Guns, Pets, and Strikes: An Experiment on Identity and Political Action

Boris Ginzburg[1]**, and José-Alberto Guerra**[2]

[1]*Universidad Carlos III de Madrid*
[2]*Universidad de los Andes*

Introduction

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- But what happens afterwards?
- What effect does participation in political collective action – petitions, protests, boycotts – have on interpersonal interactions?

- We run an experiment with Colombian subjects to identify this.

Main Idea

- Key finding: participation builds a common identity among participants.
- This identity gives rise to in-group favouritism between participans.
  - More altruism, more trust, more trustworthiness.
- The magnitude of the gain from participation is greater if more of one's peers participate.
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  - Participation thus has features of a coordination game.

- Novel mechanism linking participation decisions to subsequent social interactions

▶ Literature

Experimental design

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  - average payment COP 16,800 (USD 4,5; 4 × minimum hourly wage)
- In each session, they face one participation decision: ▸ Word
  - Guns: signing an online petition to legalise guns.
  - Pets: signing an online petition to ban fireworks.
  - Strikes: reporting whether they had participated in the *Paro Nacional* or National Strike – street protests happening shortly before.
- Difference by cost: low for petitions, high for protests.

Difference valuation by political alignment
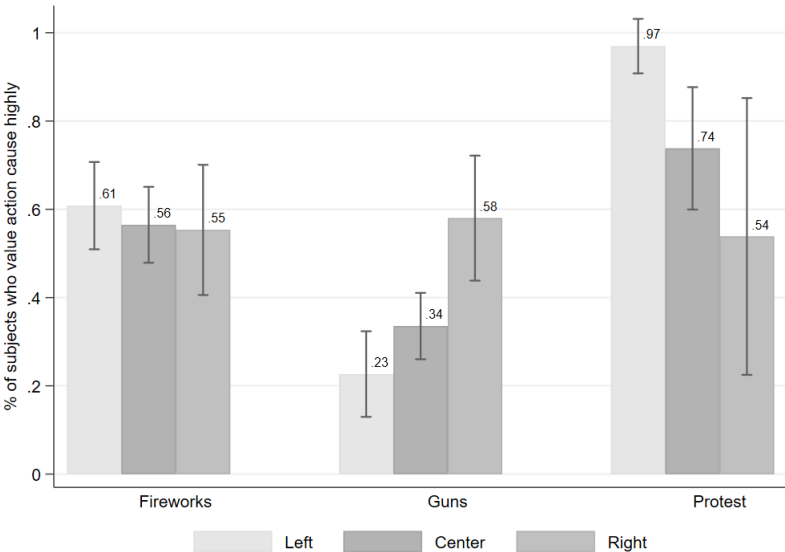
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- After the participation decision, subjects know whether their partner has participated.

- We use strategy method: subjects are asked how much they would give in each situation.

No connection between initial preferences and participation

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Dep Var: Petition Signed / Participated in strike				
	(1)	(2)	(3)	(4)
	Fireworks	**Guns**	**F & G**	**Strikes**
Sent DG stage 1	-0.023	0.014	0.000	-0.022
	(0.038)	(0.033)	(0.028)	(0.040)
Sent TG stage 1	0.033	0.002	0.015	0.007
	(0.029)	(0.028)	(0.022)	(0.034)
Percent sent back TG stage 1	0.523***	-0.055	0.158	0.229
	(0.175)	(0.207)	(0.149)	(0.282)
Political alignment	-0.006	0.008	-0.034	-0.040
	(0.056)	(0.055)	(0.041)	(0.062)
Generalised trust	-0.217**	-0.199**	-0.164**	0.106
	(0.088)	(0.079)	(0.066)	(0.127)
High valuation of the cause	0.340***	0.278***	0.398***	0.051
	(0.092)	(0.089)	(0.064)	(0.109)
Constant	0.088	0.015	0.115	0.880***
	(0.223)	(0.273)	(0.185)	(0.314)
Observations	110	110	220	87
R-squared	0.304	0.303	0.244	0.214

*** $p<0.01$, ** $p<0.05$, * $p<0.1$. Robust standard errors in parentheses. Controls: female, semester, political spectrum, measure of rationality and, WT Risk

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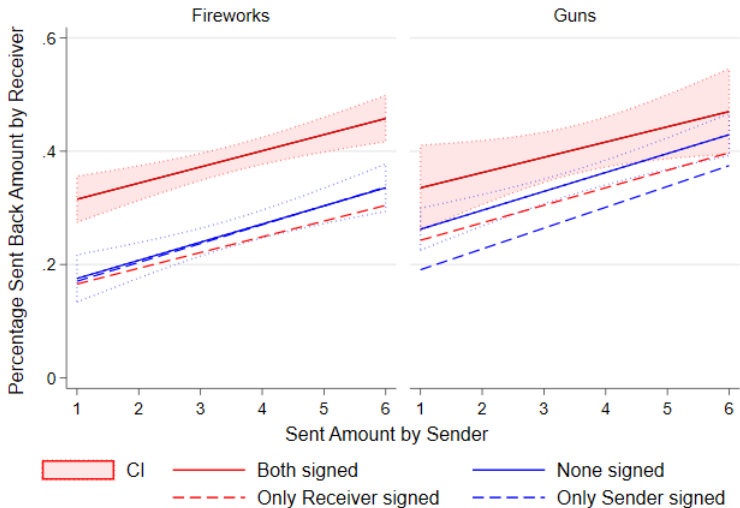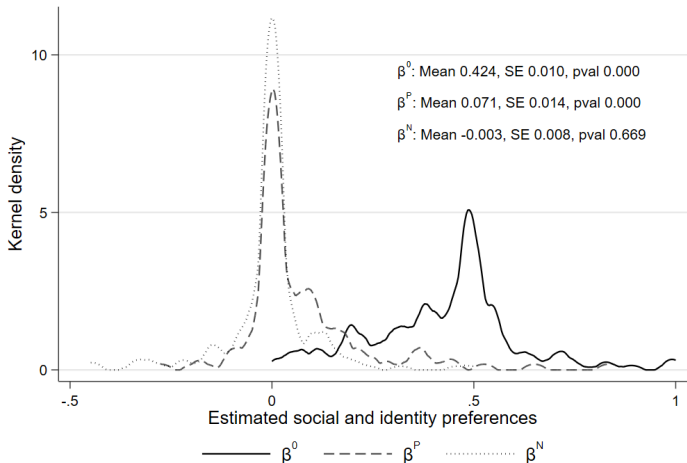# More trust between subjects who participate ▸ Altruism ▸ Protests
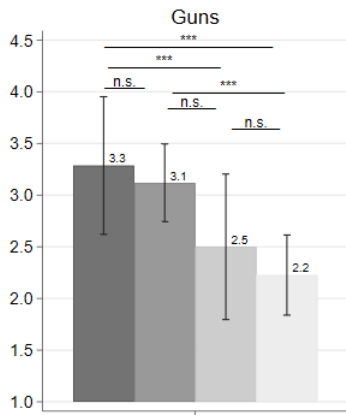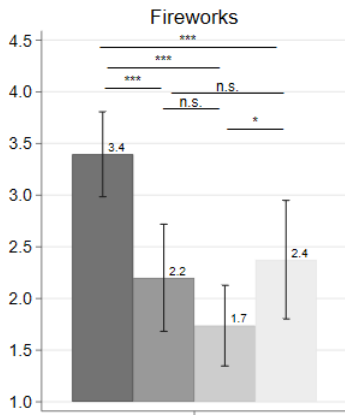
More trustworthiness between subjects...

who signed or joined street protests ▶

Estimated distribution of prosocial preferences ▸ SM

$$u_i = (\text{own payoff})^{1-\alpha_i} (\text{partner's payoff})^{\alpha_i}$$

β^0: Mean 0.424, SE 0.010, pval 0.000

β^P: Mean 0.071, SE 0.014, pval 0.000
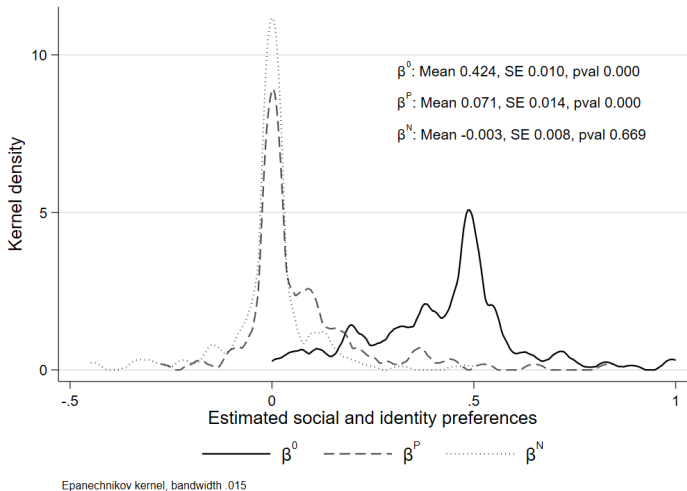
β^N: Mean -0.003, SE 0.008, pval 0.669

Epanechnikov kernel, bandwidth .015

- Subjects are, on average, prosocial
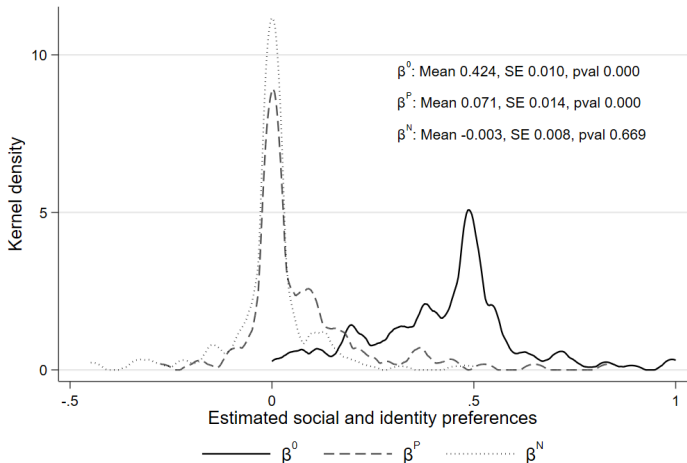
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- Increased prosocial preferences from joint participation...

Estimated distribution of prosocial preferences ▶ SM

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- ...but not from joint nonparticipation.

# Participation and payoffs

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- Especially if there are many participants among their peers.

- In our sample, 66% signed the fireworks petition, 25% signed the guns petition, 22.5% participated in protests.

- We should expect those who signed the fireworks petition to receive higher payoffs than those who did not.

Participation in a popular petition results in larger payoffs
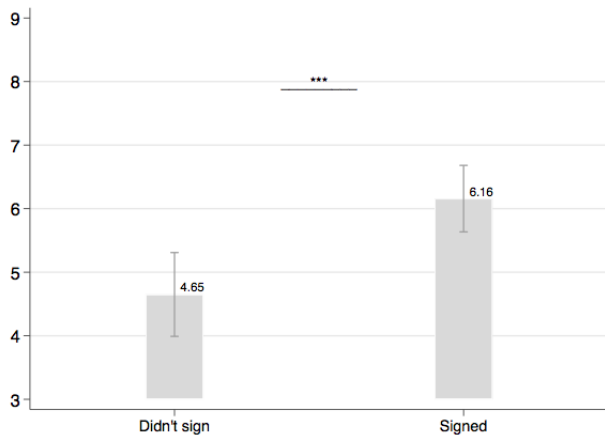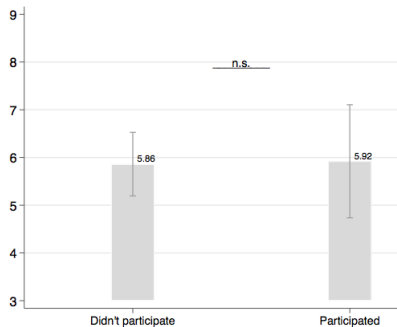

Fireworks petition

...while participation in a less popular cause does not
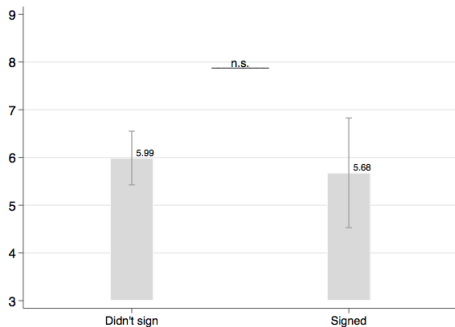
Guns petition

Street protests

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- Additional treatment: subjects are informed that they will interact again with people who will know of their participation decision.

- We then elicit their belief about the number of other subjects who participate.

Expecting participation by others increases participation

Dep Var: Petition Signed	Fireworks & Guns
Standardised belief about % signing	0.145***
	(0.046)
Sent DG stage 1	0.032
	(0.029)
Sent TG stage 1	-0.038
	(0.026)
Percent sent back TG stage 1	-0.260
	(0.244)
Political alignment	-0.076
	(0.056)
Generalised trust	-0.040
	(0.131)
High valuation of petition	0.465***
	(0.092)
Constant	0.656**
	(0.312)
Observations	99
R-squared	0.456

*** p<0.01, ** p<0.05, * p<0.1. Robust standard errors in parentheses. Controls: female, semester, political spectrum, measure of rationality and, WT Risk

Mechanisms

- Participation is creating an stronger identity than minimal identity ▶
    - *When both subjects did not participate, the effect is smaller or nonexistent*
    - *Particularly so when the participation cost is high: Colombia's 2021 Social Protests (23% participation rate)*

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    - *Particularly so when the participation cost is high: Colombia's 2021 Social Protests (23% participation rate)*
- Participation is not simply signalling a pre-existent identity ▶
    - *Signing either petition is uncorrelated with political views*
    - *Signing matters even after controlling for valuation of the petition*

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- Participation is not simply signalling a pre-existent identity ▶
  - *Signing either petition is uncorrelated with political views*
  - *Signing matters even after controlling for valuation of the petition*
- Our results are not driven by experimenter demand effect
  - *No difference between Strategy method vs Direct method* ▶

Conclusions

- More intense prosocial preferences and behaviour between subjects who participate in collective action than within any other pair of subjects
- Suggests the existence of identity induced by participation.
- If the cause is popular among peers, subjects who participate receive higher payoffs.
- Expecting greater participation by peers increases participation.

"There are some things you can't share without ending up liking each other, and knocking out a twelve-foot mountain troll is one of them"
— Harry Potter and the Philosopher's Stone by J.K. Rowling

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Thank you for your attention!
contact: ja.guerra@uniandes.edu.co

Related Literature

- **Strategic interaction between participants of political action.**
  - Theory: Tullock (1971); Granovetter (1978); Kuran (1989); Casper and Tyson (2014); Hollyer et al. (2015); Battaglini (2017); Buchheim and Ulbricht (2020); Correa (2022); Ginzburg (2023).
  - Experiments: Cantoni et al (2019); Gonzalez (2020); Bursztyn et al. (2021).

- **Image concerns matter for participation:** Gerber et al (2008); Gerber & Rogers (2009); DellaVigna et al (2016); Perez-Truglia & Cruces (2017); Enikolopov et al (2020b).

- **Communication technologies help participation:** Christensen & Garfias (2018), Enikolopov et al (2020a), Manacorda & Tesei (2020).

- **Identity and in-group favouritism:** Chen and Li (2009); Kranton and Sanders (2017); Brañas-Garza et al. (2020); Blanco and Guerra (2020).

|	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
						Mean by Petition			P-value for H0	
	Mean	Sd	Min	Max	Guns	Fireworks	Strikes	(5)=(6)	(6)=(7)	(5)=(7)
			(307 obs)		(110 obs)	(110 obs)	(87 obs)			
Semester	5.459	3.227	1	15	5.418	5.455	5.517	0,82	0,88	0,83
Political Spectrum	2.762	0.808	1	5	2.855	2.700	2.724	0,12	0,74	0,32
Beauty Contest	36.34	21.79	0	99	33.32	35.94	40.65	0,33	0,14	0,02
Risk	6.417	1.837	1	10	6.355	6.336	6.598	0,99	0,38	0,43
Generalized Trust	0.283	0.451	0	1	0.273	0.382	0.172	0,07	0,00	0,08
Female	0.573	0.495	0	1	0.518	0.627	0.575	0,10	0,44	0,44
Degree	0.153	0.361	0	1	0.191	0.136	0.126	0,30	0,98	0,29
Socio-economic Strata	3.697	1.232	1	6	3.727	3.691	3.667	0,83	0,89	0,73
Percentage Sent Back S1	0.344	0.184	0	1	0.344	0.336	0.354	0,70	0,58	0,81
Sent Trust Game S1	3.290	1.712	0	6	3.364	3.209	3.299	0,43	0,67	0,84
Sent Dictator Game S1	2.410	1.433	0	6	2.364	2.282	2.632	0,68	0,09	0,17

More altruism between subjects who signed
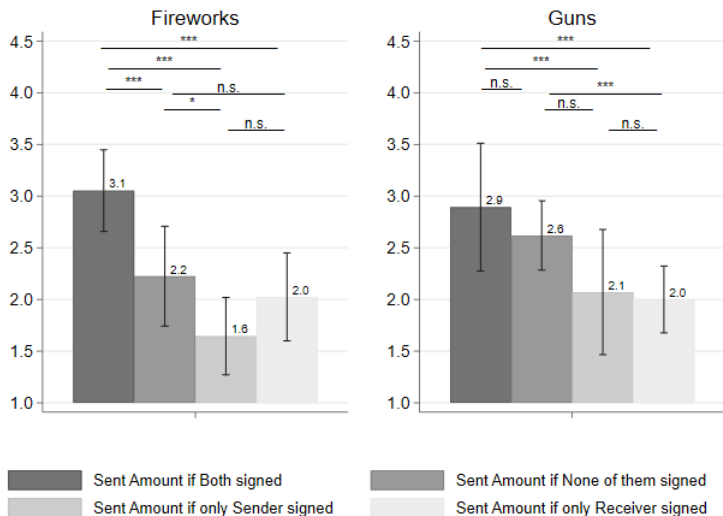
More altruism and trust between subjects who joined street protests ◀
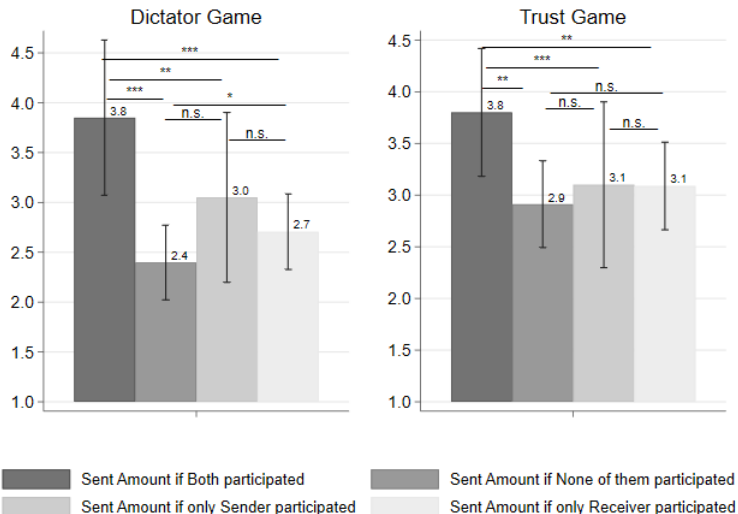
More trustworthiness between subjects who joined street protests
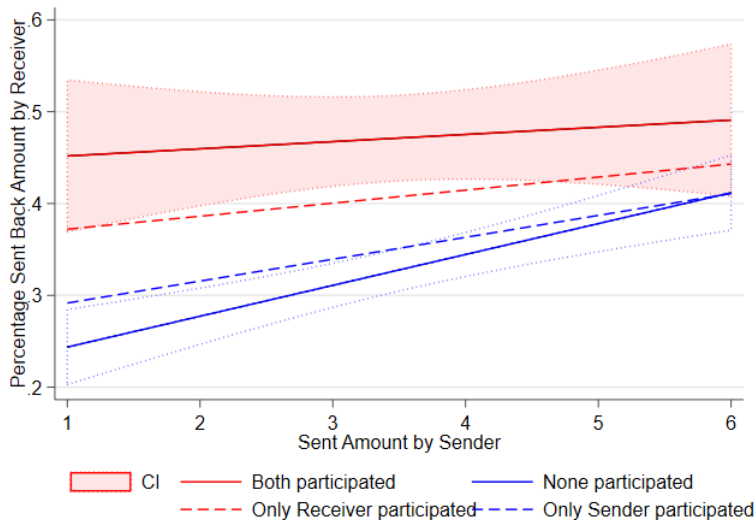
Estimating prosocial preferences ⊙

- Take the following utility function for agent i interacting with partner

$$u_i = (\text{own payoff})^{1-\alpha_i} (\text{partner's payoff})^{\alpha_i}$$

- α_i measures the intensity of prosocial preferences, and is given by

$$\alpha_i = \begin{cases} \beta_i^0 + \beta_i^P & \text{if both } i \text{ and the partner participated;} \\ \beta_i^0 + \beta_i^N & \text{if neither } i \text{ nor partner participated;} \\ \beta_i^0 & \text{otherwise.} \end{cases}$$

- β_i^0: baseline prosocial preference.
- β_i^P: extra prosocial parameter if both participated.
- β_i^N: extra prosocial parameter if both did not participate participated.
- We solve for optimal transfers in the DG and TG, and estimate behavioural parameters for each subject using nonlinear least squares.

Is this about creating identity, or signalling identity?

- Our mechanism proposes that participation builds identity.
- An alternative explanation is signalling existing identity.

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- Our mechanism proposes that participation builds identity.
- An alternative explanation is signalling existing identity.
- Recall that political views do not predict participation.
- We ask subjects to evaluate the cause of the petition.
- If the results are caused by signalling, a subject that likes the petition should favour those who signed irrespective of her own participation.

Difference between the amount sent to receiver who signed and the receiver who did not sign

Signing matters even controlling for valuation of the petition

Difference between the amount sent to receiver who signed and the receiver who did not sign

Fireworks Petition

Petición en línea

La petición en línea presentada a continuación fue recopilada directamente del sitio web Change.org. Se le hicieron unos pequeños cambios al texto para facilitar su lectura. Por favor léala con atención y decida si quiere firmarla o no. En el caso de decidir firmarla, le pedimos que al acabar el experimento, ingrese al sitio web Change.org y diligencie el formulario. Adicionalmente, si decide firmarla, **debe contestar la pregunta del final de la página.**

Tenga en cuenta que, a la fecha de hoy, más de **2.137** personas han firmado la petición.

Nombre de la Petición: ¡Digamos #NoALaPirotecnia por la vida y tranquilidad de nuestros animales!

¿Sabías que los perros escuchan 3 veces más que nosotros? ¿Te imaginas entonces lo que para ellos significa el estruendo de la pólvora? Es toda una tortura.

Lo más triste es que a muchas personas no les importa someter a los animales a ese martirio, solo por no sacrificar su "diversión" en los festejos de diciembre. ¡Qué horror!

Ojalá más personas fueran conscientes de lo que hacen y cómo esto afecta la vida de otros, incluidos los animales.

Por eso, con esta petición quiero despertar la consciencia de miles de colombianos para que se comprometan conmigo a decir #NoALaPirotecnia, para así lograr salvar la vida de miles de peludos en este diciembre.

Juntos podemos evitar que nuestros animales colapsen, tengan infartos, se enfermen, se asusten y sufran por culpa de la pólvora. En nuestras manos está la responsabilidad de cuidarlos y hacer todo lo posible por su bienestar.

Ya basta de permitir que el precio de los festejos navideños con pólvora, sea la vida nuestros animales.

Firma y comparte esta petición para decir #NoALaPirotecnia.

Fin de la petición

1. ¿Desea firmar la petición?

- ○ Sí
- ○ No

Recuerde:

- Si responde que Sí desea firmar la petición, en la siguiente pantalla deberá expresar sus razones, en un recuadro, para que pueda avanzar en la actividad.

- Si responde que No desea firmar la petición, no es necesario que escriba nada para poder avanzar en la actividad

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Tenga en cuenta que, a la fecha de hoy, más de **1.725** personas han firmado la petición.

Nombre de la Petición: "¿Apoyas el derecho a la legítima defensa tuya y de tu familia?"

Los usuarios legales de armas tenemos un permiso de porte adquirido conforme a la ley llenando una serie de requisitos, y por esta razón apelamos a los principios de la de la buena fe para eliminar la prohibición presidencial al porte de Armas.

La imposición de requisitos para adquisición de armas de fuego está establecida por la ley, y los usuarios legales de armas, cumplimos a cabalidad con una serie de filtros rigurosos.

Es claro que los delincuentes son alentados al atacar a una víctima desarmada porque saben que no corren riesgo, la lógica indica que a medida que haya menos ciudadanos armados, disminuye el peligro para los delincuentes. La restricción al porte ha demostrado que no solo no se disminuyen las tasas de homicidio, sino que también se aumentan las tasas de otros delitos.

Al reducir el porte de armas, el ciudadano queda en inmediata desventaja ante el delincuente, porque no solo no se permite ejercer todas las posibilidades de la auto legítima defensa, sino que también se elimina toda posibilidad de ejercer el derecho de la legítima defensa a terceros, y de paso se incurre de manera obligatoria en el delito de omisión de deber de socorro.

Está demostrado estadísticamente cerca del 98% de los homicidios ocurridos con armas de fuego en Colombia, se realizan con armas ilegales, y no tiene sentido pensar que las cifras van a bajar a costa de las armas que están en manos de los ciudadanos que cumplen las leyes.

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- Si responde que No desea firmar la petición, no es necesario que escriba nada para poder avanzar en la actividad

Mechanisms

- By labelling participants as signers / nonsigners we may be assigning identity artificially: "minimal group paradigm" (Chen & Li, 2009).
  - If this is the case, not participating should have the same effect as participating – but this is not supported by data
  - Particularly so when the participation cost is high: Colombia's 2021 Social Protests (23% participation rate)

Mechanisms

Signing either petition is uncorrelated with political views

Dep Var: Petition Signed/Participated in strike	(1) Fireworks	(2) Guns	(3) F & G	(4) F & G[†]	(5) Strikes
Female	0.115	-0.045	0.023	0.004	0.009
	(0.094)	(0.076)	(0.064)	(0.085)	(0.099)
Semester	-0.007	0.003	-0.003	-0.001	-0.007
	(0.013)	(0.011)	(0.009)	(0.015)	(0.018)
Economic Degree	-0.098	-0.008	-0.071	0.196	0.023
	(0.123)	(0.091)	(0.084)	(0.148)	(0.127)
Strata	0.022	-0.075**	-0.017	0.054	-0.142***
	(0.037)	(0.035)	(0.027)	(0.041)	(0.036)
Political spectrum	-0.006	0.008	-0.034	-0.076	-0.040
	(0.056)	(0.055)	(0.041)	(0.056)	(0.062)
Beauty contest	-0.003	0.005**	0.002	-0.004**	-0.001
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
WT risk	0.037	0.041*	0.031*	-0.017	-0.010
	(0.023)	(0.021)	(0.018)	(0.027)	(0.027)
Generalised Trust	-0.217**	-0.199**	-0.164**	-0.040	0.106
	(0.088)	(0.079)	(0.066)	(0.131)	(0.127)
High valuation of petition	0.340***	0.278***	0.398***	0.465***	0.051
	(0.092)	(0.089)	(0.064)	(0.092)	(0.109)
Beliefs about % signing				0.145***	
				(0.046)	
Sent DG stage 1	-0.023	0.014	0.000	0.032	-0.022
	(0.038)	(0.033)	(0.028)	(0.029)	(0.040)
Sent TG stage 1	0.033	0.002	0.015	-0.038	0.007
	(0.029)	(0.028)	(0.022)	(0.026)	(0.034)
Per sent back TG Stage 1	0.523***	-0.055	0.158	-0.260	0.229
	(0.175)	(0.207)	(0.149)	(0.244)	(0.282)
Constant	0.088	0.015	0.115	0.656**	0.880***
	(0.223)	(0.273)	(0.185)	(0.312)	(0.314)
Observations	110	110	220	99	87
R-squared	0.304	0.303	0.244	0.456	0.214

Notes: *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Robust standard errors in parentheses.

Is participation signalling existing identity (political views)?

- We ask subjects to evaluate the cause of the petition on a 1 - 5 scale.
- If signalling is the main explanation, for subjects who value the petition highly that difference should be the same regardless of whether they signed.
- Signing matters even controlling for valuation of the petition

Difference between the amount sent to receiver who signed and the receiver who did not sign

Figure 1
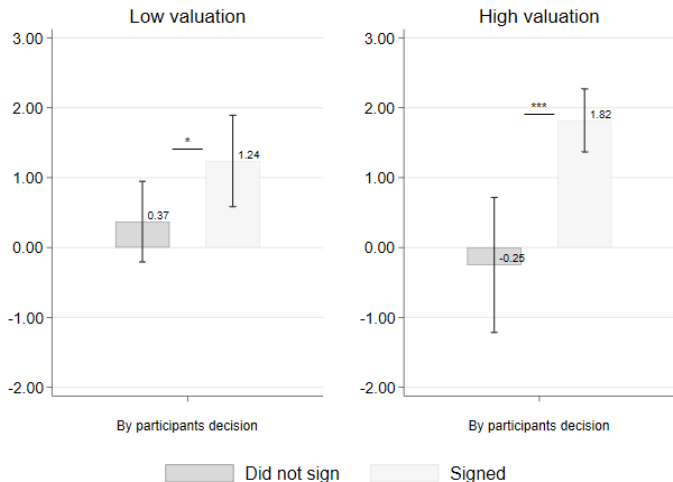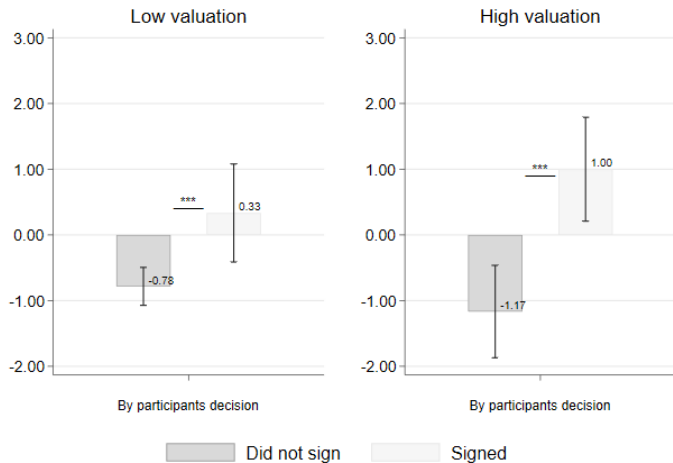
Mechanisms

Guns

Is it driven by experimenter demand effect? ◄

Table: Amount sent to a receiver in the Dictator Game and Trust Game depending on the Direct or Strategy Method, by decision to sign

Dep Var: Amount sent to receiver in:								
	Dictator Game				Trust Game			
	Sender signed		Sender didn't sign		Sender signed		Sender didn't sign	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Both signed	0.903**	1.151***			1.172***	1.604***		
	(0.347)	(0.273)			(0.358)	(0.283)		
None signed			0.301	0.407*			0.383	0.726**
			(0.266)	(0.222)			(0.350)	(0.326)
Direct Treatment	-0.050	0.396	0.425	0.869	-0.125	0.128	0.550	1.184*
	(1.030)	(0.326)	(1.284)	(0.848)	(1.072)	(0.449)	(1.148)	(0.612)
Both signed×Direct	0.525	0.163			0.542	0.198		
	(1.117)	(0.632)			(1.169)	(0.627)		
None signed×Direct			0.057	-0.590			-0.300	-1.034
			(1.342)	(0.871)			(1.237)	(0.672)
Constant	2.050***	-0.109	2.175***	-0.990**	2.125***	-1.937**	2.450***	-0.841
	(0.262)	(0.938)	(0.199)	(0.474)	(0.274)	(0.875)	(0.293)	(0.714)
Observations	123	118	153	149	123	118	153	149
R-squared	0.078	0.545	0.024	0.568	0.110	0.583	0.013	0.522
Controls	No	Yes	No	Yes	No	Yes	No	Yes