Activating Change: The Role of Information and Beliefs in Social Activism

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- Citizen activism is important for democracy building and institutional transitions
 - An active civil society is often necessary to pressure government officials to implement public policy reforms and/or regime changes.

• Successful activism requires high levels of participation, but:

- Participation involves a private cost (time, money, effort);
- May lead to additional costs, depending on others' participation
 - e.g., punishment
- Expected benefits depend on others' participation:
 - The action may lead to change only if others also act.

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- Expected benefits depend on others' participation:
 - The action may lead to change only if others also act.
- We ask: What can increase activism?

- Primary research questions:
 - Does providing information about the cause increase activism?
 - Does correcting beliefs about others' willingness to act matter?
- Which form of activism is more/less likely to be taken up?
 - Petition?
 - Donation?
 - Watching a video on how to act?
- Is it better to present subjects with a choice of possible ways to act, or encourage them to engage in one only?
- The *Cause*:
 - Fight fraud and corruption in the provision of health services during the COVID-19 pandemic (bribes, overcharging etc.)
- The *Context*:
 - India during the second wave of the pandemic.

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Our Contributions

- Limited evidence on the importance about others' propensity to act:
 - Game of strategic complements, as predicted by most of the theory?
 - Game of strategic substitutes?
 - Cantoni et al.(2019): Protests in Hong Kong;
 - Hager et al (2022): Political canvassing in a Western Europe country.
 - Our study: Participation in a spontaneous movement, rather than repeated (long-run) activism. More urgency? More uncertainty on others?;
 - Our study: Forms of activism other than protesting.

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 - Our study: Participation in a spontaneous movement, rather than repeated (long-run) activism. More urgency? More uncertainty on others?;
 - Our study: Forms of activism other than protesting.
- Limited evidence on the role of information (about a cause) in collectivizing efforts to act in support of the cause.
 - Is more information always good? Could it lead to discouragement?
- Broadly: If the objective is to mobilize citizens, what is the most effective way to do so?

Literature Slide

Afridi, Basistha, Dhillon and Serra (2023)

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 - Correction of misaligned beliefs about others' willingness to act;
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- Participants randomized to a Control and 3 Activism Treatments:
 - Information about the problem/cause (fraud/corruption in health);
 - Correction of misaligned beliefs about others' willingness to act;
 - Combination of Information and Belief Correction
- Within each treatment, subjects are cross-randomized into 4 different **Action Treatments**, based on the type of activism that we present to them at the end of the survey:
 - Petition signing
 - Donation
 - Video Watching
 - Choice between the three actions

Design



T1: Information about entitlements and the occurrence of fraud/corruption in the health sector during the pandemic: 3 minute video



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Delhi Hospital Overcharges by Rs 10,000 / Day!



They could not move forward with the survey until the 3 min had passed Information Video

T2: Correction of misaligned beliefs about others' willingness to act against corruption (Bursztyn et al. (2020))

- We present 3 statements, and ask whether they agree or disagree;
 - We incentivize them to guess the % of previous participants who agreed;
- Statement of interest:

"I am willing to raise my voice and participate in a protest against corruption in the provision of health services"

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"I am willing to raise my voice and participate in a protest against corruption in the provision of health services"

• In the *Belief Correction* treatment, at the end of the survey **we show a table** with each statement and the *true* percentage of previous participants who had agreed with each statement.

T3: Combined Treatment:

• They watch the 3-minute information video

AND

• At the end of the survey **we show a table** with each statement and the *true* percentage of previous participants who had agreed with each statement.

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 - Make a donation (out of earned bonus) to a non-profit organization working against corruption in health Screen

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 - Make a donation (out of earned bonus) to a non-profit organization working against corruption in health Screen
 - Watch a 5-minute how-to video on anti-corruption activism Screen Video content
 - Choose between the petition, the donation and the video Screen.
- Note on Outcomes: Subjects can exit the survey or click on the action

Theoretical Framework

- We extend the benchmark model (Cantoni et al., 2019):
- Set of citizens *N* who need to choose whether to participate in activism. Utility when *P_i* = 1:

$$U_{i} = 1_{P_{i}=1}(V_{i}(n, S(n)) - C_{i}(n, S(n)))$$
(1)

- V=benefit of acting; n=number of people participating
- S=Success of action, as a function of number of people acting
- $\bullet~$ C=Cost of acting, as a function of others acting
- Assume strategic complementarities in costs and benefits.
- Extension 1: corruption could be high (H) or low (L). Assume it is H.
 - Citizens have priors p_i on the probability of H.
 - Some are better informed than others (higher *p*)
- Extension 2: Individuals get an intrinsic net benefit from participating W_i(θ), which we assume to be higher when θ = H.

Theoretical Framework

- Petition: High Collective Action Component
 - Identification may lead to punishment
 - Less likely when more people sign: $\frac{\partial C_i}{\partial n_{-i}} < 0$.
 - Benefits Function: Assume $\frac{\partial V_i}{\partial S} > 0$ and $\frac{\partial S}{\partial n_{-i}} > 0$.
- Donation: Low Collective Action component
 - Cost does not depend on donations of others: $C_i = c(P_i)$
 - Individual believes that the benefits of donating (success function) increase when more people donate: $\frac{\partial V_i}{\partial S} > 0$ and $\frac{\partial S}{\partial n_{-i}} > 0$.
- Video: Lowest Collective Action Component
 - Cost that does not depend on others' decision watch video: $C_i = c(P_i)$.
 - Benefit function less likely to be a function of actions of others.
- Some Predictions (in brief)
 - Belief Correction treatment most likely to affect Petition and least likely to affect Video.
 - Effects of Information are ambiguous.

Afridi, Basistha, Dhillon and Serra (2023)

Empirical Strategy

$Y_{ia} = \beta_0 + \beta_1 T_{2i} + \beta_2 T_{3i} + \beta_3 T_{4i} + \delta X_i + \varepsilon_{ia}$

- Y_i = decision to act by individual *i* on action *a*
- $T_{2i} =$ **Information** treatment
- T_{3i} = **Belief Correction** treatment
- T_{4i} = **Combined** treatment
- X_i = vector of controls (demographics, beliefs, indices of experience of, information about and attitude towards corruption, controls for time and state of residence)
- Type of action (outcome variable) varies by treatment:
 - Willingness to petition, donate, watch video, choose one;
 - Actual action (signed, donated, watched, chose one)
- Willingness to act (or acted) when action presented alone vs. in Choice.

Afridi, Basistha, Dhillon and Serra (2023)

characteristics	Proportion					
	national sample	experimental sample				
Age (45+)	36	14				
College educated	27	79				
Married	69	51				
Income	92	48				
Hindu	79	78				
SC or ST	18	28				

Note: Income indicates the percentage with less than Rs 30K in monthly income. SC (Schedule Caste) and ST (Scheduled Tribe) are socio-economically deprived individuals in India. The sample of adult (18 years and above) urban men from the Periodic Labor Force Sample (PLFS) 2017-2018 are used for the national figures and experimental figures are from own experimental sample.

- More educated and wealthier than the national average;
- Comparable in terms of religion and caste.

Balance Tests



Results: Some Descriptive Statistics

- Nearly 91% of the respondents personally visited or had a household member visit a hospital since the beginning of the pandemic.
- More than 50% experienced corruption in accessing medical services.



Results: Treatment Effects on Petition



Treatment Effects on Petition

	Sign Petition?	Willing to: Signed with	Signed with
	(1)	Name (2)	Full Name (3)
Information	0.214***	0.137**	0.110*
	(0.070)	(0.070)	(0.066)
Belief Correction	0.151**	0.150**	0.140**
	(0.072)	(0.073)	(0.069)
Combined	0.222***	0.150**	0.156**
	(0.071)	(0.072)	(0.069)
Observations	417	417	417
Control Outcome Mean	0.392	0.299	0.258
Equality of treatments [p-value]			
Information = Belief Correction	[0.368]	[0.656]	[0.840]
Information = Combined	[0.912]	[0.498]	[0.131]
${\sf Belief} \ {\sf Correction} = {\sf Combined}$	[0.324]	[0.822]	[0.081]
Controls?	yes	yes	yes

Note: Controls for indicators of age, marital status, religion, education, SC/ST dummy, income, presence of elderly at home, indices for: locus of control, risk, pro-sociality, corruption perception, information about corruption and about rights and entitlements, attlude towards corruption and past civice emagagement; belief about others' willingness to protest; confidence in that belief, espected earning from the experiment; time and state of residence dummis included. Robust standard errors in parenteess; h = 0, 0; * p < 0, 5; * * p < 0, 1

Heterogeneity by Beliefs More Regs and Robustness

Afridi, Basistha, Dhillon and Serra (2023)

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Results: No Treatment Effects on Donation and Video

• No impact of the treatments on the other actions.



Regression Analysis

Results: Giving a Choice of Actions









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- The activism treatments have a significant impact on willingness to sign a petition **only**:
 - Information increases petitioning the government by nearly 42%
 - Correcting beliefs increases petitioning by about 50%.
 - Individuals with downward biased beliefs are the ones +vely impacted;
 - Evidence of complements not substitutes in petition signing.

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 - Some evidence of a negative effect of information on Donation, driven by the uninformed discouragement effect?

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- Encouraging subjects to engage in an action is preferable to giving them a choice of actions.

Petition

T1 BLOCK

Before you exit the survey, we would like you to think of the problem of corruption and overcharging in Indian hospitals during the COVID-19 pandemic. The "All India Drug Action Network" (A.I.D.A.N) is a non-profit organization that has been pressuring local and central governments to better regulate health care in India, fostering transparency in hospitals and assisting patients who have been illegally overcharged.

Would you like to support the A.I.D.A.N.'s activities? If so, you could sign **a petition** to the Health Ministry asking for more regulation and transparency in health care charges. If you prefer to **exit the survey**, please click the "EXIT THE SURVEY" button below.

PETITION

EXIT THE SURVEY



Petition Content

Dear Health Minister,

Now is the time to put pressure on our leaders to safeguard our health! The private health sector today is accountable neither to the government nor to the public. This sector has enjoyed unbrilded growth because of government subsidies and the lack of implementation of regulatory laws.

The Clinical Establishments (Registration and Regulation) Act (CEA in short), 2010 was enacted in Parliament of India to regulate all clinical establishments in India. The Act requires all clinical establishments to register themselves and provides a set of standard treatment guidelines for common diseases and conditions. However, as of sets of standard treatment guidelines for anything to diving patients and general public succembs to such malpractice.

Moreover, the standards for registration of hospitals have not been notified by the Central government, rendering it unimplementable, even in States where it has been adopted. Any similar attempts of regulatory laws by the state governments have also been met with flerce opposition from private sector lobbies.

More than 70 percent of people use private facilities for medical treatment in India, due to the dismal condition of public healthcare. Overcharging and unethical practices are frequent concerns in privatised health care, & all of this is propagated due to the COVID-19 pandemic, which has wreaked havoc on our healthcare system.

With no public health law in place, India is fighting COVID-19 Pandemic using a 123-year-old Epidemic Diseases Act, an even older Indian Penal Code of 1860, and a recent Disaster Management Act of 2005. The violation of patients' rights has shot up to an astronomical level in absence of any regulation.

We ask the government to address the following demands:

- 1. Adoption of regulatory laws like the CEA
- 2. Clear display of treatment protocol and prescription audit
- 3. District level grievance redressal system for patients

The right to affordable and accessible care will only be achieved if people start demanding that government health services be strengthened, expanded and improved; that the government stops outsourcing healthcare to the private sector, and the government introduces and implements strict regulations for private hospitals.

Addressed to:

- 1. Union health minister: Dr. Harsh Vardhan (hfm[at]gov[dot]in)
- 2. health ministers of the states:

T2 BLOCK

Before you exit the survey, we would like you to think of the problem of corruption and overcharging in Indian hospitals during the COVID-19 pandemic. The **"All India Drug Action Network" (A.I.D.A.N)** is a non-profit organization that has been pressuring local and central governments to better regulate health care in India, fostering transparency in hospitals and assisting patients who have been illegally overcharged.

Would you like to support the A.I.D.A.N.'s activities? If so, you could make **a donation** to A.I.D.A.N. If you prefer to **exit the survey**, please click the "EXIT THE SURVEY" button below.

DONATION

EXIT THE SURVEY

T3 BLOCK

Before you exit the survey, we would like you to think of the problem of corruption and overcharging in Indian hospitals during the COVID-19 pandemic. The "All India Drug Action Network" (A.I.D.A.N) is a non-profit organization that has been pressuring local and central governments to better regulate health care in India, fostering transparency in hospitals and assisting patients who have been illegally overcharged.

Would you like to support the A.I.D.A.N.'s activities? If so, you could watch **a 6 minute video** that explains AIDAN activities and how you could help. If you prefer to **exit the survey**, please click the "EXIT THE SURVEY" button below.

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T4 BLOCK

Before you exit the survey, we would like you to think of the problem of corruption and overcharging in Indian hospitals during the COVID-19 pandemic. The "All India Drug Action Network" (A.I.D.A.N) is a non-profit organization that has been pressuring local and central governments to better regulate health care in India, fostering transparency in hospitals and assisting patients who have been illegally overcharged.

Would you like to support the A.I.D.A.N.'s activities?

If so, you could sign **a petition** to the Health Ministry asking for more regulation and transparency in health care charges. Please click PETITION below, and you will be redirected to the page containing necessary instructions.

OR make a donation to A.I.D.A.N. Please click DONATION below, and you will be redirected to the page containing necessary instructions.

OR watch a 6 minute video that explains AIDAN activities and how you could help. Please click VIDEO, and you will be redirected to the page containing



Information Video (T1)

https://www.youtube.com/watch?v=8Ud5gla8gVI back

Video Action Treatment: Content

https://www.youtube.com/watch?v=xxG37wWmAv8 back

Beliefs





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Data

	Ν	Mean	Std. Dev
A. Demographics			
Age 45+	1744	0.15	0.35
Married	1744	0.49	0.50
SC\ST	1744	0.26	0.44
Hindu	1744	0.77	0.42
College	1744	0.78	0.41
Income	1744	0.49	0.50
Asset	1744	5.99	2.31
Elderly	1744	0.56	0.50
Hospital Visits	1744	0.77	0.42
B. Preferences			
Locus of Control	1744	0.06	1.00
Risk	1744	0.00	1.06
Pro-sociality	1744	-0.03	0.99
C. Corruption			
Ever given a Gift?	1744	0.51	0.50
Ever did a Favor?	1744	0.60	0.49
Ever Paid a Bribe?	1744	0.53	0.50
Know ICU Rate?	1744	0.34	0.47
Charged Extra in Hospital?	1744	0.14	0.34
Opinion: Corruption has increased	1744	0.71	0.46
Opinion: Corruption a Problem?	1744	0.82	0.38
Prior Protest	1744	0.37	0.48
Prior Walkouts or Strike	1744	0.29	0.46
Prior Boycott	1744	0.33	0.47
Prior Petition	1744	0.36	0.48
Prior Lodging Complaints	1744	0.39	0.48
Prior Marching	1744	0.26	0.44
Prior Donation	1744	0.77	0.42

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Petition: Heterogeneity by Perception of Corruption

	Willing to Sign	Signed with Name	Signed with Full Name
	(1)	(2)	(3)
Information × Perception	0.055	0.093	0.077
	(0.062)	(0.065)	(0.064)
$Belief\ Correction\ \times\ Perception$	0.012	0.078	0.063
	(0.067)	(0.073)	(0.071)
Combined × Perception	0.001	-0.035	-0.065
	(0.064)	(0.071)	(0.071)
Information	0.209***	0.129*	0.104
	(0.072)	(0.070)	(0.067)
Belief Correction	0.147**	0.143*	0.134*
	(0.073)	(0.074)	(0.070)
Combined	0.221***	0.155**	0.165**
	(0.073)	(0.073)	(0.070)
Perception	-0.046	-0.092*	-0.084
	(0.049)	(0.051)	(0.051)
Observations	417	417	417
I + 1 x Perception [p value]	[0.002]	[0.016]	[0.041]
BC + BC x Perception [p value]	[0.098]	[0.028]	[0.040]
COM + COM x Perception [p value]	[0.009]	[0.195]	[0.260]
Control Outcome Mean	0.392	0.299	0.258
Controls?	yes	yes	yes
R ²	0.165	0.116	0.145

Note: Controls for indicators of age, martial status, religion, education, SC/ST dummy, income, presence of eldeny at home, indices for: locus of control, risk, prosociality, corruption perception, information about corruption and about rights and entitlements, attitude towards corruption and abagement, belief about others' willingness to protest, confidence in that belief, expected earning from the experiment, time and state of residence dummies included. Robust standard errors in parentheses: "po < 10." "po < 10." "po < 0.0" "" po < 0.0"."



Petition: Heterogeneity by Tolerance of Corruption

	Willing to Sign	Signed with Name	Signed with Full Name
	(1)	(2)	(3)
Information x Tolerance	0.021	-0.033	-0.085
	(0.063)	(0.066)	(0.064)
Belief Correction \times Tolerance	-0.092	-0.111	-0.101
	(0.069)	(0.072)	(0.069)
Combined x Tolerance	-0.068	-0.094	-0.114*
	(0.063)	(0.069)	(0.068)
Information	0.211***	0.137*	0.111*
	(0.070)	(0.070)	(0.066)
Belief Correction	0.150**	0.149**	0.140**
	(0.072)	(0.073)	(0.069)
Combined	0.223***	0.153**	0.160**
	(0.071)	(0.072)	(0.068)
Tolerance	-0.005	0.011	0.037
	(0.048)	(0.050)	(0.048)
Observations	417	417	417
I + I × Tolerance [p value]	[0.009]	[0.259]	[0.763]
BC + BC × Tolerance [p value]	[0.548]	[0.712]	[0.688]
COM + COM × Tolerance [p value]	[0.093]	[0.542]	[0.629]
Control Outcome Mean	0.392	0.299	0.258
Controls?	yes	yes	yes
R ²	0.171	0.113	0.141

Note: Controls for indicators of age, martial status, religion, education, SC/ST dummy, income, presence of eldery at home, indices for: locus of control, risk, prosociality, corruption perception, information about corruption and about rights and entitlements, attitude towards corruption and abagement; belief about others' willingness to protest, confidence in that belief, expected earning from the experiment, time and state of residence dummies included. Robust standard errors in parentheses, "p < 10, "* p < 0, 0," ** p < 0.0, *** p < 0.0;

Petition: Heterogeneity by Information about Rights and Entitlements

	Willing to Sign	Signed with Name	Signed with Full Name
	(1)	(2)	(3)
Information \times Information (Rights)	-0.040	0.026	0.040
	(0.076)	(0.076)	(0.068)
${\sf Belief\ Correction\ x\ Information\ (Rights)}$	0.099	0.150**	0.104
	(0.068)	(0.071)	(0.067)
Combined \times Information (Rights)	-0.128**	-0.109*	-0.096
	(0.064)	(0.066)	(0.063)
Information	0.213***	0.139**	0.115*
	(0.071)	(0.070)	(0.067)
Belief Correction	0.170**	0.171**	0.155**
	(0.071)	(0.072)	(0.069)
Combined	0.234***	0.162**	0.167**
	(0.071)	(0.072)	(0.069)
Information (Rights)	0.093**	0.051	0.044
	(0.047)	(0.048)	(0.043)
Observations	417	417	417
I + I x Information (Rights) [p value]	[0.103]	[0.137]	[0.122]
BC + BC × Information (Rights) [p value]	[0.006]	[0.002]	[0.009]
COM + COM x Information (Rights) [p value]	[0.235]	[0.569]	[0.424]
Control Outcome Mean	0.392	0.299	0.258
Controls?	yes	yes	yes
R ²	0.184	0.132	0.151

Note: Controls for indicators of age, martial status, religion, education, SC/ST dummy, income, presence of delevity a home, indices for: locus of control, risk, prosociality, corruption perception, information about corruption and about rights and emultihements, attitude towards corruption and abagement; belief about others' willingness to protest, confidence in that belief, expected earning from the experiment, time and state of residence dummies included. Robust standard errors in parentheses: $j^{-} = 0.1$, $c^{+} = 0 < 0.5$, $c^{++} = 0 < 0.01$

Afridi, Basistha, Dhillon and Serra (2023)

All Actions

	Peti	tion	Don	ation	Video		
	Signed with Name	Signed with Full Name	Donated Positive Amount	Percent Donated	Watched $>$ 10 Seconds	Seconds Watched	
	(1)	(2)	(3)	(4)	(5)	(6)	
Information	0.145** (0.070)	0.117* (0.067)	-0.054 (0.055)	2.847 (3.215)	-0.003 (0.067)	-1.696 (23.509)	
Belief Correction	0.159** (0.073)	0.151** (0.070)	-0.043 (0.053)	0.741 (2.941)	-0.031 (0.070)	-27.185 (23.801)	
Combined	0.162** (0.072)	0.167** (0.070)	-0.129** (0.053)	-4.773* (2.629)	-0.079 (0.069)	-13.379 (23.722)	
Observations	417	417	437	437	450	450	
Control Outcome Mean Equality of treatments [p-value]	0.299	0.258	0.267	9.714	0.574	149.198	
Information = Belief Correction Information = Combined	[0.851] [0.811]	[0.617] [0.464]	[0.829] [0.146]	[0.542] [0.011]	[0.684] [0.254]	[0.275] [0.610]	
Controls?	yes	yes	yes	yes	yes	yes	

Notes: The dependent variable is a dummy that equals 1 if the respondent chose to sign a petition with full name (col 1) or with any name (col 2); donated a positive amount of their experimental earnings (col 3) or percent donated (col 4); dummy indicating the subject watched more than 10 seconds of the video (col 5) or seconds spent watching the video (col 6). Controls include indicators of age, marital status, religion, education, SC/ST dummy, assets, presence of elderly at home, locus of control, indices for risk, trust, retaliation, altruism, experience of corruption, information about corruption and about rights and entitlements, attitude towards corruption and past civic engagement, belief about others' willingness to protest, expected earning from the experiment, time and state of residence dummies. Robust standard errors in parentheses; p-values reported in square brackets. * p < 10, *** p < .0, *** p < .0



Heterogeneity by Information about Rights and Entitlements

Table: Treatment Effects by Information

		Petition			Donation			Video	
	Willing to Sign	Signed with Name	Signed with Full Name	Willing to Donate	Donated Positive Amount	Percent Donated	Willing to Watch Video	Watched > 10 Seconds	Seconds Watched
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Information	0.213*** (0.071)	0.139** (0.070)	0.115* (0.067)	-0.054 (0.055)	-0.056 (0.055)	3.022 (3.154)	-0.026 (0.067)	-0.002 (0.068)	-1.711 (23.490)
Belief Correction	0.170** (0.071)	0.171** (0.072)	0.155** (0.069)	-0.025 (0.055)	-0.045 (0.053)	0.619 (2.970)	-0.062 (0.069)	-0.046 (0.069)	-24.896 (23.574)
Combined	0.234*** (0.071)	0.162** (0.072)	0.167** (0.069)	-0.102* (0.056)	-0.132** (0.054)	-5.092* (2.629)	-0.084 (0.069)	-0.078 (0.070)	-11.619 (23.581)
Informed (Rights)	0.093** (0.047)	0.051 (0.048)	0.044 (0.043)	-0.007 (0.043)	-0.005 (0.043)	0.096 (1.946)	0.044 (0.050)	0.075 (0.051)	30.677 (18.639)
Information x Informed (Rights)	-0.040 (0.076)	0.026 (0.076)	0.040 (0.068)	0.051 (0.052)	0.045 (0.051)	1.548 (2.979)	0.009 (0.067)	0.005 (0.068)	-10.542 (23.773)
Belief Correction \times Informed (Rights)	0.099 (0.068)	0.150** (0.071)	0.104 (0.067)	0.072 (0.065)	0.047 (0.060)	2.660 (3.411)	-0.002 (0.073)	0.001 (0.074)	-18.168 (24.646)
Combined x Informed (Rights)	-0.128** (0.064)	-0.109* (0.066)	-0.096 (0.063)	-0.003 (0.049)	0.013 (0.048)	1.844 (2.281)	0.007 (0.068)	-0.020 (0.069)	-22.244 (23.047)
Observations 1 + 1 × Informed (Rights) [p value] BC + BC × Information (Rights) [p value] COM + COM × Information (Rights) [p value] Control Outcome Mean Controls?	417 [0.103] [0.006] [0.235] 0.392 yes	417 [0.137] [0.002] [0.569] 0.299 yes	417 [0.122] [0.009] [0.424] 0.258 yes	437 [0.964] [0.581] [0.120] 0.267 yes	437 [0.877] [0.976] [0.075] 0.267 yes	437 [0.289] [0.455] [0.352] 9.714 yes	450 [0.858] [0.500] [0.403] 0.620 yes	450 [0.977] [0.641] [0.302] 0.574 yes	450 [0.728] [0.211] [0.320] 149.198 yes
R ²	0.184	0.132	0.151	0.286	0.302	0.344	0.121	0.119	0.101

Note: Controls for indicators of age, marital status, religion, education, SC/ST dummy, income, presence of elderly at home, indices for: locus of control, risk, pro-sociality, corruption perception, infor protest, confidence in that belief, expected earning from the experiment, time and state of residence dummies included. Robust standard errors in parentheses, * p < .10, ** p < .05, *** p < .01

Heterogeneity by Perception of Corruption

		Petition			Donation			Video	
	Willing to Sign	Signed with Name	Signed with Full Name	Willing to Donate	Donated Positive Amount	Percent Donated	Willing to Watch Video	Watched $>$ 10 Seconds	Seconds Watched
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Information	0.209***	0.129*	0.104	-0.056	-0.057	3.050	-0.021	0.003	0.031
	(0.072)	(0.070)	(0.067)	(0.055)	(0.055)	(3.175)	(0.066)	(0.067)	(23.484)
Belief Correction	0.147**	0.143*	0.134*	-0.025	-0.044	0.625	-0.053	-0.035	-23.113
	(0.073)	(0.074)	(0.070)	(0.054)	(0.053)	(2.982)	(0.068)	(0.069)	(23.661)
Combined	0.221***	0.155**	0.165**	-0.104*	-0.130**	-4.852*	-0.076	-0.070	-10.393
	(0.073)	(0.073)	(0.070)	(0.054)	(0.052)	(2.605)	(0.068)	(0.069)	(23.645)
Perception	-0.046	-0.092*	-0.084	-0.151***	-0.140***	-5.333**	0.095**	0.071	11.246
	(0.049)	(0.051)	(0.051)	(0.040)	(0.040)	(2.103)	(0.047)	(0.051)	(17.124)
Information × Perception	0.055	0.093	0.077	0.089*	0.068	1.156	-0.041	-0.034	-21.885
	(0.062)	(0.065)	(0.064)	(0.053)	(0.054)	(3.415)	(0.058)	(0.061)	(23.448)
Belief Correction x Perception	0.012 (0.067)	0.078 (0.073)	0.063 (0.071)	0.063 (0.055)	0.068 (0.052)	2.316 (3.047)	-0.125** (0.062)	-0.120* (0.065)	-33.304 (22.543)
Combined \times Perception	0.001	-0.035	-0.065	0.152***	0.156***	5.766**	-0.136**	-0.154**	-44.913**
	(0.064)	(0.071)	(0.071)	(0.052)	(0.051)	(2.647)	(0.063)	(0.066)	(22.389)
Observations	417	417	417	437	437	437	450	450	450
I + I × Perception [p value]	[0.002]	[0.016]	[0.041]	[0.626]	[0.866]	[0.297]	[0.461]	[0.730]	[0.491]
BC + BC × Perception [p value]	[0.098]	[0.028]	[0.040]	[0.599]	[0.728]	[0.448]	[0.045]	[0.097]	[0.073]
COM + COM × Perception [p value]	[0.009]	[0.195]	[0.260]	[0.511]	[0.718]	[0.801]	[0.022]	[0.021]	[0.089]
Control Outcome Mean	0.392	0.299	0.258	0.267	0.267	9.714	0.620	0.574	149.198
Controls?	yes	yes	yes	yes	yes	yes	yes	yes	yes
R ²	0.165	0.116	0.145	0.295	0.315	0.350	0.133	0.134	0.107

Table: Treatment Effects by Corruption Perception

Note: Controls for indicators of age, marital status, religion, education, SC/ST dummy, income, presence of elderly at home, indices for: locus of control, risk, pro-sociality, corruption perception, info protest, confidence in that belief, expected earning from the experiment, time and state of residence dummies included. Robust standard errors in parentheses; * p < .10, ** p < .05, *** p < .01

	Willing to sign	Signed with full name	Signed with name
Information	0.214	0.11	0.137
	(0.003)	(0.098)	(0.05)
FDR-adjusted p-value	[0.012]	[0.06]	[0.046]
Belief Correction	0.151	0.14	0.15
	(0.037)	(0.044)	(0.042)
FDR-adjusted p-value	[0.046]	[0.046]	[0.046]
Combined	0.222	0.156	0.15
	(0.002)	(0.024)	(0.037)
FDR-adjusted p-value	[0.012]	[0.046]	[0.046]

back

Lasso Method for Selection of Controls

		Petition			Donation			Video	
	Willing to Sign	Signed with Name	Signed with Full Name	Willing to Donate	Donated Positive Amount	Percent Donated	Willing to Watch Video	Watched $>$ 10 Seconds	Seconds Watched
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Information	0.207*** (0.071)	0.130* (0.069)	0.105 (0.066)	-0.059 (0.056)	-0.065 (0.056)	2.086 (3.222)	-0.030 (0.066)	-0.003 (0.067)	0.231 (23.468)
Belief Correction	0.147** (0.073)	0.151** (0.072)	0.147** (0.068)	-0.021 (0.056)	-0.041 (0.054)	0.477 (3.017)	-0.057 (0.068)	-0.041 (0.069)	-25.151 (23.239)
Combined	0.236*** (0.069)	0.156** (0.070)	0.156** (0.067)	-0.091* (0.054)	-0.119** (0.052)	-3.845 (2.500)	-0.097 (0.069)	-0.095 (0.070)	-16.965 (23.560)
Observations Equality of treatments [p-value]	417	417	417	437	437	437	450	450	450
Information = Belief Correction	[0.393]	[0.768]	[0.527]	[0.497]	[0.649]	[0.639]	[0.679]	[0.565]	[0.269]
Information = Combined	[0.667]	[0.709]	[0.446]	[0.551]	[0.288]	[0.043]	[0.306]	[0.169]	[0.456]
Belief Correction = Combined	[0.204]	[0.944]	[0.896]	[0.181]	[0.109]	[0.125]	[0.550]	[0.439]	[0.724]
Control Outcome Mean	0.392	0.299	0.258	0.267	0.267	9.714	0.620	0.574	149.198
Controls?	yes	yes	yes	yes	yes	yes	yes	yes	yes



Literature

- Beliefs about others' activism:
 - Theories:
 - Models of activism as a coordination game (e.g., Pasarelli and Tabellini, 2017; Barbera and Jackson, 2020)
 - Empirical evidence:
 - Social networks, mobile phones and activism of peers increase protest turnout (Enikolopv et al., 2020; Manacorda and Tesei, 2020; Bursztyn et al. 2021)
 - Direct study of belief correction: students in Hong Kong *less likely* to protest (Cantoni et al. 2019)

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 - Direct study of belief correction: students in Hong Kong *less likely* to protest (Cantoni et al. 2019)
- Information to mobilize citizens to improve accountability in public service delivery:
 - Information on corruption of politicians: effective (Aker et al. 2017; Ferraz and Finan 2008).
 - Not much specifically about fraud/misbehavior/corruption of not elected public servants, with some exceptions (in health and education: Reinikka & Sevenson, 2005, Bjorkman and Svensson 2009, Afridi et al 2020, Bannerjee et al 2010)



Net Marginal Benefits with Strategic Complementarity



Afridi, Basistha, Dhillon and Serra (2023)

Activating Change

Petition - Heterogeneity by Bias in Prior Beliefs

Willing to Sign	Signed with Name	Signed with Full Name
(1)	(2)	(3)
0.262***	0.164**	0.156**
(0.080)	(0.079)	(0.075)
0.303***	0.260***	0.259***
(0.082)	(0.083)	(0.079)
0.307***	0.191**	0.182**
(0.080)	(0.081)	(0.076)
-0.096	-0.043	-0.134
(0.162)	(0.162)	(0.154)
-0.541***	-0.396**	-0.421***
(0.157)	(0.166)	(0.154)
-0.305*	-0.135	-0.068
(0.161)	(0.167)	(0.163)
0.233**	0.092	0.052
(0.114)	(0.115)	(0.109)
417	417	417
0.392	0.299	0.258
[0.242]	[0.391]	[0.875]
[0.078]	[0.347]	[0.221]
[0.988]	[0.704]	[0.432]
	Willing to Sign (1) 0.262*** (0.080) 0.303*** (0.082) 0.307*** (0.080) -0.096 (0.162) -0.541*** (0.161) 0.233** (0.161) 0.233** (0.161) 0.233** (0.114) 417 0.392 [0.242] [0.078] [0.988] yes	Willing to Sign (1) Signed with Name (2) 0.262*** 0.164** (0.080) (0.079) 0.303*** 0.260*** (0.082) (0.083) 0.307*** 0.191** (0.080) (0.081) -0.096 -0.043 (0.162) (0.162) -0.541*** -0.396** (0.161) (0.167) 0.233** 0.092 (0.14) (0.115) 417 417 0.392 0.299 [0.242] [0.391] [0.078] [0.347] [0.988] [0.704] yes yes

Note: Controls for indicators of age, marital status, religion, education, SC/ST dummy, income, presence of elderly at home, indices for: locus of control, risk, pro-sociality, corruption perception, inf standard errors in parentheses; * p < .10, ** p < .05, *** p < .01

Results: Giving Subjects a Choice of Actions

	Willing to Sign	Signed with Name	Signed with Full Name	Willing to Donate	Donated Positive Amount	Percent Donated	Willing to Watch Video	Watched Full Video	Seconds Watched
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Choice	-0.237***	-0.151**	-0.157***	-0.196***	-0.195***	-5.354**	-0.292***	-0.231***	-81.478***
	(0.061)	(0.059)	(0.054)	(0.046)	(0.045)	(2.282)	(0.067)	(0.056)	(20.990)
Information	0.217***	0.140**	0.114*	-0.052	-0.057	2.880	-0.016	0.027	3.513
	(0.068)	(0.067)	(0.064)	(0.054)	(0.054)	(3.074)	(0.065)	(0.065)	(22.683)
Belief Correction	0.143**	0.151**	0.137**	-0.018	-0.037	1.807	-0.050	-0.020	-20.929
	(0.070)	(0.069)	(0.066)	(0.054)	(0.052)	(2.956)	(0.066)	(0.065)	(22.464)
Combined	0.238***	0.156**	0.164**	-0.088*	-0.115**	-3.616	-0.094	-0.002	-14.889
	(0.068)	(0.068)	(0.065)	(0.052)	(0.050)	(2.400)	(0.067)	(0.065)	(22.824)
Information × Choice	-0.212**	-0.144*	-0.088	0.018	0.023	-5.686	-0.114	-0.010	-20.927
	(0.085)	(0.082)	(0.076)	(0.062)	(0.062)	(3.543)	(0.089)	(0.079)	(28.767)
Belief Correction × Choice	-0.212**	-0.228***	-0.180**	-0.028	-0.010	-5.224	0.033	0.029	6.795
	(0.085)	(0.082)	(0.077)	(0.061)	(0.059)	(3.404)	(0.096)	(0.081)	(29.178)
Combined × Choice	-0.257***	-0.180**	-0.152**	0.087	0.111*	3.030	-0.074	-0.031	-12.340
	(0.084)	(0.082)	(0.077)	(0.061)	(0.059)	(3.137)	(0.091)	(0.078)	(28.768)
Control Outcome Mean	0.392	0.299	0.258	0.267	0.267	9.714	0.620	0.343	149.198
Controls?	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	857	857	857	877	877	877	890	890	890

Note: Each column includes the sub-sample of the relevant action group (P: columns 1-3; D: columns 4-6; V: columns 7-9) and the choice group. Robust standard errors in parentheses; * p < .10,



Additional Findings

- Heterogeneity by information on rights and entitlements:
 - The information treatments are more impactful on the less informed; Information Rights
- Heterogeneity by perceptions of corruption in health:
 - None: The treatments are impactful no matter the initial perceptions of corruption in health; Perceptions Perceptions Questions
- Heterogeneity by tolerance of corruption:
 - The Information and Belief Correction treatments are impactful only on the less tolerant of corruption. Tolerance Questions
- Robustness:
 - Multiple hypothesis correction: Sharpened q-values (Benjamini et al., 2006) indicating the minimum false discovery rate (i.e., the expected proportion of false positives) **FDR** adjusted
 - Double Lasso method for selection of controls (Belloni et al., 2014).



Balance on Observables

	Total	Control	Information	Belief Correction	Combined	Difference					
Variable	(1)	(2)	(3)	(4)	(5)	(2)-(3)	(2)-(4)	(2)-(5)	(3)-(4)	(3)-(5)	(4)-(5)
A. Demographics											
Age 45+	0.145	0.129	0.149	0.144	0.157	-0.020	-0.015	-0.029	0.005	-0.009	-0.014
Married	0.490	0.464	0.480	0.503	0.512	-0.016	-0.040	-0.049	-0.023	-0.032	-0.009
SC\ST	0.264	0.272	0.264	0.246	0.275	0.007	0.026	-0.003	0.019	-0.011	-0.029
Hindu	0.769	0.784	0.769	0.740	0.783	0.015	0.044	0.001	0.029	-0.014	-0.043
College	0.782	0.779	0.802	0.763	0.780	-0.023	0.016	-0.001	0.039	0.022	-0.017
Income	0.494	0.517	0.513	0.480	0.466	0.004	0.037	0.051	0.033	0.048	0.015
Elderly	0.563	0.563	0.549	0.538	0.599	0.014	0.025	-0.036	0.011	-0.050	-0.060*
B. Preferences											
Locus of Control	0.059	0.000	0.039	0.099	0.093	-0.039	-0.099	-0.093	-0.060	-0.054	0.006
Risk	0.001	-0.000	-0.044	0.028	0.022	0.044	-0.028	-0.022	-0.072	-0.065	0.006
Pro-sociality	-0.034	-0.000	-0.029	-0.041	-0.062	0.029	0.041	0.062	0.012	0.032	0.021
C. Corruption											
Perception	0.053	-0.000	0.067	0.043	0.097	-0.067	-0.043	-0.097	0.024	-0.029	-0.053
Information (Rights)	0.027	-0.000	0.002	-0.000	0.102	-0.002	0.000	-0.102	0.002	-0.100	-0.103
Tolerance	0.052	-0.000	0.038	0.087	0.081	-0.038	-0.087	-0.081	-0.050	-0.043	0.006
Civic Engagement	0.064	-0.000	0.054	0.040	0.157	-0.054	-0.040	-0.157**	0.015	-0.102	-0.117*
D. Belief and Earning from Survey											
Bias (↑)	0.222	0.238	0.213	0.255	0.184	0.025	-0.017	0.054*	-0.042	0.029	0.071**
belief about others' willingness to protest (%)	64.077	64.709	63.044	65.986	62.705	1.664	-1.277	2.004	-2.942*	0.339	3.281**
Confidence	4.268	4.260	4.251	4.316	4.246	0.009	-0.056	0.014	-0.064	0.005	0.069
Expected Bonus Earning	138.801	138.532	136.778	142.497	137.534	1.754	-3.965	0.997	-5.719	-0.757	4.962
N	1744	412	450	431	451						
F-test of joint significance [p-value]						[0.994]	[0.841]	[0.522]	[0.830]	[0.892]	[0.303]

More Stats

