Overcoming empathy failures to reduce inequality

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Migration, prosocial behavior and empathy

- Forced Displacement is a Global Challenge (UNHCR, 2022)
  - 21.3m refugees worldwide by 2022: Syrian Arab Rep., Venezuela, Afghanistan, South Sudan, Myanmar
  - +7.8m from Ukraine by Nov 2022
  - This population has more than doubled in the last decade

- Prosocial behavior determines support and integration policies' success 3ie 2009, J-PAL 2013
  - reduces social inefficiency in the presence of incomplete contracts, Arrow 1971, Becker 1976, Akerlof 1984
  - solves collective action problems Ostrom 1990

- **Empathy** among citizens is a prime determinant of prosociality Borman et al 2001, Jolliffe & Farrington 2004, Williams et al 2014, Bauer & Freitag 2018

How to effectively integrate refugees?

- There is descriptive experimental evidence on the link between Intra-group conflict and prosociality
  - Social psychology **alone** with ex combatants, ethnic groups in Europe Bruneau et al 2015, 2017 and migrants in US Moore-Berg et al 2021
  - Prosociality **alone** towards migrants in Europe
  - Prosociality within groups, exFarc, in Afghanistan Condra & Linardi 2019

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- On **preferences for redistribution towards specific groups**
  - classic determinants
    - perception and actual current position in income distribution Meltzer & Richard 1981, Cruces et al 2013
    - ideology Fehr et al 2020
    - migrant active presence Alesina et al 2020
  - Perceptions and attitudes Hannafi & Ali Marouani 2021
  - how about **empathy?**

How to effectively integrate refugees? Media interventions

- Little evidence on the causal impact of interventions to reduce xenophobia and improve integration
  - ▶ Forced interaction interventions Basseler et al. 2022 are costly and difficult to scale up
  - ▶ Most studies do not use incentivized/behavioral measures

- Evidence that media interventions are effective in conveying information in other settings Banerjee et al 2016, Berg & Zia 2013, Ravallion, et al 2015

- Mixed results when it comes to preferences, social norms & behavior
  - ▶ Info and prosociality towards refugees in Germany Grimalda et al 2018, in Uruguay Gandelman & Lamé 2021
  - ▶ Media interventions towards exFarc Bruneau et al 2022, role models/information with migrants in LAC PNUD-IDB initiative 2022, RodríguezChatruc & Rozo 2021

This paper

How to improve integration through a media intervention that reduces empathy barriers?

A multidisciplinary approach to reduce inequality

- **Our intervention**: A social psychologically informed media intervention - tailor-made design Williams et al 2014, Bauer & Freitag 2018, Bruneau et al. 2022
- A 5-minute media intervention from interviews conducted with ...
  - exFarc in a Colombian demobilization camp and non-FARC Colombians in neighbouring communities Bruneau et al. 2022
  - V migrants in a slum Bogota and Colombians

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- **Our outcomes**:
  - ▶ prosociality: lab-in-the-field economic experiment on altruism, trust, and preferences for redistribution
  - ▶ Cognitive social biases: underlying cognitive processing behind pro-social judgements with movement tracking Song & Nakayama 2009, Freeman et al 2011

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Contribution

How to improve integration through a media intervention that reduces empathy barriers?

1. Provide evidence of the causal impact of an effective intervention
2. Use a novel mechanism in the literature: psychological barriers
3. Design an informed/structured intervention
4. Use a "passive control"
5. Use behavioral outcomes of prosociality
   - preferences for redistribution
6. Use Cognitive social biases outcomes

This paper

Main hypotheses

H1 Citizens are less prosocial when interacting with a M or E

H2 Exposure to TE or TM promotes citizens' prosociality towards M ad E, and reduces cognitive social biases

Main Findings

- Citizens are less generous, trust less and re allocate less when interacting with a M or an E
  - Citizens are more prosocial towards IDPs
- Exposure to TE or TM reduces movement vigor when interacting with M or E (i.e. reduces velocity)

Context: Massive Out-Migration from Venezuela

Communities in Colombia face an inflow of *non desirable* out-group members Gallup 2019, WVS 2020, 2021

- IDPs and Colombian Revolutionary Armed Forces (FARC) ex-combatants
- Venezuela's migrant crisis is the largest in Latin American history and the second largest worldwide

755K IDPs after 2016
8.3M Total cumulative since 1985
UNHCR, june 2022

76K ex combatants (2001-2019)
27K completed reintegration process
ARN, august 2022

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5.75M V migrants - refugees in LAC
6.81M worldwide
2.5M in Colombia

RV4, august 2022

POBLACIÓN POR PAÍS

2.48 M	Colombia
1.29 M	Perú
502.2 K	Ecuador
448.1 K	Chile
358.4 K	Brazil
América Central y México	
144.5 K	Panamá
82.9 K	México
30.1 K	Costa Rica

Study design: lab-in-the-field experiment

In order to test our psychologically informed media intervention...

A median Colombian vs. a Venezuelan migrant, an exFarc from a representative sample of **839 participants** in the main Colombian regions

1. use IDPs and low income colombians as comparison groups
2. social psychology measures, incentivized measures of prosociality and cognitive social biases measures
3. The sample belongs to the Colombian WVS panel 2018, 2020, 2021

Study design: Treatments

Each participant is randomly assign to one treatment:

Control No video

Passive control exposure to a 5 min video on the coffee region in Colombia Bruneau et al 2022

Video TE exposure to a 5 min video that presents exFarc's willingness and ability to integrate Bruneau et al 2022

Video TM exposure to a 5 min video that presents V migrants' willingness and ability to integrate
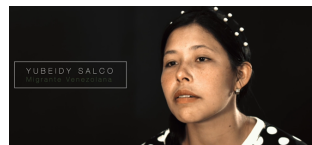
Outcomes

Prosociality
- **Altruism:** Dictator game - amount sent by P1
- **Trust:** Trust game - amount sent by P1
- **Preferences for redistribution:** Third party allocation game under merit and luck conditions - amount re-allocated by P1
- Empirical expectations of prosociality

Empathy
- Dehumanization
- Blatant dehumanization refined, rational, primitive, aggressive
- Feeling thermometer
- Meta-dehumanization subhuman, animals, inferior, instinct driven
- Malleability

Cognitive social biases: velocity, curvature, positions

Prosociality in the lab: Activities and decisions

- One token is USD$2

Prosociality in the lab: Activities and decisions

- One token is USD\$2
- Four Activities in this order

  A1. Dictator Game (DG) 5 tokens, 2 players
  A2. Trust Game (TG) 3 tokens, 2 players
  A3 and A4. Third Party Allocation Game (TPAG) 3 players

- Players will only know identity of other player in terms of three characteristics Cárdenas et al 2008, Glaeser et al 2000

Number of decisions in DG or TG

Player 1	Player 2 (randomly assigned)	Decisions
Any citizen	low SES (≤ 3)	
from the sample	$\leq$ Incomplete Secondary education	4
of participants	None, IDP, ExFarc OR VMigrant	

The third party allocation game Grimalda et al 2018, Almas et al 2020

TPAG-luck P2 and P3 are hired to perform a task. Both receive the same payment. One player is randomly chosen to receive 5 extra tokens (for simplicity it will be always P2)

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TPAG-merit Only P2 is hired to perform a task and received a 5-token payment. P3 did not have the opportunity to perform and did not received any extra payment.

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- P1 receives 5 tokens and her re-allocation decision ranges from 0 to 5
- P1 knows P2 and P3's characteristics
  - ▸ P2 and P3 know each other's three characteristics

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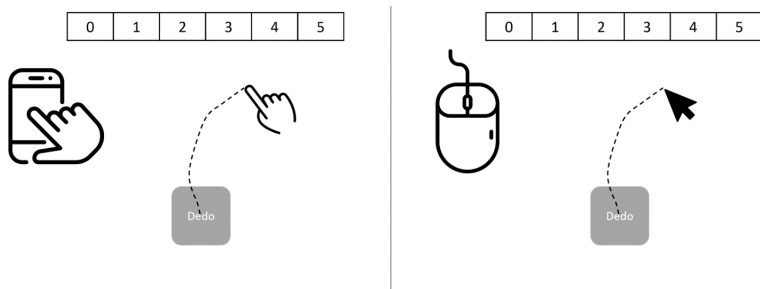
IDG-luck 7 decisions

None-None
IDP-None
ExFarc-None
Migrant-None
None-IDP
None-ExFarc
None-Migrant

IDG-merit 4 decisions

None-None
None-IDP
None-ExFarc
None-Migrant

Cognitive social biases in the lab: tablet/mouse/phone tracking

- Hand in motion reveals mind in motion Freeman et al 2011
- Hidden cognitive states are revealed in choice reaching tasks Song / Nakayama 2009
- Evidence leads to mouse/tablet tracking Dotan et al 2019
- in this study
  - All measures could be implemented on any device
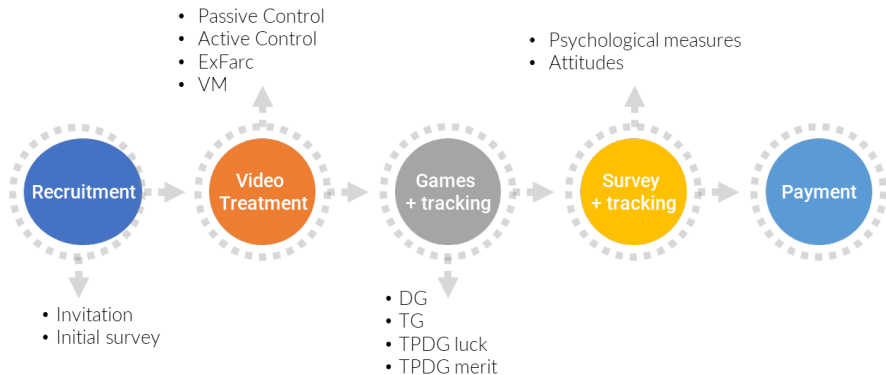
The field: Phase 1. Implementation

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May-June 2021 — VM Video
- Actors Selection
- Home Visits
- Interviews
- Video production

Nov 2021 — P2 ExFarc, IDPs and VMs sessions
- Recruitment
- Sessions
- Initial payment

Jan-May 2022 — P1 Colombians sessions
- Invitation
- Sessions
- Payment

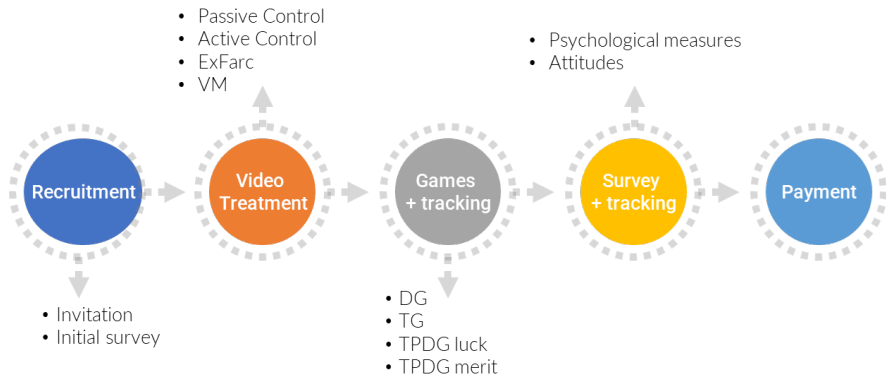**June 2022** — P2 ExFarc, IDPs and VMs
Final payment

- **P2 and P3**
  - ▶ Migrants, IDPs and low SES colombians who live in Ciudad Bolívar.
  - ▶ Ex combatants: referred by the Agency for Reincorporation and Normalization (ARN) office.

The field: Phase 2. P1 sessions

- Passive Control
- Active Control
- ExFarc
- VM

- Psychological measures
- Attitudes

Recruitment → Video Treatment → Games + tracking → Survey + tracking → Payment

- Invitation
- Initial survey

- DG
- TG
- TPDG luck
- TPDG merit

The field: Phase 2. P1 sessions

- Passive Control
- Active Control
- ExFarc
- VM

- Psychological measures
- Attitudes

Recruitment → Video Treatment → Games + tracking → Survey + tracking → Payment

- Invitation
- Initial survey

- DG
- TG
- TPDG luck
- TPDG merit

- 70 minutes duration average
- Two activity quizzes before each set of decisions
- **Payment**: 1 activity and 1 decision is randomly chosen for payment + show-fee + incentivized expectations: US$20 average

Empirical Design

For each game, our vector of outcome variables (Y_{ij}) contains the participant's prosocial preference, i.e. the amount sent by player 1, i, in the decision, j, where $j = (1, 2, 3, 4)$.

Our linear regression model is the following:

$$Y_{ij} = \alpha^k D_j^k + \beta X_i + \gamma^m T_i^m + \epsilon_{ij} \tag{1}$$

D_j^k: Is a vector of indicator functions that indicates whether the interaction is with a poor participant, an IDP, an ex-combatant, or V migrant $k = (P, ID, E, M)$

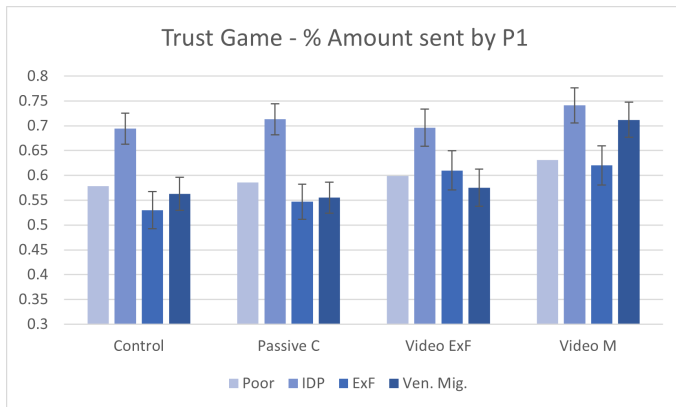T_m^i: indicates which treatment m=(control, passive control, TE, TM) was assigned to the participant.

X_i: individual characteristics.

Results: Prosociality
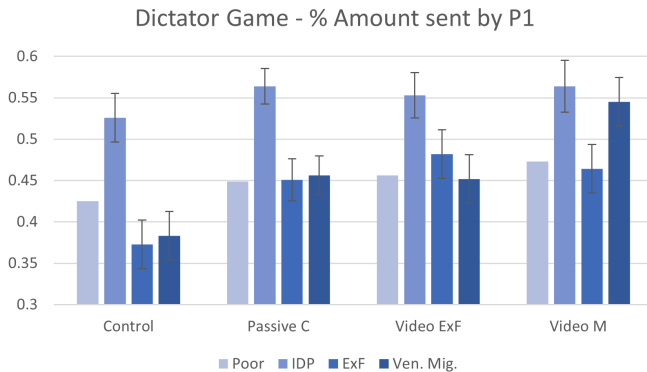
Dictator Game - % Amount sent by P1

Standard errors clustered at the individual level.

Results: Prosociality

Trust Game - % Amount sent by P1

Standard errors clustered at the individual level.

Results: Prosociality

Third Party Allocation Game - Luck - % Amount redistributed by P1 to P3

Standard errors clustered at the individual level.

Results: Prosociality

Third Party Allocation Game -Merit - % Amount redistributed by P1 to P3
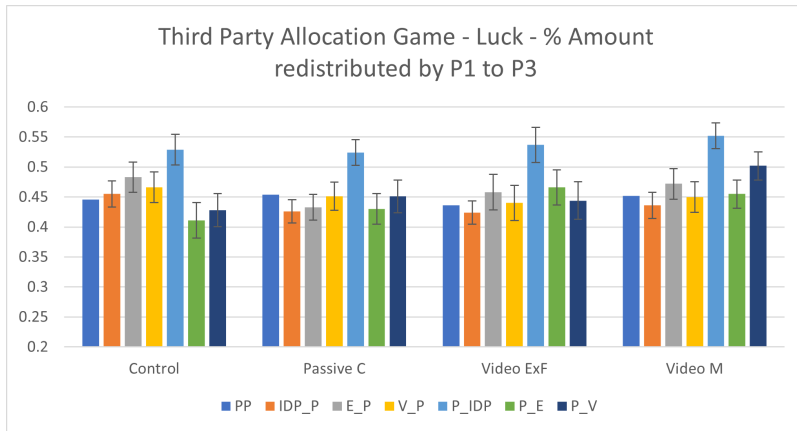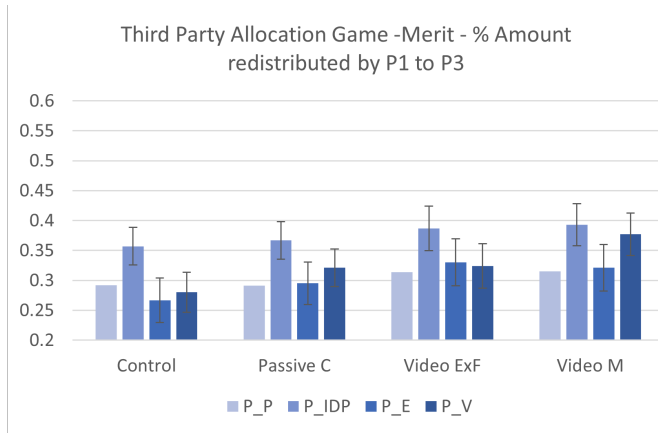
Standard errors clustered at the individual level.

Summary of results

Exposure to the M video promotes prosociality towards M and reduces cognitive social biases

1. **Prosociality:**

   ↑ More generous towards all: P 11%, ID 7%, E 24%, M 42%

   ↑ Trusts more towards all: P 9%, ID 7%, E 17%, M 26%

   ↑ More willing to reallocate in case of **merit** → P 1%, M 17% and of **luck** → E 20%, M 35%

   ↑ Empirical expectations for **Altruism** 14%, and **trust** 10%

2. **Cognitive social biases:** ↑ velocity The posterior probability of going faster than the median avg. velocity is lowest

Robust standard errors in parentheses. Results only for *** p<0.01 and ** p<0.05.

Exposure to the E video promotes prosociality towards E and reduces cognitive social biases

1. **Prosociality**

   ↑ More generous towards P 7%, E 29%, M 18%

   ↑ Trusts more towards E 15%,

   ↑ More willing to reallocate in case of **merit** towards P 1%, E %13, M 4% and of **luck** E 24%, M 16%

2. **Cognitive social biases in generosity:** ↑ velocity for DG

Robust standard errors in parentheses. Results only for *** p<0.01.

Conclusions

Lessons for how to address decreasing support for the welcoming of migrants and how to integrate *outsiders* into Colombian communities

Robust results Short exposure to a well-structured media intervention promotes prosociality towards out group members and a positive changes in internal representations

- demographics, soc cap measures, experimental variables
- multi hypothesis testing

Collaborative work among disciplines is key to fill the gaps in the literature

Behavioral measures help to clarify results in the literature

Mechanisms empathy, properly measured, is key for motivating prosocial behavior

Discussion

- WVS trust, stereotypes, social capital, attitudes during COVID
- BRIQ Institute's reciprocity, altruism measures and empirical expectations
- Support for integration policies
- Results on **ideology** (better improvement for lower levels), **income level**, exposure to out group members, and prosociality in Colombia
- On Medium term effects

Acknowledgments

Thank you!

Emile Bruneau UPenn
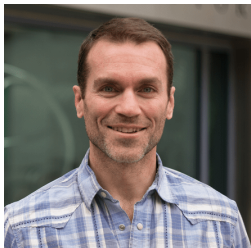
Resultados Preliminares Dictador

Table: Dictator Game

VARIABLES	(1) All_Actors DG	(2) C12 DG	(3) D DG	(4) E DG	(5) R DG
T = 1, neutral video	0.053***	0.023	0.039*	0.078***	0.073***
	(0.016)	(0.016)	(0.020)	(0.021)	(0.020)
T = 2, TE	0.059***	0.031*	0.027	0.109***	0.068***
	(0.016)	(0.017)	(0.021)	(0.022)	(0.021)
T = 3, TR	0.084***	0.047***	0.038*	0.091***	0.161***
	(0.016)	(0.016)	(0.020)	(0.021)	(0.020)
Constant	0.427***	0.425***	0.526***	0.373***	0.383***
	(0.011)	(0.011)	(0.014)	(0.015)	(0.014)
Observations	3,355	838	839	839	839
R-squared	0.035	0.011	0.006	0.035	0.071
Number of ID	839	838	839	839	839

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note: The Dependent variable is the percentage distribution by the participant over five tokens. The treatment variable represent the video shown to the participant that corresponds to control(neutral video), ExFarc(TE) or Migrants(TR). Column 1 contains the total sample, Column 2,3,4 and 5 restricts the sample to each of the actors that interacts with the participant:None(C12),Displaced(D),ExFarc(E)and Migrant(R)
Fuente: (Invamer,2022)

Resultados Preliminares Confianza

Table: Trust Game

VARIABLES	(1) All_Actors TG	(2) C12 TG	(3) D TG	(4) E TG	(5) R TG
T = 1, neutral video	0.009	0.008	0.019	0.017	-0.009
	(0.020)	(0.023)	(0.022)	(0.027)	(0.026)
T = 2, TE	0.029	0.021	0.002	0.080***	0.012
	(0.020)	(0.024)	(0.023)	(0.028)	(0.027)
T = 3, TR	0.085***	0.053**	0.047**	0.090***	0.149***
	(0.020)	(0.023)	(0.022)	(0.027)	(0.026)
Constant	0.591***	0.578***	0.694***	0.530***	0.563***
	(0.014)	(0.016)	(0.016)	(0.019)	(0.018)
Observations	3,356	839	839	839	839
R-squared	0.026	0.007	0.007	0.019	0.053
Number of ID	839	839	839	839	839

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note: The Dependent variable is the percentage distribution by the participant over three tokens. The treatment variable represent the video shown to the participant that corresponds to control(neutral video), ExFarc(TE) or Migrants(TR). Column 1 contains the total sample, Column 2,3,4 and 5 restricts the sample to each of the actors that interacts with the participant:None(C12),Displaced(D),ExFarc(E)and Migrant(R) *Fuente*: (Invamer,2022)

Third-Party Redistribution Game with Luck

VARIABLES	(1) All_Actors TRGL	(2) C12_C12 TRGL	(3) D_C12 TRGL	(4) E_C12 TRGL	(5) R_C12 TRGL	(6) C12_D TRGL	(7) C12_E TRGL	(8) C12_R TRGL
T = 1, neutral	-0.007	0.008	-0.029	-0.050***	-0.015	-0.005	0.019	0.023
	(0.012)	(0.015)	(0.018)	(0.018)	(0.018)	(0.017)	(0.019)	(0.019)
T = 2, TE	-0.002	-0.010	-0.031	-0.025	-0.027	0.008	0.055***	0.016
	(0.013)	(0.016)	(0.019)	(0.019)	(0.019)	(0.018)	(0.020)	(0.020)
T = 3, TR	0.014	0.006	-0.020	-0.011	-0.017	0.023	0.044**	0.074***
	(0.012)	(0.015)	(0.018)	(0.018)	(0.018)	(0.017)	(0.019)	(0.019)
Constant	0.460***	0.446***	0.455***	0.483***	0.466***	0.529***	0.411***	0.428***
	(0.008)	(0.010)	(0.012)	(0.012)	(0.013)	(0.012)	(0.013)	(0.013)
Observations	5,873	839	839	839	839	839	839	839
R-squared	0.004	0.002	0.004	0.010	0.002	0.003	0.011	0.019
Number of ID	839	839	839	839	839	839	839	839

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note: The Dependent variable is the percentage distribution by the participant over five tokens. The treatment variables represent the video shown to the participant like control(tourism), Ex-Farc or Migrants). Column 1 contains the total sample, Column 2,3,4,5,6,7 and 8 restricts the sample to each of pairs of actors that interacts with the participant:None(C12),Displaced(D),ExFarc(E)and Migrant(V)

Resultados Preliminares Redistribución 2

Table: Third-Party Redistribution Game with Merit

VARIABLES	(1) All_Actors TRGM	(2) C12_C12 TRGM	(3) C12_D TRGM	(4) C12_E TRGM	(5) C12_R TRGM
T = 1, neutral video	0.020	-0.001	0.010	0.028	0.041*
	(0.020)	(0.022)	(0.022)	(0.022)	(0.022)
T = 2, TE	0.040*	0.023	0.030	0.062***	0.044*
	(0.020)	(0.023)	(0.023)	(0.023)	(0.023)
T = 3, TR	0.052***	0.023	0.035	0.054**	0.096***
	(0.020)	(0.022)	(0.022)	(0.022)	(0.022)
Constant	0.299***	0.292***	0.357***	0.267***	0.280***
	(0.014)	(0.016)	(0.015)	(0.015)	(0.015)
Observations	3,356	839	839	839	839
R-squared	0.010	0.002	0.004	0.012	0.022
Number of ID	839	839	839	839	839

Standard errors in parentheses
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