral altruism, and dictator transfers are included as a control for baseline generosity or fairness preferences. The counterpart’s gender was never disclosed in this task.

Risk aversion (lottery task). Participants completed a lottery-choice task based on [Eckel and Wilson \(2002\)](#), adapted to the Latin American context by [Cardenas and Carpenter \(2013\)](#). They chose from lotteries varying in expected value and risk, and the selected lottery serves as a proxy for individual risk aversion, a potential confounder in decisions involving trust or strategic interaction.

3.3 Social Preferences: Descriptive Statistics

Table 1 reports descriptive statistics for results of the trust, ultimatum, public-goods, dictator, and risk-aversion tasks, disaggregated by participant gender. Several consistent patterns emerge. In the trust game, the average person trusts 36.7% of their endowment, with men sending more than women on average (3.96 vs. 3.41 out of 10) and also reciprocating slightly more of the available amount (0.45 vs. 0.41). In the ultimatum game, male proposers offer larger shares (4.00 vs. 3.68), while acceptance rates are uniformly high (0.88 overall) and marginally higher for women (0.89 vs. 0.86). In the public-goods game, the average person contributes 50.6% of the endowment—men contribute slightly more (5.19 vs. 4.94). In the dictator game, men also transfer more (3.86 vs. 3.59). Finally, in the risk task, men choose riskier lotteries, as reflected in the higher variance of selected options (766 vs. 677). Across tasks, gender gaps are modest relative to within-group dispersion.⁶

Country heterogeneity is limited. In the trust game, mean shares sent range from 0.34–0.40 of the endowment—highest in Argentina and Mexico (0.40, 0.39) and lowest in Brazil and Peru (0.34, 0.35)—with similar standard deviations (0.18–0.21). Reciprocity is tightly clustered between 0.40 and 0.44 in all six countries.

⁶Appendix C reports descriptive statistics for each outcome by country and presents balance tests for covariates across treatments.

Table 1: Preferences: Descriptive Statistics

			All	Male	Female
			(1)	(2)	(3)
Trust Game	Trust	Mean	3.67	3.96	3.41
		S.D.	1.93	2.11	1.70
		Obs.	3582	1724	1858
		ICC	0.01	0.02	0.01
	Reciprocity	Mean	0.43	0.45	0.41
		S.D.	0.20	0.21	0.19
		Obs.	3562	1703	1859
		ICC	0.01	0.01	0.01
Ultimatum Game	Offers	Mean	3.83	4.00	3.68
		S.D.	1.46	1.47	1.43
		Obs.	3595	1766	1829
		ICC	0.00	0.00	0.01
	Acceptance	Mean	0.88	0.86	0.89
		S.D.	0.33	0.34	0.32
		Obs.	3634	1711	1923
		ICC	0.00	0.00	0.00
Public Goods Game	Contribution	Mean	5.06	5.19	4.94
		S.D.	2.16	2.28	2.04
		Obs.	7229	3477	3752
		ICC	0.01	0.01	0.01
Dictator Game	Altruism	Mean	3.72	3.86	3.59
		S.D.	1.78	1.88	1.68
		Obs.	3599	1743	1856
		ICC	0.00	0.00	0.01
Risk Aversion Task	Variance	Mean	720.09	766.43	677.14
		S.D.	1042.79	1096.73	988.39
		Obs.	7229	3477	3752
		ICC	0.00	0.00	0.00

Notes. This table presents descriptive statistics for the outcomes of each game and task by the participant's gender. Units of trust, offers, contribution and altruism are measured in experimental dollars, with each participant receiving an initial endowment of 10. Units of reciprocity are taken as a proportion of three times the quantity trusted. Acceptance is an indicator variable. The variance of the risk aversion task is calculated from the lotteries chosen by participants.

Ultimatum offers are likewise concentrated between 0.37 and 0.39 (slightly lower in Peru at 0.37), and acceptance rates are uniformly high, ranging from 0.86 to 0.90 (highest in Colombia). Overall, cross-country dispersion is small relative to within-country variation, implying that the aggregate patterns in Table 1 are not driven by a single country.⁷ Consistent with the literature that pools individual-level trust measures across countries, we estimate pooled

⁷See Appendix Table C.1.

specifications with country fixed effects. Previous studies have used pooled trust analysis to improve precision and assess general patterns when cross-country dispersion is limited (Knack and Keefer, 1997; Zak and Knack, 2001), and more recent work applies individual trust measures in pooled analyses of public policy outcomes (Keefer et al., 2022).

Compared to the literature, our averages fall within established ranges. Trust, at 36–40% of the endowment, is somewhat below the typical 50–70% meta-analytic means (Johnson and Mislin, 2011; Buchan et al., 2008; Croson and Gneezy, 2009). Ultimatum offers (40%) and acceptance rates (85–90%) closely match previous studies (Oosterbeek et al., 2004; Croson and Gneezy, 2009). Public-goods contributions (50%) mirror meta-analytic benchmarks of 40–50% (Zelmer, 2003; Balliet et al., 2011). Dictator transfers (37%) exceed the 20–35% meta-analytic mean but remain within reported ranges (Engel, 2011; Croson and Gneezy, 2009). Risk-taking levels and gender patterns are also consistent with prior findings, where differences across studies largely reflect elicitation methods (Charness and Gneezy, 2012; Filippin and Crosetto, 2016).

4 Empirical Strategy

4.1 Estimation

We estimate ordinary least squares (OLS) regressions of standardized outcomes on treatment indicators, socio-demographic characteristics, and behavioral controls, including country fixed effects. Estimation is carried out separately for each game, player role, and participant gender. Formally, we estimate :

$$Y_{ic} = \alpha + \theta T_{ic} + \beta X_{ic} + \gamma Z_{ic} + \eta Q_{ic} + \phi_c + \varepsilon_{ic} \quad (1)$$

The outcome variable Y_{ic} denotes the standardized decision of participant i in country c as a participant in the trust or the ultimatum games. To account for cross-country differences in behavior and interpretation, we standardize outcomes (trust, reciprocity, and bargaining)

within each country. As discussed above, for reciprocity decisions, we first divide the amount returned by the triple of the amount trusted, yielding the share returned rather than the raw quantity, and then standardize at the country level. Acceptance decisions are not standardized; however, when acceptance is the outcome, we control for the amount offered to the responder.

The treatment variable T_{ic} in equation (1) indicates whether participant i in country c was told their counterpart’s gender. In addition, we estimate equation (2) in which the treatment variables captures whether their counterpart was a woman (T_{ic}^F) or that their counterpart was a man (T_{ic}^M), respectively; the omitted category is a counterpart of unspecified gender (T_{ic}^U). These randomized treatments allow us to test whether learning the counterpart’s gender affects behavior.

$$Y_{ic} = \alpha + \theta_F T_{ic}^F + \theta_M T_{ic}^M + \beta X_{ic} + \gamma Z_{ic} + \eta Q_{ic} + \phi_c + \varepsilon_{ic} \quad (2)$$

Both models include four sets of control variables. First, a vector of socio-demographic controls X_{ic} that includes age at the time of the survey, participant gender, an indicator for secondary education completion, an indicator for current employment status, the log of monthly income in 2019 U.S. dollars (PPP-adjusted), number of children, marital status, an indicator for having their income imputed and an indicator being of the top half of their country’s income distribution.⁸ Second, a vector Z_{ic} which includes measures from additional tasks used to capture pro-sociality and risk preferences: the contribution to a public good in a framed public goods game, and the choice of lottery from a set of six with increasing variance in a standard risk-elicitation task.⁹ Finally, Q_{ic} is the number of attempts the participant required to answer the game’s quiz correctly. This accounts for the participant’s comprehension of the given instructions.

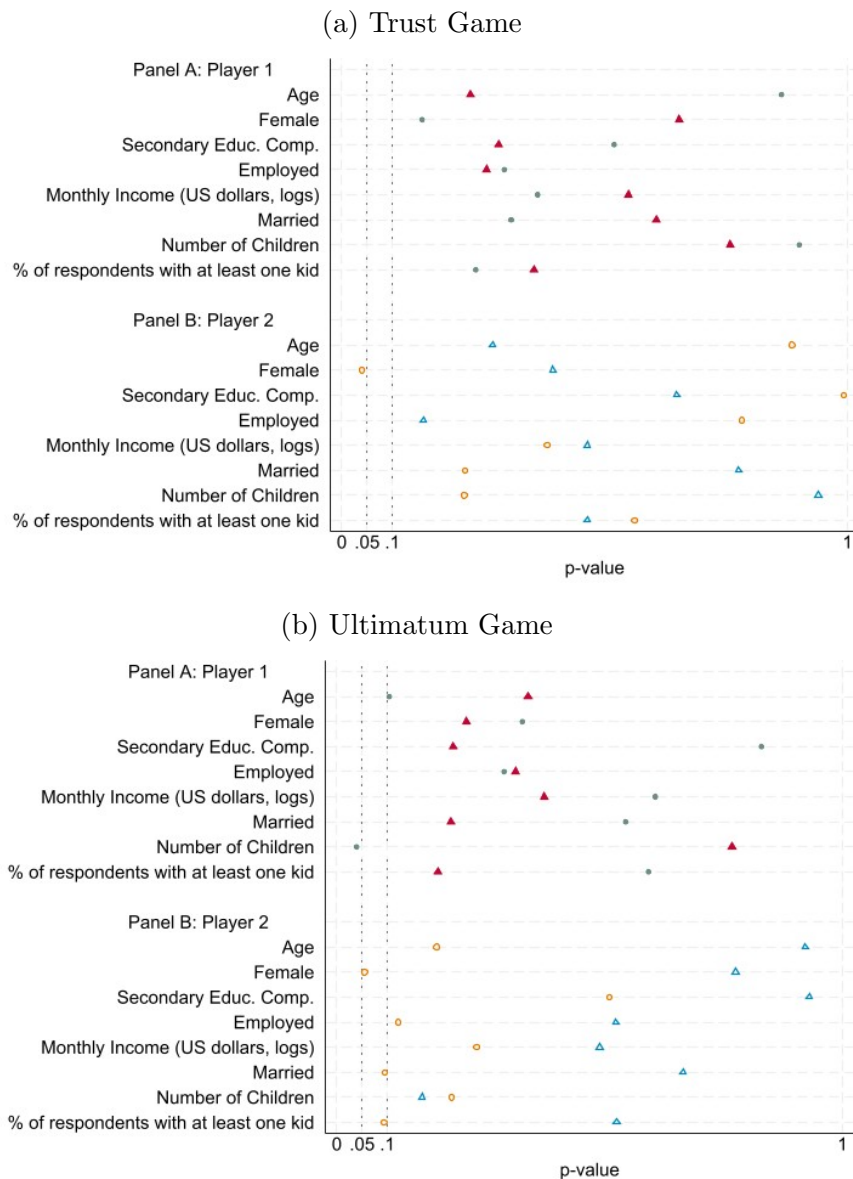
⁸Descriptive statistics are provided, with more disaggregation, in Tables B.4 and B.5.

⁹The framing of the public goods game was randomly assigned across participants. Differences in contributions across framings are small; nonetheless, we include framing fixed effects whenever public goods game contributions are used as covariates.

4.2 Internal Validity

To assess internal validity, we examined whether random assignment produced comparable groups across treatment conditions. We conducted balance checks on a wide set of demographic covariates for both the trust and ultimatum games.

Figure 3: Pre-treatment Balance



Note: This figure reports balance tests for baseline covariates across treatment groups in the Trust Game (Panel a) and the Ultimatum Game (Panel b). Each point represents the p-value from a test comparing the distribution of a covariate across groups. Filled points correspond to Player 1 covariates, while hollow points correspond to Player 2 covariates. Circles indicate comparisons between the Control group and Treatment Group 1 (facing a female counterpart), whereas triangles indicate comparisons between the Control group and Treatment Group 2 (facing a male counterpart). Dashed vertical lines at 0.05 and 0.10 indicate conventional thresholds for statistical significance. Covariates are grouped by player type.

Figure 3 presents balance tests for participants assigned to each of the three treatment arms in the trust game and ultimatum games. Observable characteristics include gender, age, secondary education completion, employment status, logged monthly income, marital status, and number of children, and the percentage of respondents who have children. In 92.2% of all cases, we fail to reject the null of equal means at the 10% level of significance, and 96.9% at the 5% level, indicating that randomization was implemented successfully and that observable characteristics are not systematically related to treatment assignment. We therefore interpret differences in behavior across treatments as causal effects of the experimental manipulation of gender disclosure.

These balance checks reinforce the credibility of our design, showing that differences in trust, reciprocity, and bargaining behavior can be attributed to the randomized treatment conditions rather than to baseline participant characteristics.¹⁰

To address selection concerns, we show that weighted means of covariates in our sample are very similar to those in household surveys for each country. This suggests that our sample is broadly representative of the general population.¹¹

5 Results

5.1 Average effect of Gender Disclosure on Social Interactions

On average, we find no differences in trust or reciprocity in the trust game. Table 2 presents OLS estimates of the coefficient θ in equation (1) under different sets of controls. Panel A shows that disclosing the gender of $P2$ does not significantly affect the amount sent by trustors. Panel B indicates a modest increase in reciprocity when the trustee knows the gender of the trustor; this effect is statistically significant in the most parsimonious specifications, but we cannot reject the null hypothesis of no effect once we control for

¹⁰We cannot reject the null hypothesis of equal means at the 10% level between each treatment (vs. woman, vs. man) and control (unknown) in 59 out of 64 cases.

¹¹Appendix Tables B.4 and B.5 report average covariates across countries relative to household surveys.

behavior in other games. The size of the coefficient is small relative to the within-sample variation, suggesting that disclosure has at best a limited influence on reciprocal behavior.

Table 2: Effects of gender Disclosure (T_{ic}) on Trust, Reciprocity, and Bargaining

		(1)	(2)	(3)	(4)
Trust	T_{ic}	-0.026 [0.035]	-0.019 [0.035]	-0.026 [0.034]	-0.019 [0.034]
	Observations	3582	3582	3582	3582
Reciprocity	T_{ic}	0.041 [0.035]	0.039 [0.035]	0.030 [0.035]	0.028 [0.035]
	Observations	3562	3562	3562	3562
Offers	T_{ic}	0.015 [0.035]	0.012 [0.035]	0.004 [0.034]	0.001 [0.034]
	Observations	3595	3595	3595	3595
Acceptance	T_{ic}	-0.009 [0.010]	-0.009 [0.010]	-0.008 [0.010]	-0.008 [0.010]
	Observations	3634	3634	3634	3634
Controls	Socio-demographic	No	Yes	No	Yes
	Other games	No	No	Yes	Yes

Notes. This table presents ordinary least squares estimations of the effect of gender disclosure on trust, reciprocity, offers, and acceptance. Units of trust and offers are standardized within each country. Units of reciprocity are taken as a proportion of three times the quantity trusted; these were later standardized at the country level. Models with acceptance as an outcome include how much players were offered as a control. Socio-demographic controls include the players' age, gender, employment situation, log of monthly income adjusted for PPP in 2019, marital status, number of children, and dummies for high school completion, having an imputed income, and being a top 50 percentile earner. Other games include the players' contribution in the public goods game and their risk-aversion lottery choice. Regressions include country fixed effects and the number of tries necessary to pass the game's quiz. Standard errors are displayed in squared brackets. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Results from the ultimatum game also show no aggregate effects of gender disclosure. Offers made by proposers ($P1$) and the likelihood of acceptance by responders ($P2$) are unaffected by whether counterpart gender is disclosed. The point estimates are very close to zero across specifications, reinforcing the result that disclosure alone does not systematically shape bargaining outcomes.

Taken together, these findings indicate that our minimal identity cue — the textual disclo-

sure of counterpart gender—is not sufficient to alter aggregate behavior in either cooperative (trust) or bargaining (ultimatum) settings. This absence of an average effect can be interpreted in at least two ways. One possibility is that participants do not view written gender cues as meaningful information in anonymous online interactions. Another is that responses differ by gender and role in ways that offset each other in the aggregate. In either case, the results suggest that gendered expectations are not strong enough, on their own, to influence behavior when conveyed in such a minimal form.

A corollary is that the effects of gender in economic interaction may be context-dependent. They are likely to emerge more strongly in environments where gender cues are either more salient (e.g., visual, face-to-face, or repeated interactions) or where institutional or cultural frames reinforce stereotypes. Our design, by abstracting from these richer cues, provides a conservative estimate of the influence of gender disclosure. The null effects reported here thus highlight the importance of moving beyond average treatment effects to explore heterogeneity across participant–counterpart pairings, which we turn to in the next section.

5.2 Do Men and Women Respond Differently to Gender Cues?

Our second empirical question asks whether men and women respond differently once the gender of their counterpart is disclosed. While the previous section showed that disclosure has no average effect, this section disaggregates the analysis by participant-counterpart gender pairings. This allows us to examine whether strategic behavior in trust, reciprocity, and bargaining varies systematically depending on the parties interacting.

Table 3 summarizes these heterogeneous effects. The estimates show that the gender of the counterpart conditions trust behavior, but in opposite directions for men and women. Male trustors increase transfers when paired with female trustees, whereas female trustors reduce transfers when paired with male trustees. The coefficient for female-to-male pairings is negative and statistically significant, indicating that women send less to male trustees than to female or unknown counterparts. For men, the effects are positive in sign but

Table 3: Gender Disclosure Heterogeneous Effects

		Trust Game		Ultimatum Game	
		Trust	Reciprocity	Offers	Acceptance
		(1)	(2)	(3)	(4)
All	vs. female	0.017 [0.039]	-0.003 [0.040]	0.037 [0.039]	-0.014 [0.011]
	vs. male	-0.055 [0.039]	0.058 [0.040]	-0.034 [0.039]	-0.002 [0.011]
	Female	-0.234*** [0.033]	-0.183*** [0.035]	-0.164*** [0.034]	0.020** [0.010]
	Observations	3582	3562	3595	3634
	p-value of equal coeffs.	0.062	0.134	0.071	0.288
Male	vs. female	0.042 [0.062]	-0.006 [0.061]	0.126** [0.057]	0.010 [0.017]
	vs. male	-0.034 [0.062]	0.082 [0.061]	0.040 [0.057]	0.027 [0.017]
	Observations	1724	1703	1766	1711
	p-value of equal coeffs.	0.225	0.145	0.128	0.315
Female	vs. female	-0.006 [0.049]	0.000 [0.054]	-0.041 [0.054]	-0.037** [0.015]
	vs. male	-0.075 [0.049]	0.036 [0.053]	-0.103* [0.054]	-0.028* [0.015]
	Observations	1858	1859	1829	1923
	p-value of equal coeffs.	0.156	0.520	0.249	0.566
Controls	Socio-demographic	Yes	Yes	Yes	Yes
	Other games	Yes	Yes	Yes	Yes

Notes. This table presents ordinary least squares estimations of the effect of playing versus a female or male on trust, reciprocity, offers, and acceptance, as well as heterogeneous effects by the participant's own gender. Units of trust and offers are standardized at the country level. Units of reciprocity are taken as a proportion of three times the quantity trusted; these were later standardized at the country level. Models with acceptance as an outcome include how much players were offered as a control. Socio-demographic controls include the players' age, gender, employment situation, log of monthly income adjusted for PPP in 2019, marital status, number of children, and dummies for high school completion, having an imputed income, and being a top 50 percentile earner. Other games include the players' contributions in the public goods game and their risk-averse choices in the lottery task. Regressions include country fixed effects and the number of tries necessary to pass the game's quiz. Standard errors are displayed in squared brackets. * p<0.10, ** p<0.05, *** p<0.01.

smaller and imprecisely estimated. These patterns suggest that counterpart gender influences trust decisions asymmetrically, with men directing more trust toward women and women withholding trust from men.

Trustees also adjust their behavior according to the counterpart's gender, and again, the

pattern differs depending on the trustee’s own gender. Male trustees reciprocate somewhat more when the trustor is male, though the effect is modest and not statistically significant. Female trustees, in contrast, return substantially more to male trustors: the coefficient for female-to-male reciprocity is large, positive, and statistically significant at the 1% level. In substantive terms, this corresponds to roughly a 13% increase in the share returned relative to other conditions. These results suggest that women reward male trust more generously, possibly because they perceive male trust as a stronger indicator of confidence or willingness to cooperate.

Turning to the ultimatum game, proposers’ offers also show gender-contingent patterns. Male proposers offer larger shares when paired with female responders, and the regression coefficient for male-to-female offers is positive and statistically significant. Female proposers, by contrast, do not systematically increase their offers to men; if anything, their offers are slightly lower to male responders. These results suggest that men increase their bargaining generosity when facing women, while women do not mirror this behavior toward men.

Acceptance rates in the ultimatum game also vary with gender. Female responders are less likely to accept offers from female proposers, while male responders are somewhat more likely to accept offers from male proposers. Although these coefficients are smaller and less precisely estimated, they suggest that gender identity shapes perceptions of fairness and willingness to reject offers, even when monetary payoffs are at stake.

Disclosing counterpart gender does not alter behavior in the aggregate but generates clear and systematic heterogeneity by participant-counterpart pairing. In both trust and ultimatum games, men and women respond to counterpart gender in opposite directions: men extend more trust and generosity toward women, while women send less to men but reward male trust more when reciprocating. These asymmetries suggest that gendered dynamics in strategic interaction emerge only once behavior is disaggregated by role and counterpart gender. They also help explain why aggregate effects appear null: offsetting responses across groups may conceal systematic patterns at the pairwise level.

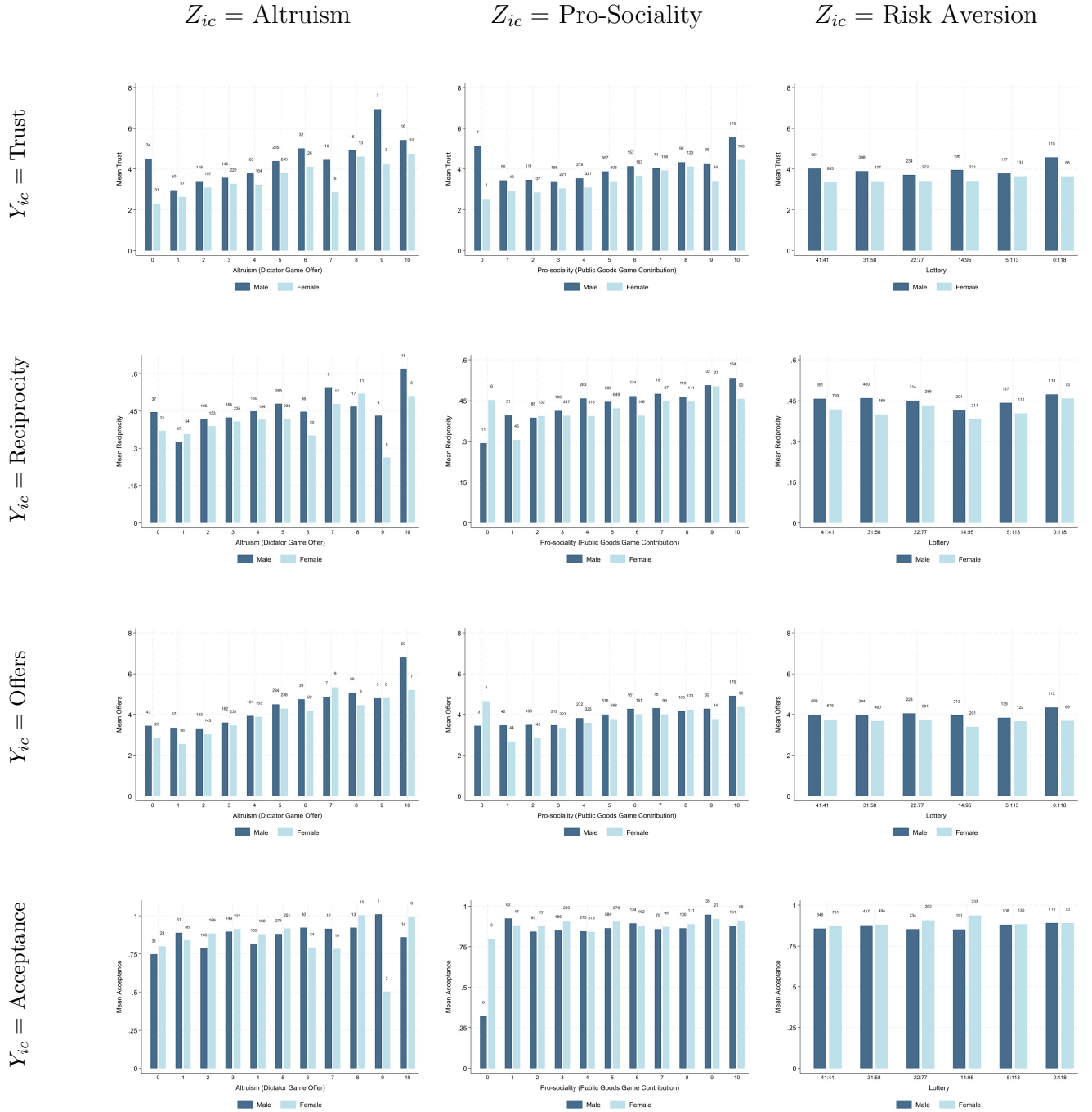
5.3 Gender Effects Across Other Domains of Preferences

Before examining the potential impact of other preferences on our result, recall the other associations with gender and preferences identified in our study. It is important to note that men and women differ systematically in these underlying preference measures. On average, participants in our sample gave 3.72 tokens in the Dictator Game and contributed 5.06 tokens in the Public Goods Game. Men were slightly more altruistic and cooperative than women, giving 3.86 vs. 3.59 tokens in the Dictator Game and contributing 5.19 vs. 4.94 in the Public Goods Game. These differences are statistically significant and consistent with prior meta-analyses, which have shown modest but persistent gender gaps in generosity and cooperation (Croson and Gneezy, 2009; Balliet et al., 2011). In contrast, risk-taking patterns were more variable across individuals and countries, and we treat the lottery choice as a proxy for individual attitudes toward risk, rather than as a social preference per se.

We begin this section with the premise that these dimensions—altruism, cooperation, and risk attitudes—can partly explain the gendered patterns in trust and bargaining. A trustor’s willingness to send tokens, or a proposer’s generosity in the ultimatum game, may be driven by a general disposition toward sharing (captured in the Dictator Game) or toward contributing to collective welfare (captured in the Public Goods Game). Likewise, risk attitudes may influence how individuals value uncertain social exchanges: trusting a counterpart or making a generous offer both involve risk regarding the partner’s response (Eckel and Grossman, 2008; Charness and Gneezy, 2012)). Therefore, if men are on average less risk-averse, their higher trust and offers could, in principle, stem from that factor rather than from social expectations

Figure 4 relates directly to our third empirical question, which asks whether gender differences in trust and bargaining behavior are associated with underlying social preferences.

Figure 4: Social Preferences and Main Outcomes



Note: This figure presents the relation between trust, reciprocity, offers, and acceptance with altruism, pro-sociality, and lottery choice by gender. All dependent variables are residualized and re-centered for each gender using the model: $Y_{ic} = \alpha + \beta X_{ic} + \eta Q_{ic} + \phi_c + \varepsilon_{ic}$. Where Y_{ic} is trust, reciprocity, offers and acceptance of participant i in country c . X_{ic} are the following demographic controls: age at the time of the survey, participant gender, an indicator for secondary education completion, an indicator for current employment status, the log of monthly income in 2019 U.S. dollars (PPP-adjusted), number of children, marital status, an indicator for having their income imputed and an indicator being of the top half of their country's income distribution. Q_{ic} is the number of tries required to pass the game's quiz. Finally, ϕ_c is a country fixed effect. All units are experimental dollars (from an endowment of 10) except for reciprocity, which is presented as a proportion of three times the trusted amount. The number of observations is displayed over each bar

The figure plots residualized outcomes from the trust and ultimatum games against three preference dimensions: altruism (dictator game transfers), prosociality (public goods contributions), and risk attitudes (lottery choices).¹² Each row of the graph matrix displays a different main outcome, and each column shows one of the three preference dimensions. For each value of altruism, pro-sociality, and risk aversion, the residualized and re-centered averages of trust, reciprocity, offers, and acceptance are plotted separately by gender.¹³ Two substantive patterns emerge. First, altruism and pro-sociality are positively associated with trust, reciprocity, offers, and acceptance, while risk aversion plays only a minor role. The upward slopes in the first two columns of figures indicate that participants in the dictator and public goods games who are more generous are also systematically more cooperative and fair-minded in the trust and ultimatum games. This confirms that the auxiliary tasks capture meaningful variation in cooperative preferences.¹⁴ Second, the gender gaps documented earlier persist even after accounting for individual preference measures. Men consistently exhibit higher levels of trust, reciprocity, and generosity in offers than women, despite having comparable levels of altruism and prosociality, while women remain more selective in their responses. Thus, compositional differences in underlying preferences do not account for gender differences in trust and bargaining; instead, these gaps appear to reflect systematic behavioral asymmetries that operate conditional on those preferences.

¹²All dependent variables are residualized and re-centered for each gender using the model: $Y_{ic} = \alpha + \beta X_{ic} + \eta Q_{ic} + \phi_c + \varepsilon_{ic}$, where Y_{ic} is trust, reciprocity, offers, or acceptance of participant i in country c ; X_{ic} are demographic controls (age at the time of the survey, participant gender, an indicator for secondary education completion, an indicator for current employment, log monthly income in 2019 PPP-adjusted U.S. dollars, number of children, marital status, an indicator for imputed income, and an indicator for being in the top half of the country's income distribution); Q_{ic} is the number of attempts required to pass the game quiz; and ϕ_c is a country fixed effect. All outcomes and preference measures are denominated in experimental dollars (from an endowment of 10), except reciprocity, which is expressed as a proportion of three times the trusted amount, and risk attitudes, which are measured through a discrete lottery choice. Altruism refers to the amount assigned from player 1 to player 2 in the dictator game, pro-sociality is the contribution in the public goods game, and risk attitudes are measured through a 50/50 lottery choice with varying variances.

¹³Appendix Figure D.1 is analogous to Figure 4, however, outcomes are raw, not residualized and re-centered

¹⁴Appendix Table D.4 shows correlations within our main outcomes. In general, larger offers are positively correlated with trust and reciprocity. Acceptance is negatively correlated to trust for males and positively correlated for females. Reciprocity and acceptance do not correlate.

Controlling for altruism, pro-sociality, and risk aversion, therefore, strengthens identification. Methodologically, it rules out omitted-variable bias stemming from heterogeneous preference distributions across treatment arms. Substantively, it demonstrates that gendered strategic behavior is not reducible to baseline generosity or risk-taking, but arises from expectations and norms triggered by interaction with specific counterparts.

The implications are twofold. First, the persistence of gender differences conditional on preferences suggests that these gaps reflect social norms or expectations tied to interaction context rather than intrinsic differences in cooperative or risk preferences. Second, the fact that altruism and pro-sociality matter strongly for both genders highlights the role of preference heterogeneity as a source of variation in economic interactions. This implies that interventions aiming to foster cooperation or trust may be more effective when they target preference formation or salience, but they should also account for systematic gendered patterns in how those preferences translate into behavior. More broadly, our findings underscore that understanding gendered behavior in markets and institutions requires moving beyond average treatment effects to consider the interaction between individual preferences, gender, and the strategic context of decision-making.

6 Conclusion

Using canonical trust and ultimatum games in an online experiment with over 7,000 participants across six Latin American countries, we demonstrate how minimal information about a counterpart’s gender can shape strategic choices. The design provides a unique opportunity to examine gendered dynamics in a large and diverse population. While average treatment effects are small, disaggregated results show asymmetries in strategic responses. Men exhibit greater willingness to extend trust and generosity across contexts, whereas women’s decisions are more contingent on the counterpart’s identity and the informational setting. These patterns suggest that social context—rather than inherent preference differences—drives much

of the observed heterogeneity in cooperative and bargaining behavior.

Methodologically, our design isolates the causal role of counterpart gender through a low-salience textual cue, avoiding the visual or hierarchical signals that typically accompany gender perception. The patterns that emerge under such minimalist conditions thus represent a conservative test of how expectations and behavioral scripts are triggered. Richer environments or repeated interactions may amplify or reshape these dynamics—an open question for future research.

Although the measured effects are modest, their potential significance should not be underestimated. Economic and social life consists of billions of gendered interactions—purchases, negotiations, evaluations, and collaborations—that accumulate over time. Even small asymmetries, repeated across contexts, can compound into meaningful disparities in opportunities, earnings, and social capital.

The implications extend beyond the laboratory. In workplaces, teams, and collective decision-making environments, subtle gendered expectations can affect both efficiency and fairness. Levels of trust, reciprocity, and acceptance can vary with the gender composition of groups or leadership structures. Recognizing these dynamics can inform institutional and organizational design: diversity in roles and visibility may not only promote equity but also foster cooperation by balancing asymmetric expectations about behavior.

Gendered behavior in Latin America reflects both universal strategic patterns and region-specific norms. By experimentally manipulating gender disclosure in a large, heterogeneous sample, we identify when and how gender matters in economic interaction and provide a methodological template for future studies in other contexts. Ultimately, our findings underscore that gender operates less as a fixed trait than as a contextual signal that interacts with norms of reciprocity and fairness. Gendered behavior is conditional, context-dependent, and shaped by mutual expectations—a perspective that calls for incorporating social context into models of strategic interaction and exploring how institutions can attenuate or amplify these asymmetries.

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Online Appendix

A Literature Review

Table A.1: Previous Research on Trust Games

Study	Experimental Details	Trust	Trustworthiness	Controls Included?
Van den Akker et al. (2020)	Meta-analysis of trust and gift-exchange games	$M > F$	$M > F$	Yes
Takahashi, Shen, & Ogawa (2020)	Meta-analysis of 162 replications of trust games	$M > F$	$M < F$	Yes
Haselhuhn et al. (2015)	US participants, response after previous trust violations	$M < F$	$M = F$	Yes
Dittrich (2015)	Large-scale, German representative sample	$M > F$	$M > F$	Yes
Haucap, & Müller (2014)	Economics and law students	$M > F$	$M > F$	Yes
Derks, Lee, & Krabbendam (2014)	Field experiments with adolescent participants	$M > F$	$M = F$	Yes
Chaudhuri, & Sbai (2013)	Stage game played repeatedly with random rematching of players	$M = F$	$M < F$	Yes
Buchan, Croson, & Solnick (2011)	US participants, playing investment game	$M > F$	$M < F$	Yes
Rau (2011)	Meta-analysis of trust and gift-exchange games	$M > F$	$M < F$	Yes

Table A.2: Global Preference Survey

Country	Trust			Positive Reciprocity			Negative Reciprocity		
	Male	Female	Pvalues	Male	Female	Pvalues	Male	Female	Pvalues
Argentina	-0.260	-0.234	0.699	0.138	0.227	0.102	-0.077	-0.332	0.000
Chile	-0.010	-0.108	0.138	0.028	0.099	0.259	-0.115	-0.268	0.018
Colombia	0.003	0.040	0.610	0.072	0.215	0.033	-0.289	-0.424	0.060
Mexico	-0.379	-0.424	0.479	-1.091	-1.139	0.589	-0.077	-0.233	0.012
Peru	-0.080	-0.121	0.501	-0.079	-0.072	0.908	0.024	-0.006	0.626
Total	-0.159	-0.158	0.980	-0.242	-0.086	0.000	-0.099	-0.261	0.000

Note: This table uses data from the Global Preference Survey showing the average level of trust, positive reciprocity and negative reciprocity by country in our sample and gender, where zero is the global average. Next to each set of means are the p-values testing for their equality.

Table A.3: Latinobarometro

Country	Male	Female	P-values
	(1)	(2)	(3)
Argentina	0.226	0.160	0.004
Brazil	0.037	0.045	0.480
Chile	0.155	0.159	0.856
Colombia	0.205	0.213	0.745
Mexico	0.233	0.152	0.001
Peru	0.143	0.099	0.023
Overall	0.166	0.138	0.002

Notes. This table presents averages by country and gender for answering affirmatively to the question "Generally speaking, would you say that you can trust most people, or that you can never be too careful in dealing with others?". Column (3) displays p-values for testing for equal means between men and women.

B Data

B.1 Fieldwork

Fieldwork was carried out in Argentina, Brazil, Chile, Colombia, Mexico and Peru, using sample matching to draw a sample from a panel of respondents provided by Netquest, a commercial panel provider.

LAPOP programmed the survey instrument in the Qualtrics platform and designed each sample based on IPUMS census information. Netquest sent out batches of invites, relaying back to LAPOP which panelists had responded. LAPOP then re-matched panelists to unfilled target sample slots. This cycle was repeated several times, until the target sample was approximately filled. Up to 20 matches were sent out at the same time in one “batch”. The highest number of matches performed was in Brazil, where 143 matches were needed to achieve the desired sample size.

At the conclusion of fieldwork, responses were weighted to population using post-stratification weights.

B.2 Background Data

An agreement with LAPOP enabled us to access the profiles of potential respondents. LAPOP was in charge of designing the sample and deploy the online survey questionnaire in the six Latin American countries. From the Netquest panel, LAPOP drew random target samples, stratified by region and urban/rural status where available, from census microdata from the Integrated Public Use Microdata Series (IPUMS). LAPOP then matched Netquest panelists to each member of the target sample to achieve a matched sample. This process was iteratively repeated until more than 90% of the target records had received a match; the resulting sample was then post-stratified on several characteristics to approximate the census population more accurately.

B.3 Survey Incentives

Respondents are rewarded with Experimental Dollars, in each country’s local currency, which can be exchanged for rewards. These consisted of USD500 worth of Netquest currency “Korus”. Participants earned experimental points for all experimental games, reflecting their own decisions and those of other participants. A lottery was carried out after fieldwork in each country, with the probability of winning proportional to each respondent’s winnings across all games.

B.4 Experimental Instructions and Comprehension Questions

Participants were presented with the following instructions before each experimental game. All participants had to pass comprehension quizzes to proceed, ensuring they understood the rules and incentive structures of each game. Participants earned Artificial Dollars (EX), which increased their chances of winning a prize.

Trust Game (TG)

Instructions (Player 1 – Trustor)

You will receive 10 experimental points. You may choose to send any amount between 0 and 10 to another participant. Any amount you send will be tripled and passed on to the other person. That person will then decide how much to return to you. You will retain the amount you did not send, plus any amount returned to you.

Comprehension Questions

1. You decide to send 4 points. How many points will the other person receive?
a) 4 b) 8 c) 12 d) 16 **Correct: c**
2. The other person receives 12 points and returns 6 to you. What is your final amount?
a) 6 b) 10 c) 12 d) 16 **Correct: b**

Instructions (Player 2 – Trustee)

You will receive a tripled amount based on what the other participant sends. For example, if they send 4 points, you receive 12. You then decide how many points to return. You keep the rest.

Comprehension Question

1. You receive 12 points. You return 6. How many do you keep?
a) 6 b) 12 c) 18 d) 4 **Correct: a**

Ultimatum Game (UG)

Instructions (Player 1 – Proposer)

You have 10 experimental points to divide with another person. You decide how much to offer. The other person can accept or reject. If they accept, the points are divided. If they reject, neither of you receives anything.

Comprehension Questions

1. You offer 3 points and keep 7. The other person accepts. What is your final amount?
a) 3 b) 7 c) 10 d) 0 **Correct: b**
2. You offer 3 points. The other person rejects. What is your final amount?
a) 3 b) 7 c) 0 d) 10 **Correct: c**

Instructions (Player 2 – Responder)

You will receive a proposed division of 10 points. If you accept, the split is implemented. If you reject, both get nothing.

Comprehension Questions

1. You are offered 2 points. You accept. How many do you receive?

a) 0 b) 2 c) 5 d) 10 **Correct: b**

2. You are offered 2 points. You reject. How many do you receive?

a) 2 b) 8 c) 0 d) 10 **Correct: c**

Dictator Game (DG)

Instructions

You have 10 points. You may send any amount to another participant. That person must accept your decision. You keep the rest.

Comprehension Question

1. You send 6 points. How many do you keep?

a) 6 b) 4 c) 10 d) 0 **Correct: b**

Public Goods Game (PGG)

Instructions

You are in a group of 4. Each receives 10 points. You decide how many to contribute to a public pot. The total contribution is doubled and split equally among the group.

Comprehension Questions

1. If all contribute 5 points, how many are in the public pot?

a) 20 b) 40 c) 30 d) 10 **Correct: b**

2. The total pot is 40. How much does each receive?

a) 10 b) 5 c) 20 d) 40 **Correct: a**

Risk Aversion Task

Instructions

Choose one of six lotteries. Each has a 50/50 chance of two outcomes. Higher potential rewards come with higher risks.

Example Options:

- A: 41 or 41
- B: 31 or 58
- C: 22 or 77
- D: 14 or 95
- E: 5 or 113
- F: 6 or 118

Comprehension Question

1. Which lottery has the highest risk?
a) A b) C c) F d) B **Correct: c**

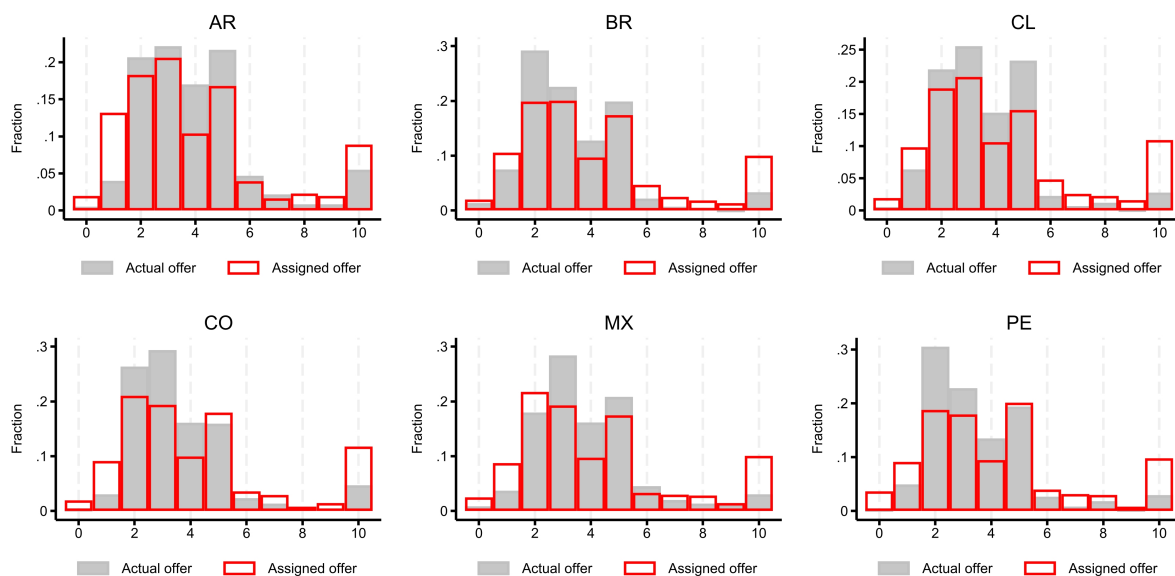
B.5 Matching

In the Trust and Ultimatum games, players' actions were fictitious. Actions observed by players were randomly selected from a previously implemented Trust Game and Ultimatum Game. This was taken into account when matching players. That is, a player 1 who was told that they were playing with, say, a woman, was matched with a player 2 who is also a woman. Figures B.1 and B.2 show that assigned offers (replies) in the Trust Game fairly resemble the distribution of actual offers (replies).

In the Dictator game, only player 1 has played the game. Still, the other half of respondents who did not play the game were matched with a player 1. In the Public Goods game, a one-to-many matching process was involved.

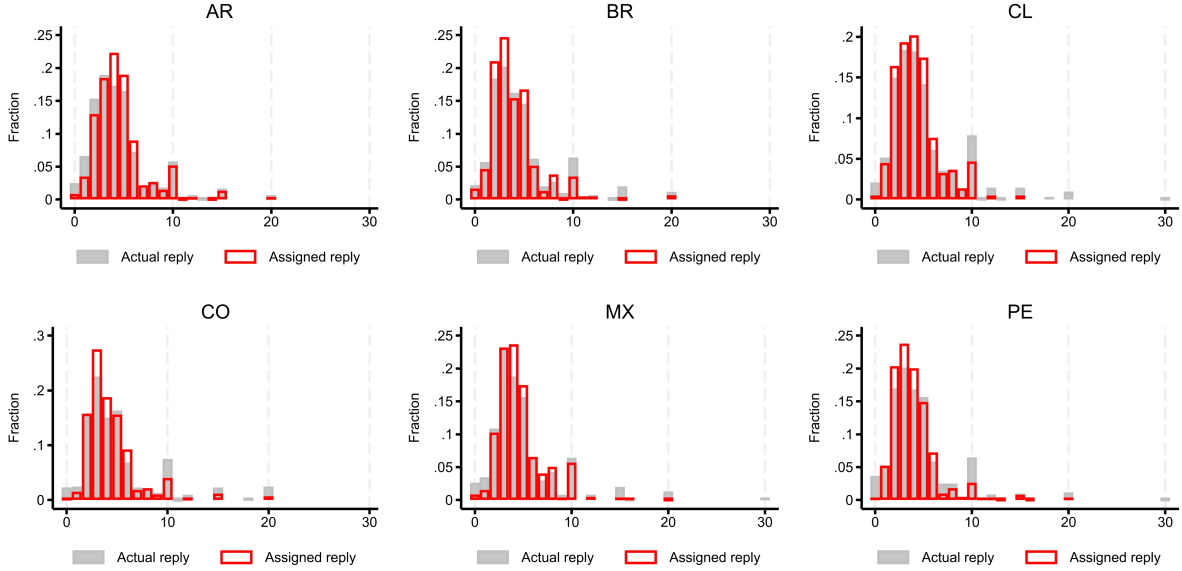
After matching players for each game, we calculated the total payoffs for all participants by determining how many "Korus" players 1 and 2 earned in each game. We then sent an email to all players informing them of the number of "Korus" they had collected in the survey.

Figure B.1: Distribution of Actual and Assigned Trusted Quantities by Country



Note: This figure presents the distribution of actual trusted quantities by player 1 versus the distribution of received quantities by player 2 across countries.

Figure B.2: Distribution of Actual and Assigned Reciprocated Quantities by Country



Note: This figure presents the distribution of actual reciprocated quantities by player 2 versus the distribution of received reciprocated quantities by player 1 across countries.

B.6 Additional Information on the Survey

Not all individuals who started the survey completed it. Individuals can stop responding voluntarily or be denied to continue with the survey if they do not correctly respond (in up to three attempts) to the practice exercises before each experimental game. Table B.1 presents sequentially the number of individuals who completed each part of the survey. Our main sample of analysis are the 7,229 individuals that completed the entire survey (70.6% of those who completed the first game). It should be noted that the completion of the entire survey, compared to those who completed only the trust game, is balanced across treatment status (p -values 0.85 and 0.26)—depending on the cluster level.

Table B.1: Completion Rate in the Survey

# individuals that completed:	
TG	10,242
TG+UG	8,899
TG+UG+PG	7,431
TG+UG+PG+DG	7,431
TG+UG+PG+DG+RG	7,370
Entire Survey	7,229

Note: This table shows the number of participants who completed each step of the survey.

Time to respond to the full survey varied between countries, but consistently taking significantly more than 30 minutes. The median length of interview (LOI) is reported in minutes.

The incidence rate is the percentage of respondents who enter the survey, qualify, and pass the comprehension tests for game participation.

Table B.2: Survey Time

Country	Median LOI (minutes)
Argentina	32.4
Brazil	36.4
Chile	34.6
Colombia	37.0
Mexico	34.0
Peru	36.9

Note: This table shows the median time needed to complete the survey by country.

B.7 Sample

Table B.3: Gender Counterpart in Trust Game and Ultimatum Game

		Ultimatum Game			Total
		vs. unknown	vs. woman	vs. man	
Trust Game	vs. unknown	778	796	818	2,392
	vs. woman	767	791	848	2,406
	vs. man	827	831	773	2,431
Total		2,372	2,418	2,439	7,229

Note: This Table shows the distribution of the number of participants across groups of treatment.

Table B.4: Sample Descriptive Statistics

	Mean	Weighted Mean (age-gender-education)	Weighted Mean (Household Surveys)
	(1)	(2)	(3)
Age	40.03	40.07	39.97
Female	0.52	0.52	0.52
Secondary Educ. Comp.	0.83	0.79	0.51
Married	0.58	0.60	0.57
Number of Children	2.00	2.05	1.44
% of respondents with at least one kid	0.62	0.64	0.33
Employed	0.63	0.62	0.69

Notes. This table shows the average pre-treatment characteristics of all individuals who completed the entire survey. Column (1) shows the unweighted average and column (2) shows the weighted average of individuals from our survey. Column (3) shows the average characteristics of individuals from Household surveys. For the purpose of comparing levels of income across countries, we use estimates of monthly income converted to US dollars using Purchasing Power Parity (PPP) conversion factor for Private Consumption 2019 from the World Bank.

Table B.5: Sample Descriptive Statistics by Country

		Mean	Weighted Mean (age-gender-education)	Weighted Mean (Household Surveys)		Mean	Weighted Mean (age-gender-education)	Weighted Mean (Household Surveys)
		(1)	(2)	(3)		(4)	(5)	(6)
Age	Argentina	42.29	42.47	42.09	Colombia	38.91	38.77	39.05
Female		0.51	0.52	0.52		0.54	0.53	0.52
Secondary Educ. Comp.		0.82	0.72	0.65		0.75	0.65	0.61
Married		0.55	0.58	0.56		0.60	0.60	0.57
Number of Children		2.31	2.43	1.48		1.91	1.96	1.41
% of respondents with at least one kid		0.61	0.66	0.32		0.66	0.68	0.29
Employed		0.65	0.61	0.63		0.68	0.67	0.70
Age	Brasil	40.11	39.94	39.94	Mexico	39.72	40.02	39.26
Female		0.50	0.52	0.53		0.54	0.52	0.53
Secondary Educ. Comp.		0.82	0.81	0.31		0.83	0.75	0.44
Married		0.59	0.60	0.51		0.62	0.67	0.61
Number of Children		1.77	1.78	1.32		2.00	2.07	1.47
% of respondents with at least one kid		0.56	0.56	0.26		0.66	0.70	0.36
Employed		0.62	0.62	0.65		0.56	0.54	0.72
Age	Chile	41.68	41.17	41.57	Peru	37.51	38.07	41.04
Female		0.52	0.52	0.53		0.51	0.51	0.51
Secondary Educ. Comp.		0.81	0.81	0.71		0.98	0.97	0.71
Married		0.61	0.61	0.52		0.53	0.53	0.55
Number of Children		1.97	1.98	1.38		2.02	2.05	1.53
% of respondents with at least one kid		0.65	0.64	0.38		0.60	0.62	0.41
Employed		0.61	0.61	0.63		0.64	0.64	0.74

Notes. Each panel shows the average pre-treatment characteristics of individuals who completed the entire survey for each country. All Panels show unweighted and weighted average of individuals who completed our survey in columns (1) and (2) and (5) and (6) respectively. Columns (3) and (6) shows the average characteristics of individuals from Household Surveys. For the purpose of comparing levels of income across countries, we use estimates of monthly income converted to US dollars using Purchasing Power Parity (PPP) conversion factor for Private Consumption 2019 from the World Bank.

C Descriptive Statistics

Table C.1: Social Preferences: Descriptive Statistics by Country

			Argentina	Brazil	Chile	Colombia	Mexico	Peru
			(1)	(2)	(3)	(4)	(5)	(6)
Trust Game	Trust	Mean	4.01	3.40	3.61	3.62	3.87	3.54
		S.D.	2.10	1.89	1.81	1.92	1.90	1.88
		Obs.	600	603	579	596	595	609
	Reciprocity	Mean	0.44	0.42	0.44	0.44	0.44	0.40
		S.D.	0.21	0.21	0.20	0.20	0.20	0.19
		Obs.	595	586	609	601	592	579
Ultimatum Game	Offers	Mean	3.92	3.80	3.93	3.81	3.87	3.67
		S.D.	1.58	1.52	1.47	1.39	1.32	1.44
		Obs.	602	591	590	599	604	609
	Acceptance	Mean	0.88	0.86	0.87	0.90	0.87	0.88
		S.D.	0.33	0.34	0.34	0.30	0.34	0.32
		Obs.	605	610	610	610	598	601
Public Goods Game	Contribution	Mean	5.13	5.23	5.11	5.02	5.15	4.75
		S.D.	2.22	2.23	2.18	2.14	2.04	2.14
		Obs.	1207	1201	1200	1209	1202	1210
Dictator Game	Altruism	Mean	3.71	3.74	3.76	3.72	3.78	3.60
		S.D.	1.94	1.77	1.81	1.75	1.70	1.72
		Obs.	603	597	604	598	600	597
Risk Aversion Task	Variance	Mean	690.22	725.99	725.00	692.22	713.24	773.78
		S.D.	1030.89	1061.95	1068.73	986.81	1050.94	1055.49
		Obs.	1207	1201	1200	1209	1202	1210

Notes. This table presents descriptive statistics for the outcomes of each game and task by the participant's country. Units of trust, offers, contribution and altruism are measured in experimental dollars, with each participant receiving an initial endowment of 10. Units of reciprocity are taken as a proportion of three times the quantity trusted. Acceptance is an indicator variable. The variance of the risk aversion task is calculated from the lotteries chosen by participants.

D Robustness

Table D.1: Robustness: Conditional on Altruism

		Trust Game		Ultimatum Game	
		Trust	Reciprocity	Offers	Acceptance
		(1)	(2)	(3)	(4)
All	vs. female	−0.002 [0.055]	0.105* [0.057]	−0.012 [0.054]	0.010 [0.016]
	vs. male	−0.066 [0.055]	0.122** [0.058]	−0.064 [0.054]	−0.008 [0.016]
	Female	−0.269*** [0.047]	−0.170*** [0.050]	−0.142*** [0.047]	0.028** [0.014]
	Observations	1803	1759	1798	1801
	p-value of equal coeffs.	0.238	0.762	0.331	0.247
Male	vs. female	0.060 [0.090]	0.089 [0.089]	0.065 [0.081]	0.036 [0.025]
	vs. male	0.012 [0.089]	0.157* [0.090]	−0.012 [0.079]	0.020 [0.024]
	Observations	871	851	901	842
	p-value of equal coeffs.	0.583	0.447	0.315	0.530
Female	vs. female	−0.057 [0.067]	0.134* [0.075]	−0.065 [0.074]	−0.014 [0.020]
	vs. male	−0.134** [0.068]	0.103 [0.075]	−0.124* [0.075]	−0.035* [0.021]
	Observations	932	908	897	959
	p-value of equal coeffs.	0.236	0.679	0.434	0.314
Controls	Socio-demographic	Yes	Yes	Yes	Yes
	Other games	Yes	Yes	Yes	Yes

Notes. This table presents ordinary least square estimations of the effect playing versus a female or male on trust, reciprocity, offers and acceptance as well as heterogeneous effects by the participant's own gender controlling for their dictator game offer (altruism). Units of reciprocity are taken as a proportion of three times the quantity trusted, these were later standardized at the country level. Models with acceptance as outcome include how much players were offered as a control. Socio-demographic controls include the players' age, gender, employment situation, log of monthly income adjusted for PPP in 2019, marital status, number of children and dummies for high school completion, having an imputed income and being a top 50 percentile earner. Regressions include country fixed effects and the number of tries necessary to pass the game's quiz. Standard errors are displayed in squared brackets. * p<0.10, ** p<0.05, *** p<0.01.

Table D.2: Robustness: Country-Week Fixed Effects

		Trust Game		Ultimatum Game	
		Trust	Reciprocity	Offers	Acceptance
		(1)	(2)	(3)	(4)
All	vs. female	0.019 [0.039]	-0.005 [0.041]	0.042 [0.039]	-0.014 [0.011]
	vs. male	-0.056 [0.039]	0.054 [0.040]	-0.033 [0.039]	-0.004 [0.011]
	Female	-0.237*** [0.034]	-0.183*** [0.035]	-0.165*** [0.034]	0.020** [0.010]
	Observations	3582	3562	3595	3634
	p-value of equal coeffs.	0.055	0.145	0.055	0.400
Male	vs. female	0.037 [0.063]	-0.004 [0.062]	0.125** [0.058]	0.008 [0.018]
	vs. male	-0.050 [0.063]	0.083 [0.063]	0.051 [0.058]	0.024 [0.017]
	Observations	1724	1703	1766	1711
	p-value of equal coeffs.	0.172	0.160	0.198	0.382
Female	vs. female	0.004 [0.050]	0.018 [0.055]	-0.033 [0.055]	-0.034** [0.015]
	vs. male	-0.063 [0.050]	0.055 [0.054]	-0.109** [0.055]	-0.026* [0.015]
	Observations	1858	1859	1829	1923
	p-value of equal coeffs.	0.174	0.495	0.166	0.597
Controls	Socio-demographic	Yes	Yes	Yes	Yes
	Other games	Yes	Yes	Yes	Yes

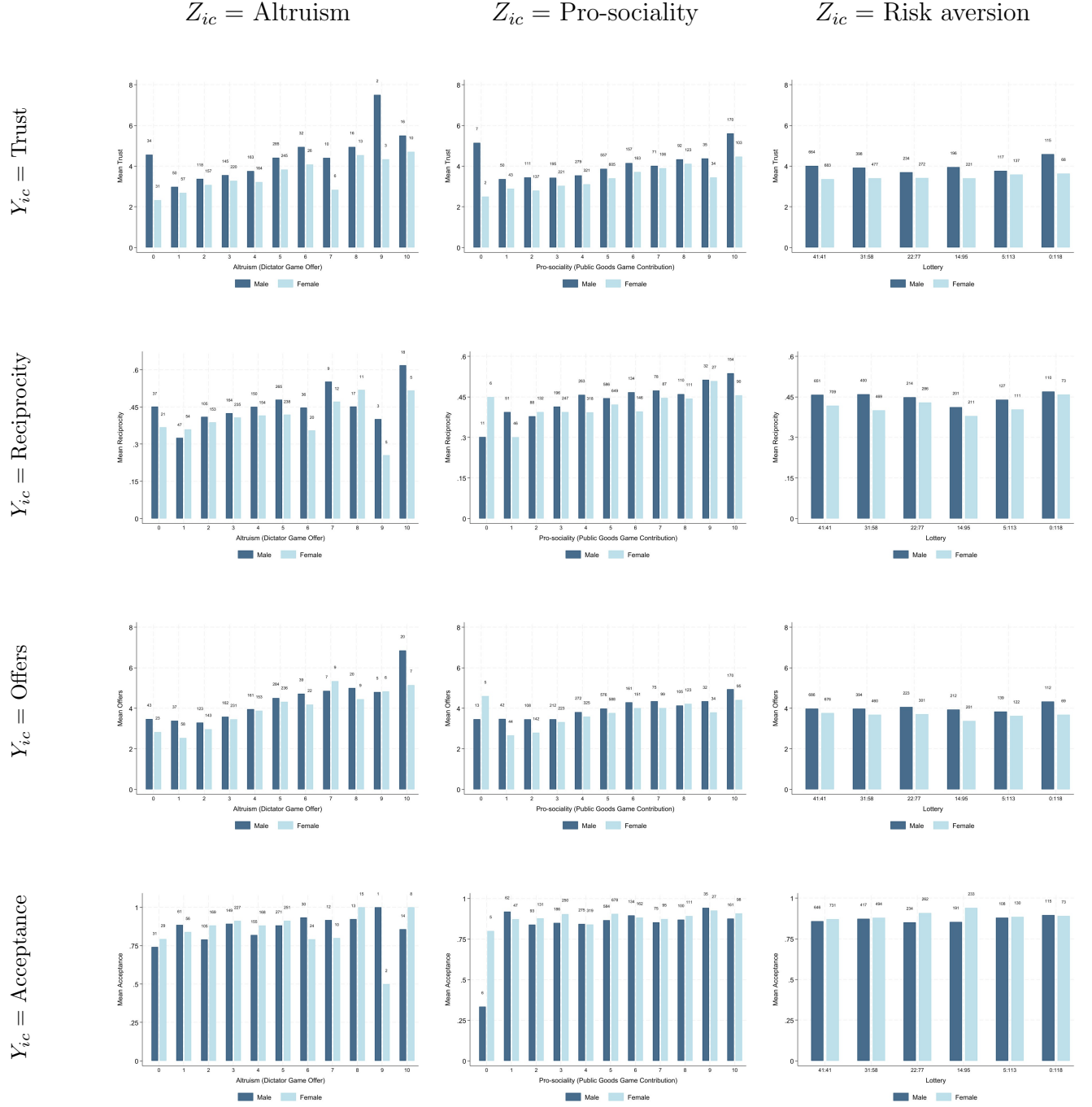
Notes. This table presents ordinary least square estimations of the effect playing versus a female or male on trust, reciprocity, offers and acceptance as well as heterogeneous effects by the participant's own gender with country-week fixed effects. Units of trust and offers are standardized at the country level. Units of reciprocity are taken as a proportion of three times the quantity trusted, these were later standardized at the country level. Models with acceptance as outcome include how much players were offered as a control. Socio-demographic controls include the players' age, gender, employment situation, log of monthly income adjusted for PPP in 2019, marital status, number of children and dummies for high school completion, having an imputed income and being a top 50 percentile earner. Other games include player's contribution in the public goods game and their risk aversion lottery choice. Regressions include the number of tries necessary to pass the game's quiz. Standard errors are displayed in squared brackets. * p<0.10, ** p<0.05, *** p<0.01.

Table D.3: Gender and Social Preferences

		(1)	(2)	(3)	(4)
Altruism	1[female]	-0.157*** [0.033]	-0.150*** [0.035]	-0.122*** [0.031]	-0.122*** [0.032]
Pro-sociality	1[female]	-0.116*** [0.023]	-0.094*** [0.024]	-0.000 [0.000]	-0.092*** [0.025]
Risk Aversion	1[female]	-0.055 [0.042]	-0.032 [0.044]	-0.060 [0.043]	-0.036 [0.045]
Controls	Socio-demographic	No	Yes	No	Yes
	Other games	No	No	Yes	Yes

Notes. This table presents ordinary least square estimations of the difference in the dictator game's offer (altruism) and public goods game's contribution (pro-sociality) given by the participant's gender, as well as ordered logit estimations of the difference in probability of choosing a riskier lottery (risk aversion) given by the participant's gender. Units of altruism and pro-sociality are standardized within each country. Socio-demographic controls include the players' age, gender, employment situation, log of monthly income adjusted for PPP in 2019, marital status, number of children and dummies for high school completion, having an imputed income and being a top 50 percentile earner. Other games include player's contribution in the public goods game and their risk aversion lottery choice except when these are outcomes. Regressions include fixed effects of the number of tries necessary to pass the game's quiz. Standard errors are displayed in squared brackets. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Figure D.1: Social Preferences and Raw Main Outcomes



Note: This figure presents the relation between trust, reciprocity, offers and acceptance with altruism, pro-sociality and lottery choice by gender. All units are experimental dollars (from an endowment of 10) except for reciprocity with is presented as a proportion of three times the trusted amount.

Table D.4: Correlation of Main Outcomes

		Trust		Reciprocity	
		(1)	(2)	(3)	(4)
All	Offers	0.312*** [0.023]	0.255*** [0.023]	0.191*** [0.024]	0.140*** [0.025]
	Observations	1756	1756	1801	1801
	Acceptance	0.005 [0.083]	-0.014 [0.080]	-0.012 [0.085]	-0.003 [0.085]
	Observations	1826	1826	1761	1761
Male	Offers	0.304*** [0.036]	0.258*** [0.037]	0.222*** [0.035]	0.171*** [0.037]
	Observations	854	854	892	892
	Acceptance	-0.210* [0.121]	-0.230** [0.117]	-0.095 [0.127]	-0.098 [0.130]
	Observations	870	870	811	811
Female	Offers	0.291*** [0.027]	0.252*** [0.028]	0.142*** [0.033]	0.107*** [0.034]
	Observations	902	902	909	909
	Acceptance	0.261** [0.113]	0.277** [0.111]	0.101 [0.116]	0.108 [0.115]
	Observations	956	956	950	950
Controls	Socio-demographic	No	Yes	No	Yes
	Other games	No	Yes	No	Yes

Notes. This table presents ordinary least square estimations of the correlation between the decisions of the trust game and those of the ultimatum game, as well as heterogeneous analysis by the participant's own gender. Units of trust and bargaining are standardized at the country level. Units of reciprocity are taken as a proportion of three times the quantity trusted to them, these were later standardized at the country level. Regressions including acceptance also include the offer made to them as a control. Socio-demographic controls include the players' age, gender, employment situation, log of monthly income adjusted for PPP in 2019, marital status, number of children and dummies for high school completion, having an imputed income and being a top 50 percentile earner. Other games include player's contribution in the public goods game and their risk aversion lottery choice. Regressions include country fixed effects and the number of tries necessary to pass the game's quiz. Standard errors are displayed in squared brackets. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.