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ABSTRACT

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

What motivates individuals to participate in social activism? Do awareness campaigns and information about others' willingness to act play a role? We conduct an online experiment within a survey of nearly 2000 Indian men, focusing on activism to combat health sector fraud during the COVID-19 pandemic. In different treatment groups, we either provide information about the social problem, correct misaligned beliefs about others' willingness to act, or both. Participants are then cross-randomized to engage in one of three forms of activism: signing a petition, making a donation to an NGO fighting for the cause, or watching a video on ways to support the cause. We also experimentally examine the impact of allowing subjects to choose between the three forms of activism. Providing information and correcting downward biased beliefs about others increases petition signing, but has no impact on donations and video viewing. Giving participants a choice of actions decreases the probability of any single action being taken up. Our comprehensive examination of the factors influencing engagement in different forms of activism within a unified framework generates insights on the motivations behind participation in collective efforts for social change.

JEL Classification: D73, D83, I15, P0

Keywords: activism, information, beliefs, experiment

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1 Introduction

The past decade has seen a substantial increase in social movements and activism across the world, often facilitated by the fund-raising, advocacy and coordinating efforts of non-governmental organizations. Between 2010 and 2020 nearly 7000 protests have been recorded across the world (Clark and Regan, 2016; Ortiz et al., 2022).[1] Advocacy through petition signing has also increased rapidly. In the US, nearly 800,000 petitions were created in 2021 on the Change.org site, reaching over 400 million signatures, and leading to some notable successes, including the installation of Juneteenth as a national holiday.[2] The presence of an active civil society is often seen as an essential prerequisite for democratic transitions, regime changes and the implementation of substantial policy reforms (Battaglini, 2017; Madestam et al., 2013; Tarrow, 2022). What are the drivers of social activism? What can facilitate successful citizen mobilization? And do different forms of activism require different mobilization strategies?

In this paper, we investigate the underlying factors that lead individuals to engage in social activism. Existing studies have focused primarily on citizen mobilization and participation in street protests. An important strand of this literature has investigated willingness to protest in the context of the long-running anti-authoritarian movement in Hong Kong, examining the impact of financial incentives, the participation of people in one's social network and beliefs about others' willingness to join the protest (Cantoni et al., 2019; Bursztyn et al., 2021).[3] We focus on spontaneous rather than long-running social movements. We examine three common forms of social activism other than protesting: signing a petition, making a donation to an NGO fighting for the cause, and watching an informational video on the cause and on how to take actions.

Through an experiment embedded in an online survey, we assess the impact of information about the social problem and beliefs regarding others' willingness to take action on each form of activism. We hypothesize that, on the one hand, widespread information about the social problem could facilitate citizen mobilization by increasing intrinsic motivations to

[1] The Mass Mobilization Protest Data records protests against the government in 162 countries between 1990 and 2020. During the same period, there were close to 900 incidences of protest recorded in India, where we conduct our study. For more details, see https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/HTTWYL According to the Armed Conflict Location and Event Data (ACLED) Project, nearly 7 percent of worldwide demonstrations in 2020 led to law enforcement intervention. See: https://reliefweb.int/sites/reliefweb.int/files/resources/ACLED_Annual-Report-2020_Web_March2021.pdf

[2] For examples of other successful petition efforts, see: https://www.change.org/l/us/change-org-releases-top-ten-petitions-that-changed-2021

[3] Other recent work has examined the characteristics and preferences of individuals who join protests in the US (Chenoweth et al., 2022).

take action; on the other, it could lead to inaction by lowering expectations regarding the movement's chances of success. Our experiment allows us to test which effect prevails, and whether the answer varies by type of activism. Our focus on beliefs about the activism of others builds on existing theories that model social activism as a collective action problem, whereby high levels of participation are necessary,[4] yet participation entails private costs.[5] Within this framework, inaccurate beliefs about others' willingness to bear such costs can hinder individual efforts and contribute to an "inactivity equilibrium," even when the proportion of people willing to take action surpasses the critical mass required for a successful outcome. We experimentally test whether correcting downward biased beliefs can increase participation in different forms of activism.

We conduct our study in India, focusing on the social problem of fraud in the provision of health services during the COVID-19 pandemic. This was a time where scarcity in the supply of health services coupled with overwhelmingly high demand and urgent needs, allowed corruption to flourish.[6] We involved nearly 2000 individuals between May and July 2021 in our pre-registered[7] online experiment.[8] The data collection was implemented by Qualtrics through local survey firms that manage large panels of individuals. We collect information on demographic characteristics, individual preferences, and personal experiences with both the COVID-19 pandemic and corruption in the health sector. Toward the end of the survey, we elicit (incentivized) beliefs about the percentage of previous survey participants who expressed their willingness to protest against corruption in the provision of health services. Participants are then randomly assigned to a control group (C) or one of three treatment arms.

In our Information (I) treatment, we show subjects a 3-minute video providing information on the occurrence of fraud in the health sector in India during COVID-19, e.g., news stories documenting overcharging for hospital beds. In our Belief Correction (BC)

[4]For instance, in the US, a petition directed to the White House needs to gather 100,000 signatures within 30 days to be reviewed by government officials.

[5]These costs may be as small as the cost of time devoted to searching for ways to support the cause, and as large as the cost of being arrested when participating in a street protest.

[6]In India, numerous news outlet reported on the occurrence of corruption in the form of overcharging for COVID-related services, favoritism in service provision, and administration of fake vaccines for a fee. See for instance `https://www.indiatoday.in/india/story/corruption-second-covid-pandemic-black-marketing-medicines-tiii-1799395-2021-05-06`

[7]We pre-registered the experiment on AsPredicted in March 2021. The pre-registration can be seen here: `https://aspredicted.org/vc8vt.pdf`

[8]Online survey experiments have been recently used to examine a variety of topics, ranging from xenophobic views (Bursztyn et al., 2020) and racial discrimination (Haaland and Roth, 2021), to opinions about monetary compensation for kidney donations (Elias et al., 2019), to support for immigration (Haaland and Roth, 2020). Previous studies have successfully used both a petition (Bursztyn et al., 2020; Facchini et al., 2016; Settele, 2019) and a monetary donation (Alesina et al., 2018; Bursztyn et al., 2020; Settele, 2019) to measure individual preferences and support for a given cause.

treatment, we use the methodology first introduced by Bursztyn et al. (2020) and correct subjects' misaligned beliefs about other's willingness to act by providing them with the true percentage of previous participants who expressed their willingness to protest to support the cause (together with the percentages who agreed with two other statements). Finally, in our Combined (COM) treatment, we show participants both the video and the true percentage of previous participants who stated their willingness to act.

Our outcome of interest is actual activism. Generating such a measure in the context of an online survey can be challenging. We employ the following approach. Upon completing the survey, participants are informed that they have reached the end of the survey and are thanked for their participation, as customary. At this point, we give them information about a local NGO that we partnered with – the All India Drug Action Network (AIDAN) – and we ask them whether they would like to support the NGO in "pressuring local and central governments to better regulate health care in India, fostering transparency in hospitals and assisting patients who have been illegally overcharged." Within each treatment group (C, I, BC, and COM), we cross-randomize participants into one of four action treatments, where we vary the type of action subjects can take. In the *Petition* treatment, participants choose whether to sign a petition to the Union Health Minister of India. In the *Donation* treatment, they decide whether to donate a portion of the money they earned in the incentivized survey tasks to AIDAN. In the *How-to-Act Video* treatment, they decide whether to watch a 5-minute video showing ways they can help the cause, with a particular focus on AIDAN's activities. Since these actions differ markedly in their expected costs and benefits, and in the extent to which they are subject to collective action problems, we hypothesize that they may respond differently to the information and belief correction manipulations.

Additionally, we implement a fourth action treatment, the *Choice* treatment, where participants are presented with all three forms of activism and choose to engage in one of them or exit the survey. This allows us to contrast the effectiveness of two different strategies that are often used by NGOs and mobilizers. In some cases, citizens are encouraged to support the cause by engaging in one specific action. Think of a donation drive led by an organization fighting a social problem, or the circulation of a petition with the request for signatures. In other cases, mobilization efforts are broader, and organizations contact citizens and plead for support of any form. This is when they offer a menu of possible ways to support the cause and let citizens choose among them. Our experiment allows us to assess which mobilization strategy is preferable.

Our data confirm that fraud in the health sector during the COVID-19 pandemic was widespread. Nearly 91 percent of the respondents personally visited or had a household member visit a hospital since the beginning of the pandemic. The majority of them report

having paid a bribe (62 percent), having given a gift (59 percent) or having done a favor (68 percent) to a health provider to obtain a medical service. Importantly, we find evidence of substantial misalignment of beliefs about others' willingness to protest against corruption in the health sector. While most participants (90 percent) stated their willingness to protest, they believed on average that around 64 percent of others are willing to do so. About 60 percent of participants have downward biased beliefs. The comparison of engagements in the three forms of activism reveals that, at baseline, subjects are least willing to make a donation (27 percent) and most willing to watch the video (62 percent), with petition signing lying in between (39 percent).[9] When looking at actual activism (absent any treatment manipulation), the percentage who donate a positive amount is 27 percent, the percentage who sign the petition with full name falls to 26 percent, and the percentage who watch the full how-to-act video is 34 percent.

Our analysis of the main treatment effects shows that petition signing is significantly impacted by information about the cause and by the correction of misaligned beliefs about others' activism. In particular, the likelihood of signing the petition with one's full name increases by 11, 14 and 15.6 percentage points, respectively, in response to the Information, Belief Correction and Combined treatment manipulations. These correspond to 42, 54 and 58 percent increases over the Control mean. These impacts are large and robust to correcting for multiple hypothesis testing. Further analysis shows that it is the individuals with downward-biased beliefs who increase their activism when their beliefs about others are corrected, providing evidence of strategic complementarities in the decision to sign a petition. The impact of the treatments on the other actions is less promising. In fact, donations and video watching do not increase, and there is evidence that the propensity to make donations may even decrease, with information about the social problem. Correcting beliefs about others' activism also does not seem to matter. Finally, when individuals are given a choice of actions, the take-up of each action is lower than when the action is presented in isolation. Moreover, offering subjects different ways to support the cause does not increase overall engagement with the cause, as measured by the decision to take action rather than exit the survey. This indicates that presenting individuals with only one form of activism is preferable.

Our paper contributes to the theoretical and empirical literature on participation in social movements. We build on recent theoretical work that models social activism, e.g., the decision to join a protest, as a coordination game, or a game of strategic complements, where individual beliefs about others' willingness to participate positively impact one's decision to act (e.g., Barbera et al., 2020; Passarelli and Tabellini, 2017). Consistent with the

[9]This reflect the initial decision to engage in the action rather than exiting the survey. After expressing willingness to act, subjects could still decide not to act.

theory, there is empirical evidence that protest turnout increases with the diffusion of social networks (Enikolopov et al., 2020) and mobile phones (Manacorda and Tesei, 2020), and with the activism of peers (Bursztyn et al., 2021; González, 2020).We add to these studies by investigating the *direct* causal link between beliefs about others' willingness to act and own participation in activism, and whether correcting such beliefs positively impacts one's decision to act. To the best of our knowledge, the only other investigations of the impact of belief correction on activism[10] are by Cantoni et al. (2019) in the context of protest participation in Hong Kong and by Hager et al. (2022) in the context of political canvassing in a Western European country. Crucially, both studies find evidence of strategic substitutability, rather than complementarity, in activism (protesting and canvassing respectively). This is in contrast with our findings for petition and much of the theoretical and empirical work on social activism, and may be due to the type of social movements examined in Cantoni et al. (2019) and Hager et al. (2022). Specifically, since Hong Kong is a semi-democratic regime with a well-established anti-authoritarian movement, political protests occur yearly on a pre-determined date and therefore differ from spontaneous social movements. Political canvassing for a party or candidate also occurs repeatedly over time. In contrast, we examine participation in grassroots social movements, which individuals may be unfamiliar with when mobilized by NGOs or other social activists. We also depart from most previous investigations by considering activism other than protesting.

Our findings on willingness to sign a petition provide support to theoretical studies that model activism as a game of strategic complements. This suggests that the setting (democracy versus semi-authoritarian government), the nature of the movement (new and spontaneous versus established and long-running) and the form of activism (petitioning in our case, protesting or canvassing in previous studies) are likely to affect how beliefs about others enter individuals' decision to participate in activism. This is further corroborated by the null impact of the belief correction intervention on activism through donations and information gathering (i.e., video watching), which indicate that, in our setting, both actions are primarily motivated by factors other than the expected behaviors of (unknown) others. The null result obtained for donating behavior, in particular, contrasts a large literature on charity fundraising that shows that donations tend to increase with information about the contributions of others (Croson and Shang, 2008; Frey and Meier, 2004; Martin and Randal, 2008).[11] This may be because we do not provide information on the donations of

[10] See Bursztyn and Yang (2021) for a review of studies experimentally manipulating beliefs, or correcting misaligned beliefs, in contexts other than social activism.

[11] Perez-Truglia and Cruces (2017) also find that political contributions increase with information about the contributions to own party by others in the area. For reviews of the literature on charity donations, see Andreoni and Payne (2013) and Vesterlund (2016) for reviews of the literature on charity donations.

previous participants; instead, we correct beliefs about others' willingness to fight for the cause. It is also possible that the decision to make a donation to an organization working toward addressing a social problem is different in nature from the decision to make a charity donation. Moreover, it is unclear whether we would obtain the same results if subjects could donate any amount of money, instead of only a portion (or all) of the small earnings from participating in the study.

Our paper also adds to the sparse literature on whether and how information about the social problem – the *cause* – affects participation in social movements. We are not aware of any other study testing specifically the impact of information on social activism. Related investigations exist, however, in the context of politics and voting. Some studies have shown that information about politicians' malfeasance affects voting decisions (see, e.g., Adida et al., 2020; Aker et al., 2017; Ferraz and Finan, 2008), while others have shown that information about political corruption lowers voter turnout (Chong et al., 2015; De Vries and Solaz, 2017). A recent meta-study (Dunning et al., 2019) reveals that commonly run information campaigns are unlikely to affect voting behavior. Other studies assess the impact of providing service recipients with information regarding the existence of participatory mechanisms or institutions (e.g., Banerjee et al., 2010; Pandey et al., 2009), or their entitled benefits (Banerjee et al., 2018; Dupas and Jain, 2023), or the relative performance of local health facilities/providers or schools (Andrabi et al., 2017; Afridi et al., 2020; Björkman and Svensson, 2009; Di Maro et al., 2021). These studies typically examine the impact of information interventions on the quality of the services being provided rather than on individuals' decision to actively participate in initiatives aimed at improving such services.[12] We contribute to this broad set of studies by empirically showing that providing information about the social cause could successfully mobilize citizens (as is the case for petition signing in our setting), but could also have no effect, or even a negative effect (as is the case for donations and video watching). This is likely because awareness of the severity of the social problem may discourage individuals to act, due to lower expectations of a successful outcome.

Finally, we generate important insights on how citizen mobilization efforts are affected when individuals are presented with multiple ways to support the cause, as opposed to only one form of activism. Our findings are important as they show that not only does engagement with each form of activism decrease when different possible actions are presented jointly rather than in isolation, but it also becomes less responsive to interventions providing information about the social problem or the activism of others. To our knowl-

[12]There is also a large literature on the effects of information in the context of environmental conservation. However, these studies focus on the effects of information on individuals' choices that have an environmental impact, rather than participation in environmental activism. See Gillingham et al. (2018) for a review of this literature.

edge, no other studies comprehensively explore the factors that influence engagement with various forms of activism within a unified framework, investigating the differential effects of mobilization interventions and comparing outcomes when different forms of activism are presented individually or jointly.

2 Experiment Design and Implementation

2.1 The Online Survey

The study was conducted between March and July 2021 in two Waves. Wave 1 involved 391 participants and took place in early March, about a week prior to the beginning of the Wave 2 data collection. Our experiment is embedded in the Wave 2 survey, which involved 1774 participants. The only purpose of Wave 1 was to generate survey answers that we used to incentivize the belief elicitation that we conduct in Wave 2. Hence, our empirical analysis focuses on the data generated by the Wave 2 survey.[13]

Figure 1 provides an overview of our study design. The online survey had four main sections. Subjects first answered questions on basic demographics such as age, gender, education, caste and religion, household composition and income, and location of current residence. They then answered a set of questions aimed at generating personality and preference measures, including locus of control,[14] risk, trust, altruism and retaliatory tendencies.[15] We combine the indices of trust, altruism and reverse-coded retaliation to generate a measure of pro-sociality (details provided later). The next section of the survey centered on experiences with the healthcare system during the pandemic. It included questions aimed at measuring: (1) awareness about corruption and fraud in the health sector during the pandemic; and (2) the extent to which subjects tolerate or justify corruption in the health sector and in other government sectors. These are especially important as we expect the impact of our treatment manipulations to likely depend on both subjects' prior information about corruption and fraud in the health sector (the *cause*) and their overall tolerance of corruption. A more detailed discussion of these measures is presented in Section 4.1.

[13]The recruitment criteria, hence the demographic characteristics, of the subjects who participated in the Wave 1 survey, were the same as those who participated in Wave 2. The Wave 1 survey was identical to the baseline version of the Wave 2 survey, with the exception of the belief elicitation questions, which we only included in the Wave 2 survey.

[14]The locus of control index captures the degree of control subjects believe they have over outcomes in their lives. Summary statistics are reported in Appendix A.

[15]We took these non-incentivized measures of individual preferences from the Global Preference Survey, following (Falk et al., 2018). Specifically, we chose questions that have been shown to correlate with the corresponding incentivized measures.

The last section of the survey, which preceded the randomization into treatments, included questions that allowed subjects to earn bonus money. First, participants engaged in a risk-elicitation incentivized activity, modeled after Eckel and Grossman (2008). Then, they answered questions aimed at eliciting beliefs on others' willingness to act against corruption in health. We followed the methodology introduced by Bursztyn et al. (2020) in the context of female labor force participation in Saudi Arabia. We presented participants with three statements related to the health sector and health-related behaviors. We first asked subjects whether they agreed or disagreed with each statement. We then asked them to guess the percentage of the Wave 1 survey participants who agreed with each statement. We incentivized the belief elicitation by rewarding each correct guess with INR 50, for a maximum of INR 150 if all three guesses were correct.[16] In order to facilitate the incentivized elicitation, beliefs were recorded over 10 percentage point ranges, i.e. 0-10, 11-20, 21-30 and so on and so forth. We describe each statement and its relevance in the following section. Participants were not provided feedback on either the outcome of the lottery or their earned bonus earnings, to eliminate the risk that endowment effects caused by earning differentials could impact the outcomes of interest.

Next, subjects were randomly assigned to either a control group or one of three activism treatments. A further individual-level randomization, within each treatment group, took place at the conclusion of the survey and determined which form of activism (action treatment) each subject was offered to partake in. We describe each activism treatment in Section 2.2.1 and each action treatment in Section 2.2.2.

2.2 Treatments

Our experiment employs a 4x4 between-subject design, as depicted in Figure 1. In particular, we implemented two independent sets of treatment manipulations by acting on: (1) factors that may increase individuals' willingness to partake in activism, and (2) the types of action(s) made available to subjects. We refer to the former as *Activism Treatments*, and to the latter as *Action Treatments*.

2.2.1 Activism Treatments

After answering all sections of the survey described in Section 2.1, subjects were randomized to either a control group or one of three treatments. The control group reached the end of the survey, whereas the treatment groups were exposed to different stimuli aimed at increasing individuals' willingness to engage in activism for the cause.

[16] INR stands for Indian Rupee; 1 USD = INR 75 at the time of the project implementation.

In the **Information (I)** treatment, subjects were shown a 3-minute video on the social problem under study, i.e., specific instances of corruption in the health sector in India during the COVID-19 pandemic. The video showed and discussed news stories concerning the demand for bribes, the illegal overcharging for medical equipment or hospitalization, and the occurrence of medical hostage taking.[17] The content of the video was taken from corruption cases documented in local newspapers and social media platforms between April 2020 and January 2021.[18] In order to maximize the likelihood that participants would watch the video in its entirety, we made sure that the video could not be forwarded and that subjects could not move on with the survey until the video ended.

The **Belief Correction (BC)** treatment aimed at updating participants' (potentially misaligned) beliefs about others' willingness to act to help the cause. We employed the methodology introduced by Bursztyn et al. (2020), i.e., we elicited subjects' beliefs about the percentage of Wave 1 survey participants who agreed with the statement "I am willing to raise my voice and participate in a protest against corruption in the provision of health service." The elicitation took place in all treatments. However, in the BC treatment, at the end of the survey, we presented subjects with a table displaying the three statements for which we elicited beliefs - including the statement of interest - together with the percentage of Wave 1 participants who agreed with that statement. Similar to Bursztyn et al. (2020), in order to minimize experimenter demand effects, we used three statements, rather than only the statement of interest. We chose the other statements so that they were all about health-related behaviors, but differed in the expected belief mismatch and the hypothesized impact of the belief correction on our outcomes of interest. The first statement was about the use of masks during the pandemic - a health advisory that had been emphasized through public communication channels and that we expected not to generate a belief mismatch.[19] The second statement concerned the independent oversight of emergency funds set up during the pandemic,[20] and was therefore closer to the statement of interest, in terms of its focus on possible misbehavior within the health sector during the pandemic. However, contrary to the statement of interest, it did not directly address individuals' willingness to act against such misbehavior.

We note that our belief correction procedure is not about beliefs regarding the percentage

[17] Hospitals often illegally hold dead bodies or detain patients for non-clearance of hospital bills, as documented here: https://scroll.in/article/973153/interview-how-should-india-regulate-private-healthcare-to-avoid-pitfalls-exposed-by-the-pandemic)

[18] The video could be accessed here: https://youtu.be/8Ud5gla8gVI

[19] The statement read: "In order to contain the spread of COVID-19, people should wear face masks when they are in public spaces."

[20] The statement read: "I believe that citizens should demand that the usage of relief funds set up during the pandemic should be audited by independent third party organization."

of people engaging in the specific forms of activism that we then ask subjects to engage in. In other words, we do not elicit beliefs about previous participants' petition signing, donating decisions or video watching, and we do not correct such beliefs. This is because if we had corrected beliefs regarding the forms of activism that constitute our outcome variables, and then asked subjects whether they would want to take up those same actions, we may have unintentionally induced activism due to experimenter demand effects, rather than the true effect of corrected beliefs on the decision to take action. In other words, our design allows us to simulate a setting where individuals are asked to take part in a "new" spontaneous movement by taking a specific action, without knowing the exact number or percentage others participating taking the same action, but with information on the extent to which others care about the cause and are generally willing to fight for it. Note that this design choice also allows us to keep the information disclosed in the Belief Correction treatment constant across the Petition, Donation, Video and Choice treatments. If instead we had disclosed (in the Belief Correction treatment) the percentage of past participants signing a petition, making a donation, watching the video, or choosing an action in each of the four action treatments, respectively, any differential impact of the belief correction treatment on the four forms of activism could have been driven by the different percentages of previous participants taking each action.

In the **Combined (COM)** treatment, we implemented both the Information and the Belief Correction treatment manipulations. Specifically, subjects were shown both the 3-minute video *and* the table displaying the true percentage of previous survey participants who agreed with each of the three statements.

2.2.2 Action Treatments and Outcome Variables

An important aspect of our experiment design is the way we measure our outcome variables. Given the nature of the data, which made it impossible to follow up survey participants over time and observe subsequent decisions regarding activism, we had to devise a way to allow for such decisions to be made within the framework of the survey. At the same time, any decision concerning activism should be perceived as a factual decision, and not as an hypothetical survey answer. We achieved this by directing subjects to a final survey page, where we thanked them for their participation in the study. This aimed to create the belief that the survey has ended. In fact, subjects could select an "Exit Survey" button on that page. However, on the same page, we also gave subjects information about a local non-profit organization - the All India Drug Action Network (A.I.D.A.N) - that had been pressurizing local and federal government to better regulate health care in India, fostering transparency in pricing and providing redress to patients who have been illegally overcharged.

Following the paragraph with information about A.I.D.A.N., we gave subjects the chance to either exit the survey or to take an action to support the activities of the organization.[21] We experimentally manipulated the action that was offered to subjects. Specifically, subjects were given the chance to either sign a petition to the Ministry of Health, or make a monetary donation to A.I.D.A.N., or watch an informational video on A.I.D.A.N.'s activities and ways to get involved in support of the cause. A fourth action treatment presented subjects with all three actions and allowed them to choose among them. Exiting the survey was always a choice. All decision screens are presented in Appendix B.

In the **Petition Action Treatment**, subjects were given the chance to sign a petition addressed to the Union Health Minister of India. If subjects clicked on "Petition", they were shown a new page, which disclosed the full 200-word long petition, which we designed in close collaboration with A.I.D.A.N.. The petition placed demands on the government to (1) fast-track the adoption of regulatory laws of health establishments, (2) adopt a clear communication of treatment protocols and implementation of prescription audits, and (3) implement district level grievance redress systems for patients. At the bottom of the petition, subjects were given the chance to sign by writing down their name, knowing that the petition, once all signatures had been collected, would be sent to the Health Minister. Subjects could also decide not to sign the petition and instead select the "Exit Survey" button, which appeared at the bottom of the same page.

Petitions have been used in a number of studies to measures individuals' attitudes toward sensitive topics, such as support of pro- or anti-immigration policies (Facchini et al., 2016; Haaland and Roth, 2020) and gender equality in the labor market (Settele, 2019). The usual methodology consists in providing subjects with links to a webpage outside the survey platform, and to then assess changes in the total number of signatures on the platform by treatment, while individual signatures remain inaccessible to the researchers. We departed from this method and instead presented a petition (that we created) to participants *within* the survey platform. This allowed us to record whether each individual participant decided to sign the petition.[22] While we have no way to verify whether the name subject wrote down is his actual name, we assume that whenever a first and last name are provided, the likelihood of them being truthful is high. Another advantage of using our methodology is that, by preventing access to an online petition through an external website, the decision to sign the petition cannot be conditioned on the number of previous signatures, which is usually visible in such websites, and would be outside of our control.

[21] We developed each of these actions in partnership with A.I.D.A.N.

[22] We placed an invisible time-tracker question attached to the petition action to track how much time the subject spent on reading the petition text. We found that on an average, in the petition action group, subjects spent 39 seconds to read the text, with a standard deviation of 41 seconds in the full sample.

When analyzing activism in the form of petition signing, we consider the following outcome variables: (1) Initial willingness to sign the petition (rather than exit the survey); (2) Decision to write down a first name (rather than leaving the name field empty); (3) Decision to write down a first and a last name (rather than just first name or leaving the field empty).

In the **Donation Action Treatment**, once subjects reached the final survey page, subjects were given the same information about the non-profit organization (A.I.D.A.N) as in the Petition Action Treatment. They were then given the option to either donate a percentage of their bonus earnings to the organization or to exit the survey. If they selected the "Donation" button, they were shown a new page where they were asked to select their desired donation level, out of 10 possible levels, i.e., 10 percent, 20 percent, 30 percent, and so on and so forth, up to 100 percent of their bonus earnings.[23] Importantly, 0 percent was also listed as a possibility, meaning that subjects could still decide to not make a donation to the organization prior to exiting the survey.

A number of recent studies employing online surveys use subjects' willingness to make donations to specific organizations as their outcome measures of interest. Usually, subjects are presented with some money, e.g., 1 USD, and choose whether to authorize the donation of that amount to an organization presented to them by the researchers, as in Bursztyn et al. (2020). Other studies (e.g., Grigorieff et al., 2020) give subjects an endowment and allow them to keep or donate some or all of the money to the organization of interest. Others, (e.g., Alesina et al., 2018) ask subjects to decide how much to donate out of an amount of money that they have the chance of winning in a lottery that is implemented as part of the study. Our approach is different. To maximize similarities with real life donation decisions, we ask subjects to donate part of the money that they earned by participating in the survey. In fact, while the compensation for completing the survey is fixed, subjects could earn bonus money from the incentivized lottery game and the belief elicitation exercise conducted towards the end of the survey. In order to minimize endowment effects, subjects were not informed about their bonus earnings prior to deciding whether and how much to donate, although we did collect data on expected earnings. Recall that possible donations were expressed in percentage points, rather than actual monetary amounts. When analyzing activism in the form of making donations, we consider the following outcome variables: (1) Initial willingness to make a donation (rather than exit the survey); (2) Decision to donate a positive percentage; (3) Actual percentage of bonus earnings donated.

In the **How-To-Act Video Treatment**, the information on the final survey page was held constant, but subjects were given the chance to watch a 5-minute informational video

[23] We deducted the contribution from subjects' earnings and donated the amount to A.I.D.A.N after completion of the study.

about A.I.D.A.N's activities, including examples on how the organization helps citizens fight corruption in the health sector. The video also provided information on how citizens can assist A.I.D.A.N's efforts to promote transparency and accountability, for instance by sharing information on their own experience with illegal practices in the health sector and by collectivizing in the fight against corruption. Like in the other action treatments, subjects were first given the chance to select either "Exit Survey" or "Video", and then, once the video started in the next page, they could still exit the survey at any time. We included an invisible time tracker to record how long the participants watched the 5-minute video. When analyzing activism in the form of video watching, we consider the following outcome variables: (1) Initial willingness to watch the video (rather than exit the survey); (2) Decision to watch the full video; (3) Seconds of video watched.

In the **Choice Treatment**, subjects received the same information about A.I.D.A.N, but were presented with the three actions - Petition, Donation, Video – and asked whether they would like to take up one of them - but only one - or exit the survey.[24]

Our decision to experimentally manipulate the types of actions subjects were asked to engage in, was motivated by a desire to examine the collective aspect of activism by varying the nature of the costs and benefits associated with each action, and the extent to which such costs and benefits are perceived as somehow depending on others' activism. In the next subsection we formalize our conceptual framework and derive our empirical predictions.

2.3 Theoretical Framework

In deriving our theoretical predictions we adapt and extend the model of protest participation introduced by Cantoni et al. (2019). Similar to their benchmark model, we assume that individuals' utility from participating in any form of activism depends on the costs and benefits of participation. As in previous models (Cantoni et al., 2019; Barbera et al., 2016; Passarelli and Tabellini, 2017), we assume that such costs and benefits are affected, negatively and positively, respectively, by the participation of other individuals, i.e. we assume strategic complementarity in both the costs and benefits of activism.

The participation decision is denoted by $P_i \in \{0, 1\}$, where 1 (0) denotes participation (non-participation). We augment Cantoni et al. (2019)'s model by assuming that there is uncertainty regarding the state of the world $\theta \in \{H, L\}$ - which we interpret as the severity of the social problem that requires citizen mobilization. In our setting, this would be the

[24]In order to check subject attentiveness in the survey, we employed a variety of checks and screening questions within the study. Inattentive subjects were more likely to have a higher number of failed attempts in the training questions, and were more likely give incomprehensible answers in the descriptive questions. We do not find the proportion of inattentive subjects (24 percent overall) to vary significantly between treatment groups or affect our results. Our analysis sample, therefore, consists only of attentive subjects.

level of fraud and corruption in the health sector. Without loss of generality, we assume that the severity of the social problem, i.e., the level of corruption, θ is high (H). Informed citizens are aware of this, whereas uninformed citizens have a prior probability p on the state of the world being H. We also assume that individuals receive an intrinsic net benefit W_i from participating in activism. This is the difference between the intrinsic benefit from participating, e.g., warm glow, and the intrinsic cost from not participating, e.g., feeling of guilt. We assume that such net benefit is increasing in the severity of the social problem, i.e., $\frac{\partial W_i}{\partial \theta} > 0$. For informed types, $W_i(\theta)$ is equal to $W_i(H)$; for the uninformed, it is equal to $pW(H) + (1-p)W(L)$. Below n_{-i} denotes the number of citizens participating in activism excluding i, while $n = n_{-i} + 1$.

Hence, the utility of citizen i from participating in activism, i.e., when $P_i = 1$, is represented by:

$$(U_i|P_i = 1) = W_i(\theta) + V_i(n, S(n, \theta)) - C_i(n, S(n, \theta)) \tag{1}$$

where V_i and C_i are the benefits and costs associated with participation, and S denotes the probability of "success" of the form of activism the citizen engages in. The state of the world θ enters the success function, as the probability of success is lower the higher the severity of the social problem ($\frac{\partial S}{\partial \theta} < 0$). The number of other participants n also enter the success function, as we assume strategic complementarities in citizen's actions. In particular, the probability of success is higher the larger the number of participants ($\frac{\partial S}{\partial n} > 0$,), and, as in Cantoni et al. (2019), individuals get more benefits from participating in an event that is more likely to succeed ($\frac{\partial V_i}{\partial S} > 0$) and when more people participate, no matter the outcome ($\frac{\partial V_i}{\partial n} > 0$). Moreover, we also assume that the cost of participating is a function of the number of others participating and the likelihood of success. This is because, for instance, the cost of being punished (e.g., for signing a petition) is likely to be lower the larger the number of other participants, as the government is more likely to give in than to crack down on citizens' actions.

The utility associated with not participating is given by:

$$(U_i|P_i = 0) = V_i(n_{-i}, S(n_{-i}, \theta)) \tag{2}$$

which indicates that by not participating, an individual still enjoys the possible benefits generated by the participation of others, without suffering any costs.

Informed citizens know that the true level of corruption is high ($\theta = H$), i.e., there is no uncertainty. Therefore, an informed citizen i will participate if and only if $(U_i|P_i = 1) - (U_i|P_i = 0) \geq 0$. In contrast, uninformed citizens do not know the true state of the world.

Therefore, their utility associated with participation is expressed in expectations over θ, as follows:

$$\begin{aligned} E_\theta(U_i|P=1) &= p\left((W_i(H)+V_i(n,S(n,H))-C_i(n,S(n,H))\right) \\ &+ (1-p)\left((W_i(L)+V_i(n,S(n,L))-C_i(n,S(n,L))\right) \end{aligned} \tag{3}$$

and similarly for $E_\theta(U_i|P_i = 0)$. Therefore an uninformed citizen i would participate if and only if the expected benefit from participating exceeds the cost of participating, i.e., if $E_\theta(U_i|P_i = 1) - E_\theta(U_i|P_i = 0) \geq 0$. In other words, participation takes place if the (Expected) Net Marginal Benefit (NMB) of participating is greater than zero. Denote the Expected Net Marginal Benefit of activism as $\Delta(\theta, n\_i)$. To simplify notation, we assume n is large so n_{-i} is approximately equal to n.

Assume that when $n_{-i} = 0$, i.e. no other citizen participates, then the (expected) benefit V associated with participation is zero, the activism has no chance of succeeding. On the other hand, both the intrinsic benefit from participating W and the cost from participating are likely to still be greater than zero. It is reasonable to assume that: (i) when nobody else participates, the cost of participating exceeds the intrinsic benefit of participating, and (ii) the Expected NMB (ENMB) curve is monotonically increasing in n_{-i} (due to the assumption of strategic complementarity). This implies that each individual i will have a threshold value of n_{-i} denoted as $\tilde{n}^i$ such that below the threshold $P_i = 0$ and above the threshold $P_i = 1$.

The activism threshold is lower for individuals with high intrinsic motivations to participate, ceteris paribus. Many factors may affect such intrinsic motivations, hence the threshold level of participation, everything else equal, including attitudes toward the cause (e.g., tolerance of/aversion towards corruption), and individual preferences related to pro-sociality, such as trust and altruism. The activism threshold is also lower for individuals for which the cost of acting when $n = 0$ is small, and those whose ENMB of acting is more responsive to changes in n.

2.3.1 Predictions: Treatment Effects

Next, we derive predictions on the impact of our Information, Belief Correction and Combined interventions on the likelihood of participating in activism.

Prediction 1: The **Belief Correction (BF)** intervention will:
(a) increase activism among individuals with downward biased beliefs about n_i;
(b) have no (negative) impact on individuals with upward biased beliefs about n (if beliefs are updated below the threshold $\tilde{n}^i$);

(c) be more likely to impact the decisions of individuals with high (low) initial thresholds $\tilde{n}^i$ if the true n is high (low).

Prediction 1 reflects the fact that the impact of the Belief Correction intervention depends on two factors: (i) whether individuals have incorrect beliefs about the number of others willing to act, n, and (ii) whether they have a low or a high threshold $\tilde{n}$ for participation. With an upward sloping ENMB curve (due to our assumption of strategic complementarity), individuals who hold downward biased beliefs about the true n will change their action from $P = 0$ to $P = 1$ if and only if their threshold lies between the true proportion and their subjective beliefs. An upward biased individual will change from $P = 1$ to $P = 0$ if and only if the threshold $\tilde{n}$ lies between the true proportion and their subjective belief. Therefore, if the true proportion is high, a higher threshold implies greater responsiveness to Belief Correction. If the true proportion is low, then the opposite is true.

Prediction 2: The **Information (I)** intervention will increase (decrease) activism among previously uninformed individuals if the positive impact on intrinsic motivations to act is larger (smaller) than the discouragement effect caused by lower expectations of success.

This is because providing individuals information about the state of the world (being H) will likely have two effects. On the one hand, it will positively affect the intrinsic motivations to act of the uninformed, leading to more participation. On the other, since the chance of success S depends negatively on θ, information about the severity of the social problem may also lower the expected S, therefore discouraging participation. The overall impact of information on the ENMB curve is therefore ambiguous. Formally, recall that the expected marginal benefit of participating for an uninformed individual who beliefs with probability p that the social problem is severe (H) is:

$$\Delta(\theta, n) = p\left((W_i(H) - C_i(n, S(n, H)) + (1 - p)\left((W_i(L) - C_i(n, S(n, L))\right)\right. \tag{4}$$

Differentiating w.r.t p we have $\frac{d\Delta}{dp} = W_i(H) - W_i(L) + C_i(n, S(n, L)) - C_i(n, S(n, H))$. The result is ambiguous because, on the one hand, the intrinsic benefit of participating when θ is H is greater than when it is L. On the other, the cost of participating is lower the greater the probability of success S, and S is higher when the social problem is less severe. Hence, $C_i(n, S(n, L)) - C_i(n, S(n, H)) < 0$. It follows that the effect of information on participation is positive when the impact on intrinsic motivations prevails, and it is negative when the impact on participation costs prevails.

Prediction 3: The **Combined (COM)** intervention will:
(a) have the same impact as the Belief Correction (BC) treatment on subjects who are already informed about the state of the world;
(b) have the same impact as the Information (I) treatment on uninformed subjects with low threshold for participation $\tilde{n}^i$;
(c) have an impact equal to the sum of the impacts of the I and BC treatments on uninformed subjects with high thresholds for participation.

The Combined Treatment provides individuals with information about the true state of the world (High corruption) and corrects beliefs about others' willingness to act. The impact of this treatment on activism depends on three factors: i) whether individuals are already informed about the state of the world θ, ii) whether they have a relatively low or high threshold $\tilde{n}^i$ for participation; and iii) whether they hold incorrect beliefs about n. For individuals who are informed, the impact of the Combined treatment will be the same as the impact of the Belief Correction treatment, i.e., larger for subjects with higher thresholds $\tilde{n}^i$ and downward biased beliefs. As in the Information and Belief Correction treatments, the effect of the Combined treatment is larger for uninformed individuals with high thresholds, who are likely to have downward biased beliefs, relative to uninformed with low thresholds.

2.3.2 Predictions: Forms of Activism

An important component of our experimental design is the manipulation of the specific types of activism subjects were presented with at the end of the survey. Conceptually, individuals could engage in different actions in support of a given cause. Such actions are likely to vary in their benefit and cost functions, therefore leading to different levels of activism and different responsiveness to our treatments of interest. We are particularly interested in actions that vary in the extent to which costs and benefits depend on the (expected) activism of others. Formally, we can assume that different forms of activism differ in the extent to which the ENMB of taking action reacts to changes in n. Specifically, we can classify different types of activism according to the extent to which $\Delta(\theta, n))$ changes with n. In the experiment, we examine three actions: a Petition (P), a Donation (D), an How to Act Video (V). We separate out the components of the ENMB function that depend on n (collective action component) and those that do not (intrinsic component).

High Collective Action Component - Petition: Signing a petition requires individuals to publicly disclose their support for a cause through the provision of identifying information,

e.g., names and contact details. This implies that individuals who sign a petition could be contacted and formally or informally punished. It is reasonable to assume that the likelihood of individual punishment decreases with the number of others signing the petition. The benefit function associated with petitioning is also likely to be dependent on n, as the probability of success S increases with the number of people signing the petition. Therefore, the Expected Net Marginal Benefit curve is likely to be increasing in n.

Lower Collective Action Component - Donation: The cost of donating to an organization fighting for a given cause is independent from n. In fact, donors can keep their identity confidential, hence punishment is unlikely no matter the number of others' donating. However, it is still reasonable to assume that the marginal benefit is increasing in n, since the probability that the organization collecting donations will be successful in reaching its goal is increasing in the number of donors.[25] Hence, $|\frac{\partial E_\theta(\Delta(n)}{\partial n}|_D$ is greater than zero, yet is it is likely lower than $|\frac{\partial E_\theta(\Delta(n)}{\partial n}|_P$ where the subscripts D and P refer to Donation and Petition, respectively.

Lowest Collective Action Component - How-to-act Video: We expect the ENMB of watching the informational video to be the least likely to depend on n. In fact, watching the video comes with a purely private cost - the cost of time. As for the expected benefits, it is still possible that individuals find watching the video more likely to be useful for the cause if they think others also watch the video and gain the same information. However, in this case, the probability that the action is successful also depends on the number of people who subsequently act upon the information received through the video. Therefore, the link between the action and number of other acting, n, is especially weak. Hence, we expect $|\frac{\partial E_\theta(\Delta(n)}{\partial n}|_V$ to be lower than both $|\frac{\partial E_\theta(\Delta(n)}{\partial n}|_P$ and $|\frac{\partial E_\theta(\Delta(n)}{\partial n}|_D$.

In order to corroborate our assumptions regarding the three forms of activism, we conducted an additional online survey of 849 Indian men in October-November 2022, using the same recruitment and implementation procedures through Qualtrics as for the Wave 1 and Wave 2 surveys. The new survey only elicited individual perceptions of the costs and benefits associated with each of the three actions, plus the decision to join a protest, which we included for completeness, as a function of number of other people acting ranging from 0 to 100,000.[26]. While the data are noisy, they provide suggestive evidence that the marginal

[25] In terms of intrinsic benefits of donating, the literature on charitable giving distinguishes between altruism (where donors benefit from the recipients' utility (equivalent to our $V_i(\cdot)$) and warm glow, where donors benefit from the act itself (equivalent to our $W_i(\cdot)$) motivations).

[26] Respondents were randomly assigned to only answer questions about one action.

net benefits of donation and video watching do not increase with the number of others acting, whereas the marginal net benefit of petition signing and protesting does, as shown in Figure A1.

We expect the different ENMB functions associated with the three forms of activism to affect their responsiveness to our Information, Belief Correction and Combined treatments, as follows:

Prediction 4 - Differential Treatment Effects on the Three Actions
(a) Belief Correction will be most effective on Petition, and least effective on How-to-act Video.
(b) The relative impact of Information on the different actions is ambiguous.
(c) The relative impact of the Combined treatment on the different actions is ambiguous.

Prediction 4.a is supported by the assumption that the ENMB curve's elasticity in n is highest for Petition and lowest for Video. Prediction 4.b is motivated by the positive and negative effects that information has on intrinsic motivations to act, W, and the expected likelihood that activism will succeed, respectively. Given the ambiguous effect of information on participation (see Prediction 2), it is possible that different forms of activism are impacted differently by information. Prediction 4.c is supported by the fact that the Belief Correction treatment is most effective on actions with high elasticity ENMB curve (to n), while the Information treatment has an ambiguous effect on participation. [27]

Prediction 5 - The Choice of Actions
When subjects are given a choice of actions:
(a) The overall likelihood of acting could be higher, same or lower than in any single action treatment.
(b) The likelihood of any one action being chosen is lower relative to when that action is the only available one.

When given a choice of actions, since subjects can self-select into the form of activism they prefer, the overall likelihood of participating may increase. For instance, an individual who would have not signed the petition when that was the only option may now choose the video if video watching is the preferred choice. It is also possible that subjects' evaluation of the expected costs and benefits of an action changes when it is presented jointly with

[27] Note that if Information has a negative effect on activism while Belief Correction has a positive effect, the overall effect may be null.

other actions as compared to when it is presented in isolation, possibly leading to a higher likelihood of choosing one of the actions instead of exiting the survey. This is in line with studies in psychology showing that moving from individual to joint evaluations of given options/goods may lead to changes in preferences (e.g., Bazerman et al., 1992; Hsee et al., 1999; Kahneman, 2011). However, information about multiple ways to act may lead to cognitive load problems and induce subjects to exit the survey. Moreover, uncertainty about the action that will be preferred and chosen by others may generate coordination problems, possibly leading to lower levels of activism. These considerations lead to Prediction 5a.

We expect coordination problems to also lower participation in each form of activism as compared to the same action being presented in isolation (Prediction 5.b). This is because subjects' beliefs about the likelihood of each of the three actions being taken up by others now plays a role. The detrimental effect of giving subjects a choice of actions is likely to be larger for forms of activism that have more elastic ENMB functions (with respect to n), i.e., Petition in our setting.

Since the decision to participate in activism and the choice between the possible actions happen simultaneously, the impacts of the Information and Belief Correction interventions (and their combination) on the likelihood to engage with a single action (e.g., Petition) may be muted by the need to coordinate with others on one action. This is especially true for our Belief Correction treatment, which, by design, aims to affect beliefs about others' engagement with the social cause, without providing information on others' participation in any specific form of activism (e.g., without disclosing the percentage of others who signed the petition, or donated to the NGO).

2.4 Implementation

The data collection was implemented by Qualtrics through local survey firms that manage large panels of study participants in India and elsewhere. Recruitment for the study was restricted to Indian subjects who were at-least 18 years of age, with a monthly household income of INR 60,000 or less.[28] We involved only men, for a number of reasons. First, men are more likely to be in charge of intra-household decision-making regarding health expenditures. Second, they are more likely to interact with and pay health professionals; they are therefore more likely to have experience with corruption - our social problem. Third, we expect men to be more likely to engage in activism in India due to patriarchal norms.[29]

[28] In May 2021, this corresponded to about 800 USD per month.

[29] For example, the sixth round of World Values Survey (2010-14) shows that in India men (relative to women) are more likely to have signed a petition (34.2 versus 22.9 percent) and participated in a peaceful demonstration (48.3 versus 29.7 percent. For more information, see https://www.worldvaluessurvey.org/WVSOnline.jsp.

Finally, we wanted to avoid confounding factors due to differential gender access to the internet or mobile devices that would be required for participation in the study.[30]

On average, subjects took about 30 (22) minutes to complete the Wave 2 (Wave 1) survey from start to finish, and earned a fixed compensation set up by Qualtrics, and an average bonus earning of INR 59. Individuals were assigned a randomly generated ID and their identities remained unknown to the research team. The payment of the bonus earnings – INR 48 on average for Wave 1, and INR 198 on average for Wave 2 – was implemented by Qualtrics within two weeks of the survey completion.

In order to screen out subjects who were not paying attention, the questionnaire included attention checks. In particular, in the middle of the questionnaire, we included a question that, while looking very similar to previous questions (by length and content), asked subjects to select a specific answer choice, to provide confirmation that they read the question, following Oppenheimer et al. (2009). About 24 percent of participants failed the attention check. We exclude them from our working sample.[31]

3 Estimation Strategy

Our main outcome of interest is subject's "willingness to act" by either signing the petition, making the donation, watching the how-to-act video, or choosing among the three actions. Our main estimating equation, therefore, is:

$$Y_i = \beta_0 + \beta_1 I_i + \beta_2 BC_i + \beta_3 COM_i + \delta X_i + \varepsilon_i \tag{1}$$

where Y_i is a dummy variable that equals 1 if subject i is willing to take an action and 0 otherwise. I_i is an indicator equal to 1 if the individual was assigned to the information treatment, and 0 otherwise. Similarly, BC_i and COM_i are indicators equal to 1 if the individual was assigned to the Belief Correction or the Combined treatment, respectively. The control group is the excluded category. X_i is a vector of individual characteristics, including demographics (e.g. age, marital status, ethnicity, religion education and household

[30] 64 percent of subjects participated in the study through a mobile device.

[31] We also included three comprehension questions prior to the incentivized belief elicitation questions to make sure that subjects understood the payoff structure. This allows us to calculate the number of failed attempts for each subject. Finally, we included in the survey an open-ended question and checked for entries that did not make sense. The very high correlation between failing the attention check, the number of failed attempts for the comprehension questions, and writing ludicrous answers to the open ended question provides further justification for our decision to exclude subjects who failed the attention question from the analysis.

wealth), personality and preference measures, experiences of corruption in the health sector in the previous 12 months, information about and attitudes toward such corruption, as well individual measures of past activism and civic engagement.[32]

Since, within each activism treatment, subjects are randomly assigned to 4 action groups, we estimate equation (1) separately for each anti-corruption action, i.e. for the petition (P), the donation (D), the how-to-act video (V), and the choice among actions (C) groups. Our main coefficients of interest are β_1, β_2 and β_3, which estimate the impact of each treatment on willingness to engage in a given action, relative to the control group. Heteroskedasticity robust standard errors are reported throughout the analyses. As an alternative specification, we also pool the data and include dummy variables for each action treatment, keeping the donation action (D) as the benchmark, and including interactions between each Action Treatment and each Anti-corruption Treatment. We report estimates from equation (1) in the main text, and estimates from the pooled sample in Appendix A.

In order to assess whether it is preferable to give subjects a choice of actions or only one action, within each action treatment (Petition, Donation, How-to-act Video) we pool the subjects who were only shown one action and those who were given a choice of actions, and we estimate the following equation:

$$\begin{aligned} Y_i =& \beta_0 + \beta_1 I_i + \beta_2 BC_i + \beta_3 COM_i + \theta_1 I_i * C_i + \theta_2 BC_i * C_i + \theta_3 COM_i * C_i \\ &+ \gamma C_i + \delta X_i + \varepsilon_i \end{aligned} \tag{2}$$

where Y_i indicates individual i's decision to act within each action treatment - i.e., the decision to sign a petition in the Petition action treatment, to make a donation in the Donation action treatment, and to watch the video in the Video action treatment. C_i is a dummy variable that equals 1 if the subject belongs to the Choice action group, and 0 if he belongs to a single action group. Its estimated coefficient, γ, indicates the impact of giving subjects a choice of actions, rather than presenting one action only, in the Control group. Since we include the interactions between each activism treatment and the Choice action treatment, β_1, β_2 and β_3 are now the impacts of the Information, Belief Correction and Combined treatments, respectively, on willingness to act (i.e., to sign a petition, make a donation or watch the video) when the action is presented on its own rather than as part of the set of action. Finally, θ_1, θ_2 and θ_3 are the differential impacts of each anti-corruption treatment when subjects are given a choice of actions.

As a secondary analysis, we examine heterogeneous effects of the activism treatments on

[32]Specifically the vector X_i includes the following variables: (1) locus of control index; (2) The survey-generated indices of risk, trust, altruism and retaliation; (3) indexes of corruption experience, information about corruption and tolerance of corruption; and (4) civic engagement index. Each index is discussed in Section 4.1 and summarized in Table 1.

each action across several dimensions that we hypothesize could affect the responsiveness to our treatments: (i) beliefs about others' willingness to fight for the cause; (ii) information about rights and entitlement; (iii) perceptions of the severity of the social problem, i.e., corruption; and (iv) tolerance of corruption. When estimating the heterogeneous treatment effects by a given variable of interest, we simply augment equation (1) by adding interactions between that variable and each treatment indicator.

We conduct two primary robustness checks. First, the large set of control variables included in our most comprehensive specification may lead our model to overfit. To address this potential concern, we estimate an alternative specification where we used the double LASSO method - a regression technique optimized for selecting controls from a large set of covariates (Belloni et al., 2014). Second, for each action outcome (petition, donation and video), we employ three measures, capturing initial willingness to act and effective action. A common issue of using more than one outcome is that the more inferences are made, the more likely erroneous inferences become. This problem is typically addressed by requiring a tighter significance threshold for individual comparisons in order to compensate for the number of inferences made. To address the possibility of false positives arising from multiple hypothesis testing, we compute the false discovery rate (FDR) and report the sharpened q-values (Benjamini et al., 2006)[33].

4 Results

4.1 Descriptive Statistics and Balance Tests

Figure 1 shows the number of subjects in each of our treatments. Our sample of 1774 men includes subjects from all major states of India as shown in Figure A2. The majority of our subjects (over 80 percent) are younger than 45 years of age, unmarried (51 percent) and with a college degree (78 percent). Around 49 percent of the subjects' monthly household income is below INR 30K, i.e., lower than 400 USD. More than half (56 percent) of the subjects reside with an elderly and 77 percent had made at least one hospital visit in the 12 months preceding the survey - i.e., from the beginning of the COVID-19 pandemic - as shown in Panel A of Table A1.

When comparing our sample to a representative sample of urban men from the Periodic Labor Force Survey (2017-18) we find that our average respondent is younger, more edu-

[33]The FDR is the proportion of rejections that are "false discoveries" (Type I errors). We use the code from (Anderson, 2008). The q-value indicates the minimum false discovery rate (i.e., the expected proportion of rejected null hypotheses that are actually true) at which the null hypothesis would be rejected for that test given all tests reported in the same table

cated and belongs to wealthier households than the average Indian urban man, as shown in Table A2. We argue that our sample is well suited for the study for two primary reasons. First, many of the protests in India in recent years have been led by young people, particularly students and young professionals,[34] making our working sample a good representation of the relevant actors in the field. Second, we argue that the characteristics of our study participants - being younger and more educated than the average Indian citizen – do not undermine the internal validity of our experiment and its policy relevance. In fact, if wealthier and better educated individuals are more likely to be informed about the social problem and the cause, and have more accurate beliefs about others – a plausible assumption to make – our estimated treatment effects may be smaller than if we had involved a less informed population in the study.

Table 1 reports balance tests for all our survey measures across the anti-corruption treatment groups. The descriptive statistics reported in Panel A, show that participants' demographics and living standards are balanced across the Activism treatments. In Panel B, we report the average scores of survey-generated indices measuring individual preferences and personality traits, i.e., locus of control, risk preferences, and a pro-sociality index generated from the aggregation of questions measuring trust, altruism and reverse-coded retaliation indices. All indices in Panel B are standardized around the control group mean, as explained in Appendix C, and are therefore expressed in standard deviations from the control group mean. We do not see any imbalances in any of these measures across treatment groups.[35]

Panel C of Table 1 reports on four indicators that capture various aspects of corruption in health, i.e., perceptions, information, tolerance, and civic engagement. These indices are also all standardized around the control mean, and therefore expressed in standard deviations from such mean. The *corruption perception* index aggregates answers to three survey questions: (i) personal experience of corruption - in the form of bribery - in the health sector during the pandemic; (ii) individual perception of the prevalence of corruption in the health sector; and (iii) individual opinion on whether the level of corruption has gone up/down since April 2020. The *information* index capture individual awareness of their rights and the occurrence of fraud in the health system. It aggregates answers to a question on knowledge of ongoing rates for intensive care beds in hospitals, and a question on whether subjects (thought that they) had been illegally overcharged by healthcare professionals during a hospital stay. The *tolerance of corruption* index combines answers to four questions: (i) the extent to which subjects think that paying a bribe is justifiable, (ii) that avoiding fare

[34] https://www.livemint.com/news/india/young-india-politically-conscious-more-likely-to-take-part-in-online-and-offline-protests-11592566694673.html

[35] Balance tests by Action treatment groups are reported in Table A3.

on public transportation is justifiable; (iii) that doctors overcharging patients in justifiable; and (iv) subjects' beliefs on how many people in their community would expect them to complain if they were overcharged or asked to pay a bribe by a doctor. Finally, the *civic engagement* index averages subjects' answers to questions regarding their past participation in different types of activism, such as protests, strikes, and petitions, and the extent of their civic involvement through a set of action, such as voting, membership in community groups.

Table 1 shows that all individual measures related to corruption and civic engagement are balanced across treatments. The disaggregated data, displayed in Table A1, show that nearly all survey participants had personally visited a hospital or had a household member visit a hospital during the pandemic. The majority of them (53 percent) had experienced corruption in the form of bribery to access health services, 61 percent of the respondents suspected that they to have been overcharged for a hospital bed, and 71 percent perceived corruption to have increased during the pandemic. There seems to be considerable level of misinformation about rights and entitlements, with only 34 percent of the sample knowing about the existence of caps on the prices that can be charged on ICU hospital beds, and only 14 percent suspecting to have been overcharged for health services. The answers to questions of previous forms of activism show that about one third of the respondents have participated in protests, strikes and/or petitions. A larger proportion (77 percent) had donated to an organization in the past, although this is not an accurate representation of donations as a form of activism, since the donation question in the survey referred to having donated in the past to all kinds of organizations.[36]

Panel D of Table 1 reports data on subjects' beliefs about other participants' willingness to protest against corruption in the health sector. This is our incentivized measure of beliefs of others' willingness to act, which we then manipulate in the Belief Correction and Combined treatments. The direct measure of individual willingness to act shows that 90 percent of respondents stated their willingness to act against corruption. While it is difficult to compare this percentage to the percentage of individuals who did join street protests at the time of the survey implementation (2021), protests in India have generally been on the rise since the mid-2000s.[37] For example, the protests against the Citizenship Amendment Act (CAA) in 2019-2020[38] saw large-scale participation, with demonstrations taking place across several

[36] A recent report by Shresth and Verma (2020) shows that most donations in India (about 70 percent) are made towards religious organizations and street beggars (15 percent).

[37] The fifth wave (2018-21) of Asian Barometer Survey (https://www.asianbarometer.org/) shows that in India, about 66 percent of respondents attended in the past or would be willing to attend a demonstration or protest march and numerous large-scale protests took place in 2020 and 2021 (Carnegie Endowment for International Peace, 2023).

[38] https://www.indiatoday.in/india/story/protests-against-caa-intensify-across-country-how-indian-newspapers-covered-stir-1629930-2019-12-20

cities. There have also been several instances of healthcare activism during the COVID-19 pandemic.[39] We also note that the 90 percent willingness to protest that we recorded in our survey is a very stable statistic across the Wave 1 and the Wave 2 of the data collection and across months of survey completion. Importantly, in August and September 2022 we conducted a third Qualtrics survey with a smaller sample, using the same recruitment conditions as for the Waves 1 and 2 survey, with the sole goal of corroborating our theoretical assumptions, as explained in Section 2.3. In the survey, we asked subjects about their participation in protests the previous year, i.e., in 2021 - the year of our Waves 1 and 2 surveys. Exactly 90 percent of these respondents stated that they had participated in a protest in the previous 12 months. This matches the statistic on willingness to protest recorded in our main survey in 2021. We use this as an indication that these statistics are a truthful measure (and not an overstatement) of subjects' willingness to take action in support of the cause.

We observe substantial misalignment of beliefs regarding others' willingness to act in our sample. The average *believed* percentage of others willingness to participate is around 64 percent, with small differences across treatments (the average believed percentages range from 63 to 66 percent). A further look at the belief data shows that about 60 percent of the respondents believed the percentage of others willing to act to be lower than the true percentage, and about 20 percent believed the percentage to be higher than the true percentage. In other words, the majority of our respondents have downward-biased beliefs. The statement on the need for external auditing of COVID-19 relief funds shows similar overall belief misalignment as our statement of interest. In contrast, we see very little misalignment in the beliefs regarding the statement on mask wearing, as shown in Panel (a) of Figure A3.

Panel D of Table 1 shows that belief misalignment is generally balanced across treatments, although we do see some evidence of more pronounced upward bias in the Combined treatment than in the Belief Correction treatments (25 versus 21 percent). We display the cumulative distributions of individual beliefs by treatment in Figure A4. Kolmogorov-Smirnoff tests of equality of distributions show that the four distributions of beliefs (Control, Information, Belief Correction and Combined) are not significantly different from each other, with the exception of the Combined and the Belief Correction distributions. Finally, we do not see any imbalances in individuals' levels of confidence in their own beliefs, or in their expected bonus earnings from the incentivized sections of the survey.

[39]Examples are Oxygen for India, a citizen-led initiative for raising funds through donations to procure oxygen concentrators (April 2021)), and COVID Aid Resources India, volunteer-led initiative started in April 2021 to provide information and resources related to COVID-19 over social media platform.

Overall, we conclude that the individual-level randomization was successful. We account for the slight differences seen in our balance tests by including the full set of individual measures displayed in Table 1, in our empirical specification, as discussed in Section 3.

4.2 Treatment Effects on Activism

Our experimental design allows us to test the impact of our Information, Belief Correction and Combined treatments on each of the three actions available to (randomly selected) subjects: signing a petition, making a donation and watching the informational video. Figure 2 reports the willingness to take action by type of action and by activism treatment. When comparing the take-up rates of each action in the Control group, we see that subjects are least likely to donate part of their earnings to the non-profit organization (about 27 percent) and most likely to be willing to watch the how-to-act video (about 62 percent). Willingness to sign the petition lies in between, with around 39 percent stating their willingness to sign it. In panel a of Figure 2 we see that the Information, the Belief Correction and the Combined treatments increase individuals' willingness to sign the petition, while having no effect on willingness to make a donation (panel b) and to watch the how-to-act video (panel c). Figure A5 displays the same figures but reports the actual take-up of each action, i.e., the percentage of participants who signed the petition with the full name, made a positive donation and watched the full length (approx. 325 seconds) of the video. We see the same patterns as in Figure 2, although the values observed for petition signing and video watching are substantially lower than the corresponding willingness to take action.

In Figure 3, we compare the take up rates of each action when presented by itself or together with the other two actions. Panels a to c show that the percentages of participants who engaged with each action are lower when subjects are given a choice of actions, and this is true in all activism treatments. Panel d reports the percentages of participants who acted in the Choice treatment (by engaging with an action instead of exiting) as compared to activism in the three single action treatments (pulled together). Panel d suggests that activism is not higher, and may be lower (depending on the treatment), when subjects are given a choice of actions than when they are presented with only one action.

In the following subsections we present the primary findings obtained from regression analyses for each form of activism. We conclude the section by presenting the results obtained when subjects are given a choice of actions.

4.2.1 Petition Signing

Table 2 presents the impact of the Information, Belief Correction and Combined treatments on our three measures of engagement in the Petition action treatment: willingness to sign the petition (columns 1-2), whether the subject signed the petition with at least one name (columns 3-4) and whether he signed the petition with a full name (columns 5-6). For each outcome, we show the estimates without and with controls.

Column 2 of Table 2 shows that the Information, Belief Correction and Combined treatments increase individuals' willingness to sign a petition by 21.4, 15.1 and 22.2 percentage points, respectively. These correspond to 54.6 percent, 38.5 percent and 56.6 percent increases from the baseline willingness to petition (39.2 percent) observed in the Control group. The treatment impacts decrease in magnitude but retain statistical significance when refining the outcome variable to measure the actual signing of the petition. In particular, column 4 (6) of Table 2 shows that the Information, Belief Correction and Combined treatment manipulations increase the likelihood of signing the petition with a name (with a full name) by 13.7 (11), 15 (14) and 15 (15.6) percentage points, respectively, which correspond to 45.8 (42.6), 50.2 (54.3) and 50.2 (60.5) percent increases over the Control mean.[40] We do not find any significant differences in effect sizes across the three treatment groups as indicated by the p-values of the test of equality of treatment effects in the bottom panel of Table 2. The fact that the Information and the Belief Correction treatments do not have additive effects is likely due to the binary nature of activism through petition signing: once one treatment leads to the threshold for participation to be met, adding the other treatment becomes irrelevant. We discuss our findings in more details, with references to our theoretical predictions, in Section 5.

4.2.2 Donation

The estimated impacts of information and belief correction on the donation outcomes are displayed in Table 3. Our three measures of engagement with the Donation action are: initial willingness to donate part of one's earnings to the partnering NGO (columns 1-2); the actual decision to donate a positive percentage of the earnings once on the donation page (columns 3-4), and the percentage of earnings donated (columns 5-6).

Contrary to the positive treatment effects observed for the petition outcomes, the Information, Belief Correction and Combined treatments do not positively impact our donation measures. If anything, the estimated coefficients are negative, and approach statistical sig-

[40] We obtain similar results when pooling the data from all the Action Treatments and interacting each action with each activism treatment, as shown Table A4.

nificance for the Combined treatment, suggesting that information in this case may have led to discouragement. We discuss these findings in Section 5.

4.2.3 How-to-act Video

Similarly to the other two actions, we employ three measures of engagement with our third form of activism: (1) the initial willingness to watch the 5-minute how-to-act video, as stated in the final survey page; (2) the decision to watch the full length of the how-to-act video; and (3) the number of seconds watched.

The estimates, reported in Table 4, show that the none of the treatments significantly impacted subjects' willingness to watch the how-to-act video. We discuss how these findings relate to our theoretical predictions in Section 5.

4.2.4 Robustness

A common issue that arises when employing multiple outcome variables, is that, by increasing the number of inferences made, the likelihood of false positives also increases. In our case, while we do have different measures of activism (Petition, Donation, Video), they are not different proxies for the same variable of interest, generated from the same sample of subjects. Rather, by design, they are different outcomes generated by separate groups of subjects, who were randomly assigned to distinct action treatment groups. Nevertheless, for each action, we employ three outcome measures, as shown in their respective regression tables. To address the possibility of false positives arising from multiple hypothesis testing, we compute the false discovery rate (FDR)[41] and report the sharpened q-values (Benjamini et al., 2006) associated with the impacts of our treatments on the petition outcomes.[42] Table A5 shows that the our Petition results are robust to the adjustment for multiple hypothesis testing.

Another possible concern stems from the inclusion of a large set of control variables in our empirical specification. Although the results that we obtain with and without controls are highly comparable, we also estimate an alternative specification by using the double LASSO method, which aims to optimize the selection of controls variables when the set of covariates is large (Belloni et al., 2014). The results, reported in Table A6, show that the impacts of the activism treatments on the three actions are very similar in magnitude and significance to those displayed in our primary regression tables.[43]

[41] The FDR is the proportion of rejections that are "false discoveries" (Type I error).

[42] We do not report the q-values generated for the Donation and Video action measures, as the impacts of the treatments were null on such actions.

[43] We also conduct robustness checks by aggregating the variables that compose our preference and corruption-related indices by using the inverse covariance matrix, where the weights are calculated in order

4.3 Effect of Offering a Choice of Actions

Our experimental design allows us to test whether it is preferable to present subjects with different ways of engaging in activism or with one option only. In Table 5, for each action (Petition, Donation, Video) we pool the treatment groups and estimate equation 2 of Section 3. For each action, we test whether the action take up is higher when the action is presented in isolation or when it is presented together with the other two actions.

The estimated coefficients of the Choice treatment variable are significant and negative for all three actions: petition (columns 1 - 3), donation (columns 4 - 6) and watching how-to-act video (columns 7 - 9). This indicates that the take-up of each action is lower when the action is presented together with other actions. Focusing on the estimates in columns 1 to 3, for Petition, we also note that while the treatments have significant positive impacts on activism when the petition is presented to subjects in isolation (i.e. the non-interaction coefficients, which confirms the estimates in Table 2), such impacts are significantly lower when the petition is presented together with the donation and the how-to-act video (i.e., the negative coefficients on the interaction terms). In fact, the joint presentation of the three actions annuls the impact of information and belief correction on petition signing.

Overall, the comparison of our Choice versus No Choice treatments indicates that, in order to induce subjects to participate in a given form of activism, it is preferable to encourage them to engage with only one action.

Next, we ask whether overall activism - defined as willingness to take any action (rather than exit the survey) is affected by the Choice treatment. In Table 6, the dependent variable is an indicator equal to 1 if the subject "acted" and 0 if he exited the survey. We pool all the treatments, meaning that in the single action treatments the dependent variable refers to the willingness to engage with the randomly assigned form of activism, whereas in the Choice treatment it refers to the willingness to engage with one of the available actions. The estimates in columns 1 to 3 show that, absent any activism interventions, providing a choice of actions increases interest in the cause and initial willingness to act (column 3), as expressed on the last page of the survey. However, information and belief correction reduce such willingness, resulting in no difference in activism when subjects are given a choice as compared to no choice of actions. Moreover, when looking at actual activism, in columns 4 to 6, we see that the likelihood of taking up an action either stays the same (in the Baseline, Information and Combined treatments) or decreases (in the Belief Correction treatment).

to maximize the amount of information captured in each variable, as in Anderson (2008), rather than simple averages. The regression results when we include these differently weighted indexes are unchanged.

Overall, we conclude that mobilization efforts that promote one form of activism are more effective than those allowing for multiple ways of supporting the cause. We discuss these results further in Section 5.

4.4 Analysis of Heterogeneous Treatment Effects on Activism

An important hypothesis, which motivated our experiment design, is that subjects may be reluctant to act against corruption if they believe that the number of others willing to join the fight is low. We also assumed, and empirically found, that subjects may hold incorrect beliefs about others' willingness to take action. In Table 7, we report estimates generated by regression analyses that include interactions between our activism treatments and a dummy variable equal to 1 if the respondent held downward biased (about 60 percent of our sample) or correct (about 20 percent of our sample) beliefs and 0 if he held upward biased beliefs about the percentage of other participants willing to act in support of the cause (according to our incentivized belief measure). Thus, the coefficients on the uninteracted treatment dummies in Table 7 indicate the impacts of the treatments on subjects holding either downward biased or correct beliefs.

The estimated coefficients show that the Belief Correction treatment operated on Petition (columns 1-3) as hypothesized, i.e., by increasing the activism among subjects that held incorrect downward-biased beliefs about others. We note that the impact of the Belief Correction treatment on these subjects' propensity to sign the petition (with full name) is substantial, i.e. 25.9 percentage point higher than the Control mean, which translates into a 100 percent increase in the likelihood to act. The impacts of the Information and Combined treatments are also large, corresponding to a 60 percent and a 70 percent increase in the likelihood of signing the petition with the full name, as shown in column 3.[44]

The negative and significant coefficients on the interaction between Belief Correction and the upward bias dummy indicates that the impact of the treatment on subjects with upward-biased beliefs is significantly lower than the impact on the downward-biased individuals (columns 1-3). In fact, the sum of the relevant coefficients indicate that the Belief Correction induced the upward biased individuals to adjust their beliefs downward and, consequently, lower their propensity to sign the petition. The results obtained for the upward- and the downward-biased individuals are consistent with our model of strategic complementarities in the decision to act through petition signing. We do not find a similar effect on Donation and How-to-Act Video in Table 7 (columns 4 - 9), confirming that the decision to partake

[44]When we categorize subjects into 3 groups - those who held downward biased beliefs, those with correct beliefs, and those who had upward biased beliefs - we obtain similar results as shown in Table A7, but more likely to be under-powered due to multiple interactions.

in these forms of activism is less dependent on beliefs about the participation of others. We discuss this further in Section 5.

Naturally, and in line with the theory, we expect the provision of information to have a differential impact on uninformed subjects, i.e., those who are unaware of their rights and entitlement – and may have therefore been victims of fraud without realizing it – and those who erroneously perceive corruption in the health sector to be low. In Table 8 and Table 9, we test these hypotheses by interacting our treatments with, respectively, our indicator for *information* on own rights in the health sector and our indicator of *perceptions of corruption*.

The estimates displayed in Table 8 for the Petition outcomes (columns 1-3) confirm that the uninformed are significantly and positively impacted by all treatments. While the coefficients of the interaction terms are not statistically significant, the tests conducted on the linear combinations of the estimated coefficients show that the Information and Combined treatments are not effective on the most informed subjects, whereas the Belief Correction treatment remains effective no matter the initial level of information. The estimates displayed for Petition in Table 9 reveal that perceptions of corruption do not affect subjects' responsiveness to any of the treatments, i.e., information and belief correction increase individuals' likelihood to sign a petition no matter their initial perceptions of corruption in the health sector.

Columns 4 to 6 of Table 8 and Table 9 provide some insights into the mechanisms behind the null or negative treatment effects obtained for donations in our primary regression analysis (see Table 3). In particular, it is the uninformed subjects with low perceptions of corruption who respond to information by lowering their likelihood of donating to the NGO. This suggests that raising awareness about the severity of the social problem has a discouragement effect on the decision to make a (small) donation to an organization fighting for the cause.

For Video watching, there is some suggestive evidence of a negative impact of information on likelihood to watch the video the higher the perceptions of corruption are (columns 7 to 9 of Table 9. This could be because subjects with high perceptions of corruption are likely to believe that they are already informed about the social problem; hence, they may not feel the need to watch the informational video.

In the Appendix, we report exploratory analyses of heterogeneous treatment effects by subjects' household income, education, pro-sociality, and past activism. Results can be found in Tables A8, A9, A10, and A11. We do not find evidence of meaningful heterogeneities in treatment impacts by any of these individual characteristics.

5 Discussion

Our primary findings are that providing information about the social problem and about others' willingness to take action affect individuals' willingness to sign a petition but have no impact on individuals' willingness to donate money to a non-governmental organization fighting for the cause, or to watch a how-to-act video. We also find that promoting activism by offering individuals a choice of "ways to help the cause" – which is often a strategy adopted by organizations – reduces the likelihood of any individual action being successful, i.e. leading to the desired outcome, and mutes the effects that information interventions (on the cause or on others' activism) may have if individuals are presented and asked to engage with one action only.

We focused on three forms of activism that are often advocated by organizations promoting participation in social movements in support of a given cause: petition signing, donating to an NGO, and watching a "how to help" video. Our prior was that the three actions differ substantially in the extent to which they are subject to collective action problems, making beliefs about others' activism differentially important. We assumed Petition to be the action most dependent (positively) on beliefs about others' participation, hence we expected our Belief Correction treatment to have a larger impact on this action (Prediction 4a).

We can draw the following insights from our evaluation of the Belief Correction intervention. First, our estimates confirm that both the decision to donate to an organization fighting for a social cause and the decision to watch a how-to-act video are unlikely to be affected by beliefs about others' engagement with the same actions. Correcting individuals beliefs about others' willingness to act to fight the social problem does not increase these forms of activism. Second, our analysis confirms that beliefs about others are important for petition signing, and that this form of activism can be modeled as a game of strategic complements. In particular, our analysis of heterogeneity effects by bias in beliefs about others shows that subjects with downward biased beliefs increase participation when their beliefs are corrected. In contrast, subjects with upward biased beliefs lower their likelihood to sign the petition when their belief are corrected. This is consistent with Prediction 1. Since the majority of study participants held downward biased beliefs, we saw an overall positive effect of Belief Correction on petition signing.

Our findings provide empirical support for theoretical models of activism as games of strategic complements (Barbera et al., 2016; Passarelli and Tabellini, 2017) and contrast the findings of Cantoni et al. (2019) and Hager et al. (2022) regarding the participation of university students in street protests in Hong Kong, and political canvassing in a European country, which supported a model of activism as a game of strategic substitutes. This

indicates that the form of activism, the context and the nature of the social movement matter. Our study suggests that for spontaneous and new/unknown social movements such as the one we studied, correcting downward biased beliefs about the participation of unknown others increases activism in the form of petition signing. Conceptually, these movements could be thought of as one shot rather than repeated games, hence, characterized by a higher degree of uncertainty regarding the participation of others.

Our predictions on the impact of information about the social problem on activism were more ambiguous. This is because, in our model, information about the severity of the social problem could have two opposite effects. On the one hand, we predicted that it would increase individuals' intrinsic motivations to act. On the other, we recognized that it could have a discouragement effect by lowering expectations that social activism would lead to a successful outcome (Prediction 2). Our findings of a significant and positive impact of information on petition signing suggests that the effect of information on intrinsic motivations to act prevailed for this form of activism.[45] In contrast, the null effects we obtained for Donation and Video suggest that the two opposing effects of information cancel each other out for these actions. The analysis of heterogeneous effects by initial information for donations shows that the uninformed – particularly regarding the extent of fraud and corruption in the health sector – respond negatively to information, providing suggesting evidence for a discouragement effect.

Our results regarding the Combined intervention mirror those obtained for Information and Belief Correction separately. Only petition signing is significantly affected. We do not find any statistically significant difference between the impact of the Combined treatment and that of Information and Belief Correction alone. While this may seem to contrast our prediction of additive effects of information and belief correction (Prediction 3c), we cannot really test for additive effects in our setting, since, once the threshold for activism is met, participation in the form of petition signing is discrete (signing versus not signing). However, we do find that Belief Correction is the most effective for petition signing (Prediction 4).

Finally, by designing and implementing our Choice treatment, we were able to examine both the likelihood of acting (versus exiting the survey) and the likelihood of engaging with each form of activism when subjects are given a choice of actions as compared to when each form of activism is presented in isolation. We found that allowing subjects to choose between different form of activism, does not increase participation. In addition, when individuals can choose between different types of activism, the likelihood of any single action being taken decreases (consistent with Prediction 5b), and the impacts of Information and

[45] Our analysis of heterogeneous effects by ex ante information about the social problem confirms that the effect is driven by the uninformed.

Belief Correction on Petition vanish. This is likely because presenting subjects with multiple actions generates the need to coordinate on one action, and subjects (who do not know each other) are unable to do so. Given that Information and Belief Correction are effective only on petition signing, the presence of other actions ends up muting the treatment effects observed in the Petition only treatment.

6 Conclusion

We conducted an online experiment with nearly 2000 Indian men to examine whether and how raising awareness about a social problem and correcting beliefs about other's activism could impact individuals' willingness to take action. We randomly varied the type of activism offered to participants, focusing on three actions that are often advocated by NGOs and mobilizers: petition signing, donating money to an NGO fighting for the cause, and watching a video on the cause and on how to act. We also allowed some randomly selected participants to choose among the three forms of activism.

In line with our theoretical predictions, we found that both providing information and correcting downward-biased beliefs about others' activism (and the combination of information and belief correction) significantly increased individuals' likelihood to sign the petition. Our findings provide empirical support to recent theoretical studies that model social activism as a game of strategic complements. In contrast, the decisions to make a donation and to watch a video on possible ways to help the cause are unaffected by both information and belief correction in our setting. Our comparison of activism when subjects are able to choose between different ways to support the cause versus when they are presented with only one action shows that mobilization efforts that promote engagement with only one form of activism are to be preferred.

Overall, our study sheds light on the mechanisms that motivate individuals to participate in collective efforts for social change. We departed from previous studies by examining and comparing different forms of activism (other than protesting) within the same framework of analysis and context, and by studying engagement with a spontaneous and new, rather than an established and long-running, social movement. We conclude that information interventions – both about the social problem and about the engagement of others – have the potential to significantly and positively affect petition signing, but have no impact on activism through donations and information gathering (video watching).

Our Petition results are important, as they contrast the findings of previous studies on protesting in Hong Kong (Cantoni et al., 2019) and political canvassing in a European country (Hager et al., 2022), which provided evidence of strategic substitutability. We attribute the

difference in results to the nature of the social movement, being new and spontaneous in our setting, as opposed to long-running and "repeated" in previous studies. Further research is needed to corroborate our findings and systematically examine under which conditions activism is subject to strategic complementarities versus strategic substitutabilities. Further research is also warranted to assess the extent to which our findings on activism through donations hold in contexts where donations to social causes are more prevalent and/or in settings where the mobilizing NGO is more established and well-known by the public. Finally, our results regarding the availability of different forms of activism have novel policy relevance, as they suggest that it is preferable to conduct campaigns encouraging the public to engage with one action only, rather than offer subjects multiple ways to support the cause.

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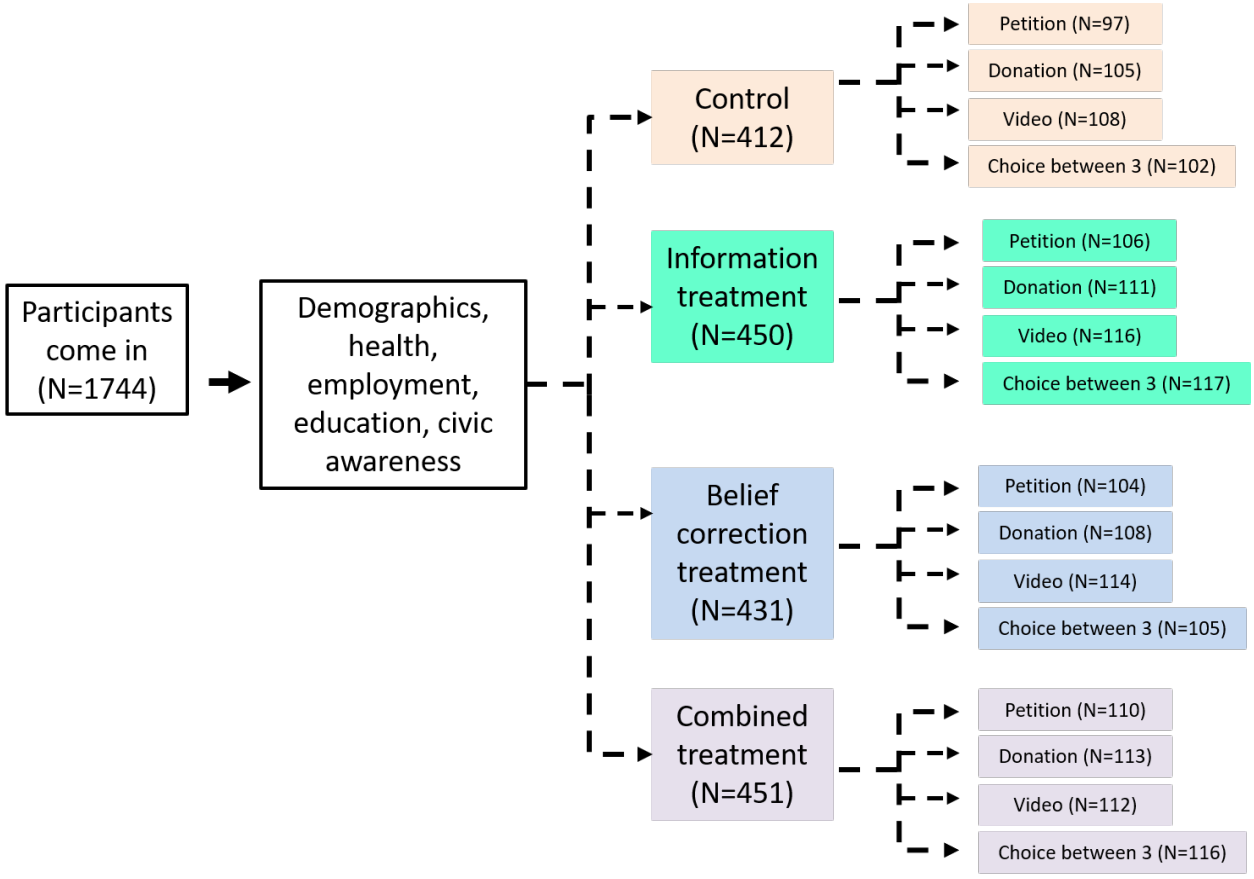
7 Tables and Figures

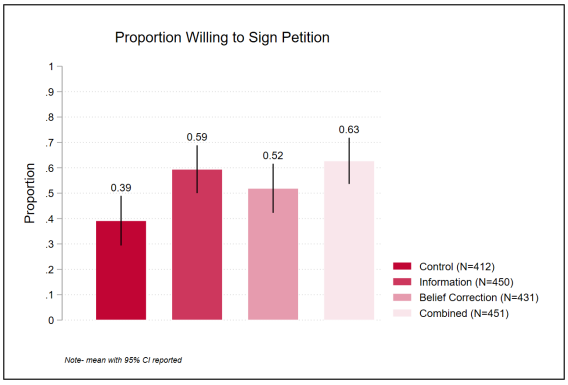
Figure 1: Experiment Design (Wave 2)



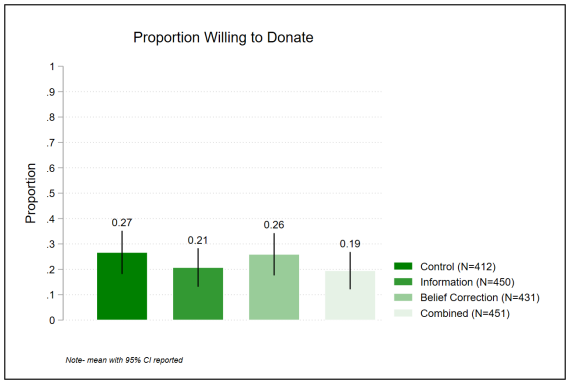
Note: Flow-chart of the experimental design. The dashed lines are used to indicate random allocation of subjects into the activism treatment conditions, and then again into the action treatment groups.

Figure 2: Activism Treatments and Willingness to Take Action

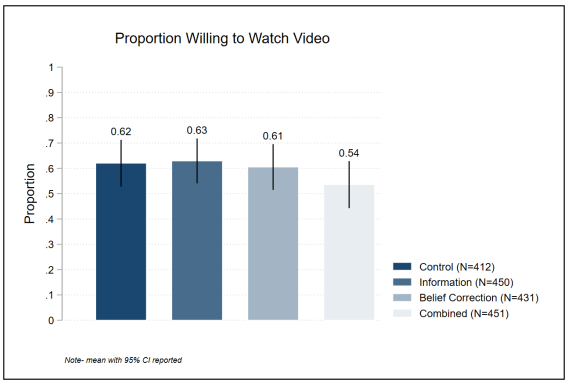
(a) Petition



(b) Donation



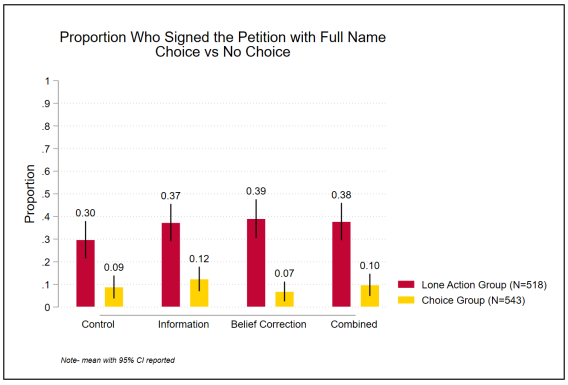
(c) How-to-act Video



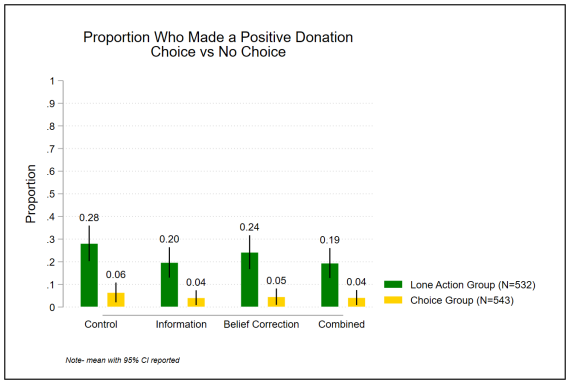
Note: The figures show the percentages of participants willing to sign a petition (a), make a donation (b), and watch an informational video (c), in each activism treatment (Control, Information, Belief Correction and Combined). Subjects were presented with one of the three actions at the end of the survey, as part of the experimental design, and had to choose whether to engage with the action or exit the survey. We display the percentages of subjects who chose the randomly assigned action, and the 95 percent confidence intervals.

Figure 3: Activism with or without a Choice of Actions

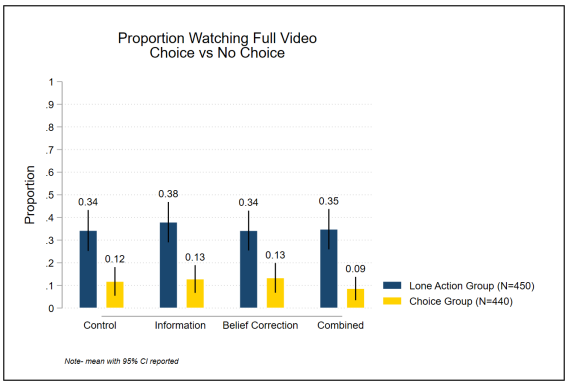
(a) Petition



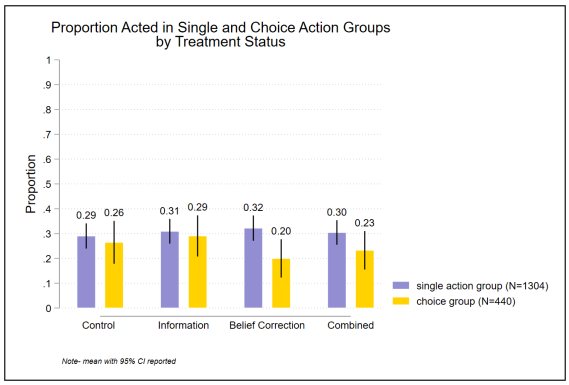
(b) Donation



(c) How-to-Act Video



(d) Actual Take-up by Treatment Status



Note: Panels (a), (b) and (c) show the percentages of participants who signed a petition with their full name (a), made a positive donation (b), watched an informational how-to-act video for 325 seconds (c) in each activism treatment, when the action was presented in isolation versus when subjects were given a choice of actions. Panel (d) reports the percentages of participants who acted instead of exiting the survey, in each activism treatment and by the type of action offered, i.e., when presented one action only (data are pulled together) or given a choice of actions. The figures display the percentages of participants who acted in each treatment condition, and the corresponding 95 percent confidence intervals.

Table 1: Balance on Observable Characteristics

Variable	Total	Control	Information	Belief Correction	Combined	Difference					
	(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 (percent)	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]

Note: The statistics in Panel A are all proportions between 0 and 1. SC (Schedule Caste) and ST (Scheduled Tribe) are socio-economically deprived individuals in India; Income indicates the percentage of subjects with monthly household income below INR 30 thousand in the previous month; Elderly indicates the percentage of subjects who answer 'yes' to the question "In your household, do you have elderly (above 60) living with you?"; Locus of control, risk and pro-sociality indices are standardized measures of self-assessment as explained in subsection C.2; indices of corruption perception, information (rights), corruption tolerance and civic engagement are created by aggregating standardized responses of relevant survey questions as described in subsection C.2; they are expressed in standard deviations from the Control group mean. Bias(↑) is a dummy equal to 1 if the subject overestimated the true willingness to protest, 0 otherwise; "Belief about others' willingness to protest" indicates subjects' guess about the percentage of previous participants agreeing with the statement "I am willing to raise my voice and participate in a protest against corruption in the provision of health service." Confidence indicates how confident a subject is, in his aforementioned belief on a scale of 1 to 5, with 5 being the most confident; Expected Bonus Earningis the subject's guess about his bonus earnings from this experiment. p-values of F-tests of joint significance of variables reported in square brackets. * $p < .10$, ** $p < .05$, *** $p < .01$.

Table 2: Treatment Effects on Activism: Petition

	Willing to Sign?		Signed with Name		Signed with Full Name	
	(1)	(2)	(3)	(4)	(5)	(6)
Information	0.203***	0.214***	0.116*	0.137**	0.091	0.110*
	(0.069)	(0.070)	(0.067)	(0.070)	(0.064)	(0.066)
Belief Correction	0.127*	0.151**	0.134**	0.150**	0.127*	0.140**
	(0.070)	(0.072)	(0.068)	(0.073)	(0.065)	(0.069)
Combined	0.236***	0.222***	0.137**	0.150**	0.142**	0.156**
	(0.068)	(0.071)	(0.067)	(0.072)	(0.065)	(0.069)
Equality of treatment effects [p-value]						
Information = Belief Correction	[0.275]	[0.368]	[0.797]	[0.859]	[0.595]	[0.656]
Information = Combined	[0.621]	[0.912]	[0.753]	[0.852]	[0.441]	[0.498]
Belief Correction = Combined	[0.111]	[0.324]	[0.957]	[0.995]	[0.819]	[0.822]
Control Outcome Mean	0.392	0.392	0.299	0.299	0.258	0.258
Controls	NO	YES	NO	YES	NO	YES
Observations	417	417	417	417	417	417

Note: Linear probability models. The dependent variable in columns 1 and 2 is a dummy equal to 1 if the subject selected the option to sign the petition on the final page of the survey, and 0 if he decided to exit the survey. In columns 3 and 4, the dependent variable is a dummy equal to 1 if the subject signed the petition by writing a name, and 0 if he exited the petition page without signing. In columns 5 and 6, the dependent variable is a dummy equal to 1 if the subject wrote a full name (first and last) on the petition page, and 0 if he exited without signing. Controls include the following demographics characteristics: age, marital status, religion, education, SC/ST dummy, income, presence of elderly at home. We also control for indices of: locus of control, risk, pro-sociality, perceptions of corruption, information about rights and entitlements, tolerance of corruption, past civic engagement. The set of controls also include beliefs about others' willingness to protest, confidence in that belief, expected earning from the experiment, time of survey completion and state of residence. Robust standard errors in parentheses; * $p < .10$, ** $p < .05$, *** $p < .01$

Table 3: Treatment Effects on Activism: Donation

	Willing to Donate?		Donated Positive Amount		Percent Donated	
	(1)	(2)	(3)	(4)	(5)	(6)
Information	-0.059	-0.053	-0.068	-0.055	1.637	3.044
	(0.058)	(0.055)	(0.058)	(0.055)	(3.361)	(3.142)
Belief Correction	-0.007	-0.026	-0.026	-0.044	2.971	0.624
	(0.061)	(0.055)	(0.060)	(0.053)	(3.594)	(2.966)
Combined	-0.072	-0.107*	-0.099*	-0.134**	-2.635	-5.028*
	(0.057)	(0.055)	(0.056)	(0.053)	(2.867)	(2.623)
Equality of treatment effects [p-value]						
Information = Belief Correction	[0.365]	[0.629]	[0.449]	[0.840]	[0.720]	[0.479]
Information = Combined	[0.816]	[0.323]	[0.563]	[0.131]	[0.157]	[0.006]
Belief Correction = Combined	[0.254]	[0.143]	[0.183]	[0.081]	[0.088]	[0.054]
Control Outcome Mean	0.267	0.267	0.267	0.267	9.714	9.714
Controls	NO	YES	NO	YES	NO	YES
Observations	437	437	437	437	437	437

Note: Linear probability models in Columns 1 to 4. OLS in columns 5 and 6. The dependent variable in columns 1 and 2 is a dummy equal to 1 if the subject selected the option to make a donation on the final page of the survey, and 0 if he decided to exit the survey. In columns 3 and 4, the dependent variable is a dummy equal to 1 if the subject made a positive donation, and 0 if he selected a 0% donation on the donation page. In columns 5 and 6, the dependent variable is the amount donated, including 0s. Controls include the following demographics characteristics: age, marital status, religion, education, SC/ST dummy, income, presence of elderly at home. We also control for indices of: locus of control, risk, pro-sociality, perceptions of corruption, information about rights and entitlements, tolerance of corruption, past civic engagement. The set of controls also include beliefs about others' willingness to protest, confidence in that belief, expected earning from the experiment, time of survey completion and state of residence. Robust standard errors in parentheses; * $p < .10$, ** $p < .05$, *** $p < .01$

Table 4: Treatment Effects on Activism: How-to-act Video

	Willing to Watch?		Watched Full Video		Seconds Watched	
	(1)	(2)	(3)	(4)	(5)	(6)
Information	0.009	-0.026	0.037	0.022	9.657	-1.487
	(0.065)	(0.066)	(0.064)	(0.068)	(22.752)	(23.516)
Belief Correction	-0.015	-0.062	-0.000	-0.027	-11.319	-25.540
	(0.066)	(0.068)	(0.064)	(0.068)	(22.283)	(23.566)
Combined	-0.085	-0.084	0.006	0.002	-11.567	-12.699
	(0.067)	(0.069)	(0.064)	(0.068)	(22.566)	(23.621)
Equality of treatments [p-value]						
Information = Belief Correction	[0.709]	[0.580]	[0.559]	[0.480]	[0.336]	[0.296]
Information = Combined	[0.153]	[0.379]	[0.627]	[0.776]	[0.337]	[0.624]
Belief Correction = Combined	[0.293]	[0.748]	[0.923]	[0.670]	[0.991]	[0.577]
Control Outcome Mean	0.620	0.620	0.343	0.343	149.198	149.198
Controls	NO	YES	NO	YES	NO	YES
Observations	450	450	450	450	450	450

Note: Linear probability models in Columns 1 to 4. OLS in columns 5 and 6. The dependent variable in columns 1 and 2 is a dummy equal to 1 if the subject selected the option to watch the 5 minute video on the final page of the survey, and 0 if he decided to exit the survey. In columns 3 and 4, the dependent variable is a dummy equal to 1 if the subject watched the full video, and 0 if he exited the video page before the 5 minute had passed. In columns 5 and 6, the dependent variable is the number of seconds of video watched, including 0s. Controls include the following demographics characteristics: age, marital status, religion, education, SC/ST dummy, income, presence of elderly at home. We also control for indices of: locus of control, risk, pro-sociality, perceptions of corruption, information about rights and entitlements, tolerance of corruption, past civic engagement. The set of controls also include beliefs about others' willingness to protest, confidence in that belief, expected earning from the experiment, time of survey completion and state of residence. Robust standard errors in parentheses; * $p < .10$, ** $p < .05$, *** $p < .01$.

Table 5: Treatment Effects on Activism: Choice vs. No Choice of Action

	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 x *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 x *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 x *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: Choice is a dummy equal to 1, indicating subjects who were presented with a choice between the actions at the end of the survey as part of our experimental design, 0 for subjects presented with *one* of the three actions. Each column includes the sub-sample of the relevant action group (Petition: columns 1-3; Donation: columns 4-6; Video: columns 7-9) and the choice group. For petition, the outcome variable is a dummy that equals 1 if the respondent was willing to sign a petition (column 1), or if signed with full name (column 2) or if signed with any name (column 3). For Donation, the dependent variable is a dummy that equals 1 if willing to donate (column 4), or if donated a positive amount of their bonus earnings (column 5) or the percentage of earnings donated (column 6). For Video, the dependent variable is a dummy that equals 1 if the subject is willing to watch the video (column 7), or if he watched more than 325 seconds (full length) of the video (column 8) or the seconds spent watching the video (column 9). Controls include indicators of age, marital status, religion, education, SC/ST dummy, income, presence of elderly at home. We also include indices for: locus of control, risk, pro-sociality, perceptions of corruption, information about corruption and about rights and entitlements, tolerance of corruption and past civic engagement. Finally, we control for belief about others' willingness to protest, confidence in that belief, expected earning from the experiment, and state of residence. Robust standard errors in parentheses; * $p < .10$, ** $p < .05$, *** $p < .01$

Table 6: Overall Activism by Treatment Status and Choice Availability

	Willing to Take Action			Actual Take-up of Action		
	(1)	(2)	(3)	(4)	(5)	(6)
Choice	-0.017	-0.017	0.119**	-0.050**	-0.050**	-0.018
	(0.027)	(0.027)	(0.055)	(0.024)	(0.024)	(0.049)
Information		0.001	0.049		0.020	0.019
		(0.033)	(0.038)		(0.031)	(0.036)
Belief Correction		-0.010	0.027		0.000	0.024
		(0.034)	(0.039)		(0.031)	(0.036)
Combined		-0.041	0.008		-0.003	0.006
		(0.033)	(0.039)		(0.031)	(0.036)
Information x *Choice*			-0.192**			0.000
			(0.075)			(0.070)
Belief Correction x *Choice*			-0.146*			-0.095
			(0.079)			(0.068)
Combined x *Choice*			-0.192**			-0.034
			(0.075)			(0.068)
Observations	1744	1744	1744	1744	1744	1744
I + I x *Choice* [p value]			[0.156]			[0.712]
BC + BC x *Choice* [p value]			[0.632]			[0.014]
COM + COM x *Choice* [p value]			[0.159]			[0.268]
Control Outcome Mean		0.432			0.248	
Controls?	YES	YES	YES	YES	YES	YES
Observations	1744	1744	1744	1744	1744	1744

Note: Choice is a dummy equal to 1, indicating subjects who were presented with a choice between the actions at the end of the survey as part of our experimental design, 0 for subjects presented with *one* of the three actions. Each column includes the sub-sample of the relevant action group (Petition: columns 1-3; Donation: columns 4-6; Video: columns 7-9) and the choice group. The dependent variable in columns 1 to 3 is a dummy equal to 1 if the respondent was willing to take up the action presented to him (in the Petition, Donation and Video treatments) or one of the three actions in the Choice treatment. The dependent variable for columns 4 to 6 is a dummy equal 1 if the respondent actually took the action (i.e., signed petition with full name, or donated a positive amount, or watched the how-to-act video for 325 seconds). Controls include indicators of age, marital status, religion, education, SC/ST dummy, income, presence of elderly at home. We also include indices for: locus of control, risk, pro-sociality, perceptions of corruption, information about corruption and about rights and entitlements, tolerance of corruption and past civic engagement. Finally, we control for belief about others' willingness to protest, confidence in that belief, expected bonus earning, and state of residence. Robust standard errors in parentheses; * $p < .10$, ** $p < .05$, *** $p < .01$.

Table 7: Heterogeneity by Bias in Beliefs

	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)
Information	0.262***	0.164**	0.156**	-0.058	-0.067	1.841	0.001	0.074	9.016
	(0.080)	(0.079)	(0.075)	(0.064)	(0.064)	(3.630)	(0.075)	(0.077)	(27.192)
Belief Correction	0.303***	0.260***	0.259***	-0.030	-0.044	0.102	-0.043	0.010	-15.529
	(0.082)	(0.083)	(0.079)	(0.066)	(0.064)	(3.811)	(0.077)	(0.076)	(26.123)
Combined	0.307***	0.191**	0.182**	-0.114*	-0.148**	-5.862*	-0.063	0.007	-5.596
	(0.080)	(0.081)	(0.076)	(0.066)	(0.063)	(3.229)	(0.076)	(0.074)	(25.787)
Information x Bias (↑)	-0.096	-0.043	-0.134	0.016	0.046	4.614	-0.131	-0.247	-52.085
	(0.162)	(0.162)	(0.154)	(0.123)	(0.122)	(7.378)	(0.163)	(0.164)	(56.104)
Belief Correction x Bias (↑)	-0.541***	-0.396**	-0.421***	0.014	-0.010	1.549	-0.104	-0.186	-51.301
	(0.157)	(0.166)	(0.154)	(0.120)	(0.114)	(5.777)	(0.166)	(0.165)	(58.141)
Combined x Bias (↑)	-0.305*	-0.135	-0.068	0.032	0.065	3.248	-0.115	0.016	-34.895
	(0.161)	(0.167)	(0.163)	(0.118)	(0.116)	(5.038)	(0.182)	(0.186)	(63.447)
Bias (↑)	0.233**	0.092	0.052	-0.051	-0.044	-3.183	0.188	0.151	54.865
	(0.114)	(0.115)	(0.109)	(0.083)	(0.081)	(3.188)	(0.118)	(0.120)	(42.205)
I + I x Bias (↑) [p value]	[0.242]	[0.391]	[0.875]	[0.697]	[0.840]	[0.321]	[0.369]	[0.233]	[0.375]
BC + BC x Bias (↑) [p value]	[0.078]	[0.347]	[0.221]	[0.873]	[0.569]	[0.700]	[0.317]	[0.236]	[0.204]
COM + COM x Bias (↑) [p value]	[0.988]	[0.704]	[0.432]	[0.400]	[0.390]	[0.517]	[0.286]	[0.891]	[0.489]
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	417	417	417	437	437	437	450	450	450

Note: Each column includes the sub-sample of the relevant action group (Petition: columns 1-3; Donation: columns 4-6; Video: columns 7-9) and the choice group. For petition, the outcome variable is a dummy that equals 1 if the respondent was willing to sign a petition (column 1), or if signed with full name (column 2) or if signed with any name (column 3). For Donation, the dependent variable is a dummy that equals 1 if willing to donate (column 4), or if donated a positive amount of their bonus earnings (column 5) or the percentage of earnings donated (column 6). For Video, the dependent variable is a dummy that equals 1 if the subject is willing to watch the video (column 7), or if he watched more than 325 seconds (full length) of the video (column 8) or the seconds spent watching the video (column 9). Controls include indicators of age, marital status, religion, education, SC/ST dummy, income, presence of elderly at home. We also include indices for: locus of control, risk, pro-sociality, perceptions of corruption, information about corruption and about rights and entitlements, tolerance of corruption and past civic engagement. Finally, we control for belief about others' willingness to protest, confidence in that belief, expected earning from the experiment, and state of residence. The symbols I, BC and COM, at the bottom of the table, stand for Information, Belief Correction, and Combined treatments respectively. 'Bias(↑)' is a dummy equal to 1 if the subject overestimated the true willingness to protest, 0 otherwise. Robust standard errors in parentheses; p-values reported in square brackets. * $p < .10$, ** $p < .05$, *** $p < .01$.

Table 8: Heterogeneity by Information about Rights and Entitlements

	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)
Information	0.213***	0.139**	0.115*	-0.054	-0.056	3.022	-0.026	0.021	-1.711
	(0.071)	(0.070)	(0.067)	(0.055)	(0.055)	(3.154)	(0.067)	(0.069)	(23.490)
Belief Correction	0.170**	0.171**	0.155**	-0.025	-0.045	0.619	-0.062	-0.024	-24.896
	(0.071)	(0.072)	(0.069)	(0.055)	(0.053)	(2.970)	(0.069)	(0.068)	(23.574)
Combined	0.234***	0.162**	0.167**	-0.102*	-0.132**	-5.092*	-0.084	0.005	-11.619
	(0.071)	(0.072)	(0.069)	(0.056)	(0.054)	(2.629)	(0.069)	(0.068)	(23.581)
Information x Information (Rights)	-0.040	0.026	0.040	0.051	0.045	1.548	0.009	-0.028	-10.542
	(0.076)	(0.076)	(0.068)	(0.052)	(0.051)	(2.979)	(0.067)	(0.069)	(23.773)
Belief Correction x Information (Rights)	0.099	0.150**	0.104	0.072	0.047	2.660	-0.002	-0.061	-18.168
	(0.068)	(0.071)	(0.067)	(0.065)	(0.060)	(3.411)	(0.073)	(0.072)	(24.646)
Combined x Information (Rights)	-0.128**	-0.109*	-0.096	-0.003	0.013	1.844	0.007	-0.049	-22.244
	(0.064)	(0.066)	(0.063)	(0.049)	(0.048)	(2.281)	(0.068)	(0.066)	(23.047)
Information (Rights)	0.093**	0.051	0.044	-0.007	-0.005	0.096	0.044	0.080	30.677
	(0.047)	(0.048)	(0.043)	(0.043)	(0.043)	(1.946)	(0.050)	(0.052)	(18.639)
I + I x Information [p value]	[0.103]	[0.137]	[0.122]	[0.964]	[0.877]	[0.289]	[0.858]	[0.949]	[0.728]
BC + BC x Information [p value]	[0.006]	[0.002]	[0.009]	[0.581]	[0.976]	[0.455]	[0.500]	[0.390]	[0.211]
COM + COM x Information [p value]	[0.235]	[0.569]	[0.424]	[0.120]	[0.075]	[0.352]	[0.403]	[0.649]	[0.320]
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	417	417	417	437	437	437	450	450	450

Note: Each column includes the sub-sample of the relevant action group (Petition: columns 1-3; Donation: columns 4-6; Video: columns 7-9) and the choice group. For petition, the outcome variable is a dummy that equals 1 if the respondent was willing to sign a petition (column 1), or if signed with full name (column 2) or if signed with any name (column 3). For Donation, the dependent variable is a dummy that equals 1 if willing to donate (column 4), or if donated a positive amount of their bonus earnings (column 5) or the percentage of earnings donated (column 6). For Video, the dependent variable is a dummy that equals 1 if the subject is willing to watch the video (column 7), or if he watched more than 325 seconds (full length) of the video (column 8) or the seconds spent watching the video (column 9). Controls include indicators of age, marital status, religion, education, SC/ST dummy, income, presence of elderly at home. We also include indices for: locus of control, risk, pro-sociality, perceptions of corruption, information about corruption and about rights and entitlements, tolerance of corruption and past civic engagement. Finally, we control for belief about others' willingness to protest, confidence in that belief, expected earning from the experiment, and state of residence. Information (rights) is an aggregated index that is standardized around the control mean. Therefore, it is expressed in standard deviations from the Control mean. The index aggregates questions related to an individual's initial information of rights and entitlements in healthcare, as explained in subsection C.2. Robust standard errors in parentheses; p-values reported in square brackets. * $p < .10$, ** $p < .05$, *** $p < .01$.

Table 9: Heterogeneity by Perception of Corruption

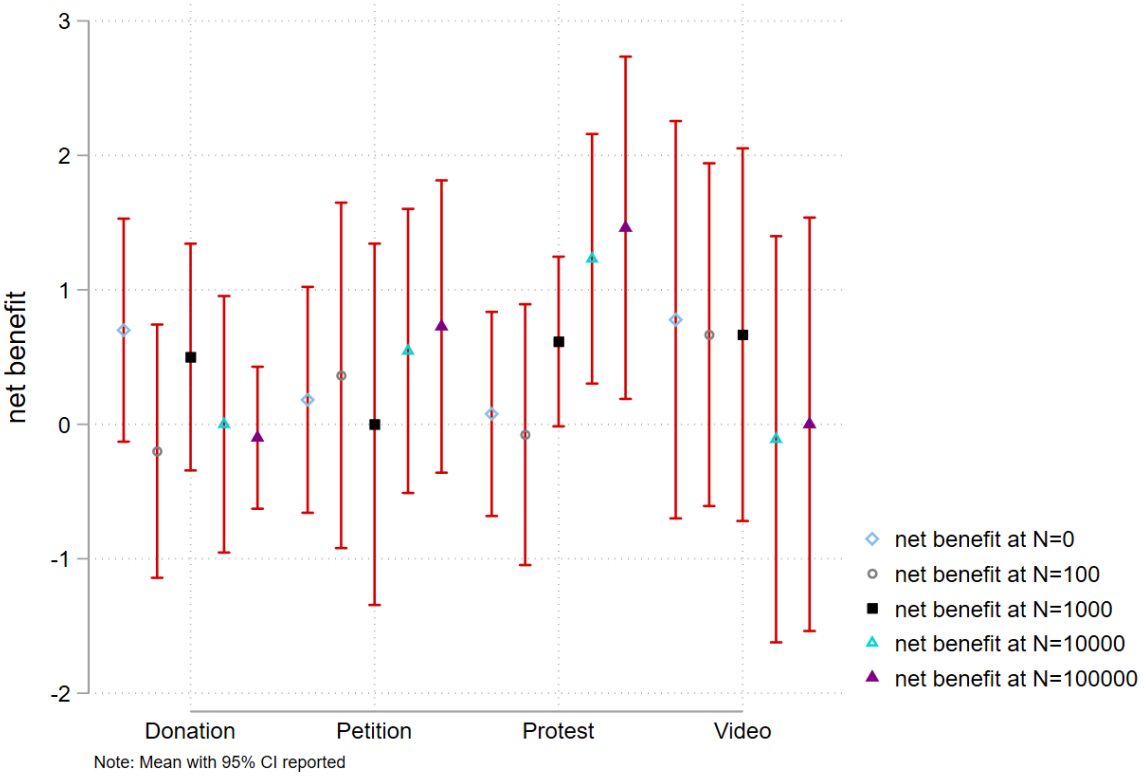
	Willing to Sign	Signed with Name	Signed with Full Name	Willing to Donate	Donated Positive Amount	Percent Donated	Willing to Watch Video	Watched Full Video	Seconds Watched
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Information	0.209***	0.129*	0.104	-0.056	-0.057	3.050	-0.021	0.026	0.031
	(0.072)	(0.070)	(0.067)	(0.055)	(0.055)	(3.175)	(0.066)	(0.068)	(23.484)
Belief Correction	0.147**	0.143*	0.134*	-0.025	-0.044	0.625	-0.053	-0.017	-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	0.009	-10.393
	(0.073)	(0.073)	(0.070)	(0.054)	(0.052)	(2.605)	(0.068)	(0.068)	(23.645)
Information x Perception	0.055	0.093	0.077	0.089*	0.068	1.156	-0.041	-0.053	-21.885
	(0.062)	(0.065)	(0.064)	(0.053)	(0.054)	(3.415)	(0.058)	(0.064)	(23.448)
Belief Correction x Perception	0.012	0.078	0.063	0.063	0.068	2.316	-0.125**	-0.134**	-33.304
	(0.067)	(0.073)	(0.071)	(0.055)	(0.052)	(3.047)	(0.062)	(0.067)	(22.543)
Combined x Perception	0.001	-0.035	-0.065	0.152***	0.156***	5.766**	-0.136**	-0.125*	-44.913**
	(0.064)	(0.071)	(0.071)	(0.052)	(0.051)	(2.647)	(0.063)	(0.067)	(22.389)
Perception	-0.046	-0.092*	-0.084	-0.151***	-0.140***	-5.333**	0.095**	0.037	11.246
	(0.049)	(0.051)	(0.051)	(0.040)	(0.040)	(2.103)	(0.047)	(0.050)	(17.124)
I + I x Perception [p value]	[0.002]	[0.016]	[0.041]	[0.626]	[0.866]	[0.297]	[0.461]	[0.780]	[0.491]
BC + BC x Perception [p value]	[0.098]	[0.028]	[0.040]	[0.599]	[0.728]	[0.448]	[0.045]	[0.110]	[0.073]
COM + COM x Perception [p value]	[0.009]	[0.195]	[0.260]	[0.511]	[0.718]	[0.801]	[0.022]	[0.234]	[0.089]
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	417	417	417	437	437	437	450	450	450

Note: Each column includes the sub-sample of the relevant action group (Petition: columns 1-3; Donation: columns 4-6; Video: columns 7-9) and the choice group. For petition, the outcome variable is a dummy that equals 1 if the respondent was willing to sign a petition (column 1), or if signed with full name (column 2) or if signed with any name (column 3). For Donation, the dependent variable is a dummy that equals 1 if willing to donate (column 4), or if donated a positive amount of their bonus earnings (column 5) or the percentage of earnings donated (column 6). For Video, the dependent variable is a dummy that equals 1 if the subject is willing to watch the video (column 7), or if he watched more than 325 seconds (full length) of the video (column 8) or the seconds spent watching the video (column 9). Controls include indicators of age, marital status, religion, education, SC/ST dummy, income, presence of elderly at home. We also include indices for: locus of control, risk, pro-sociality, perceptions of corruption, information about corruption and about rights and entitlements, tolerance of corruption and past civic engagement. Finally, we control for belief about others' willingness to protest, confidence in that belief, expected earning from the experiment, and state of residence. Perception is an aggregated index that is standardized around the control mean. Therefore, it is expressed in standard deviations from the Control mean. The index aggregates questions related to individual's perception of corruption in healthcare, as explained in subsection C.2. Robust standard errors in parentheses; p-values reported in square brackets. * $p < .10$, ** $p < .05$, *** $p < .01$.

Appendix

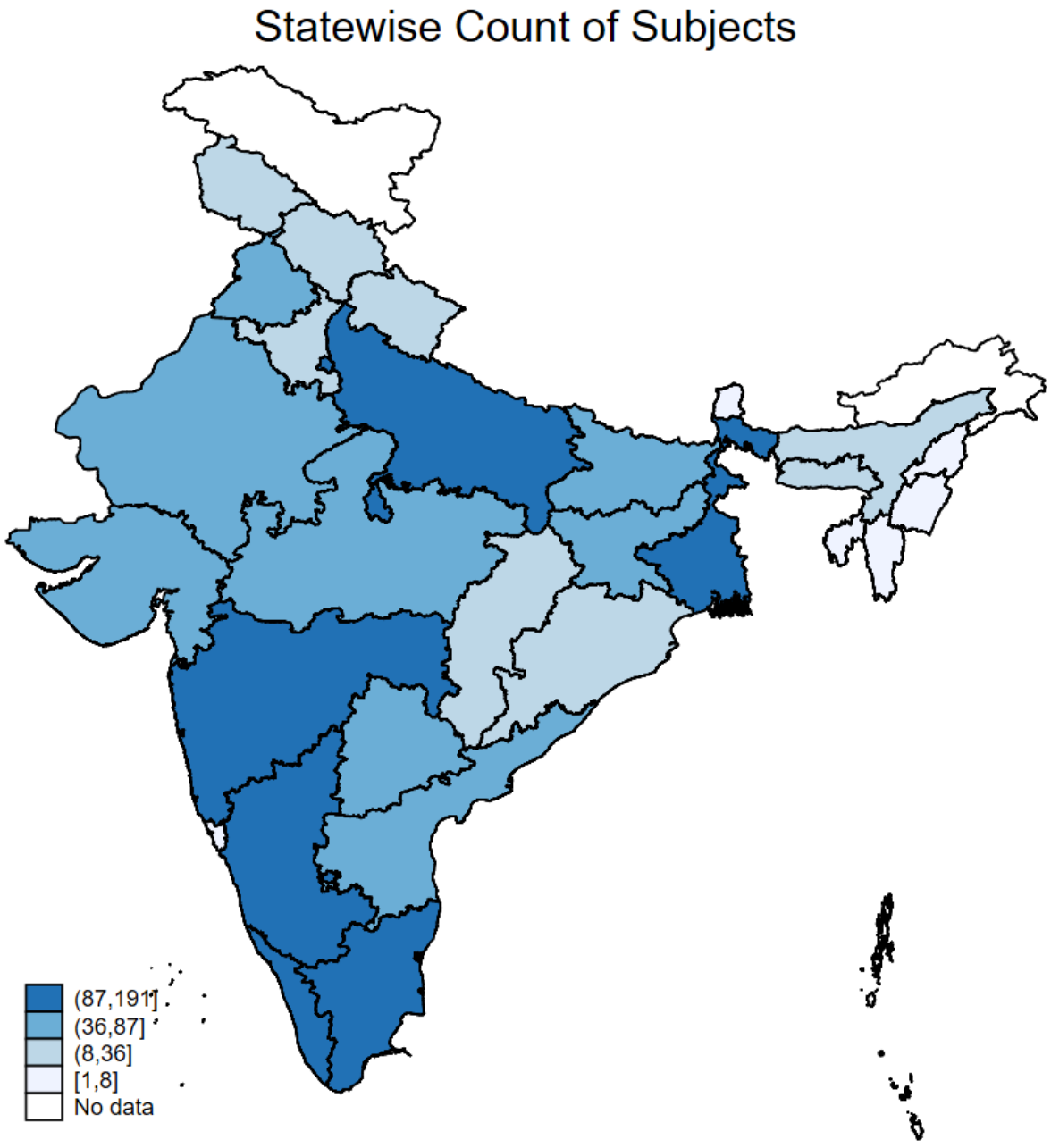
A Additional Figures and Tables

Figure A1: Net Benefit of Actions



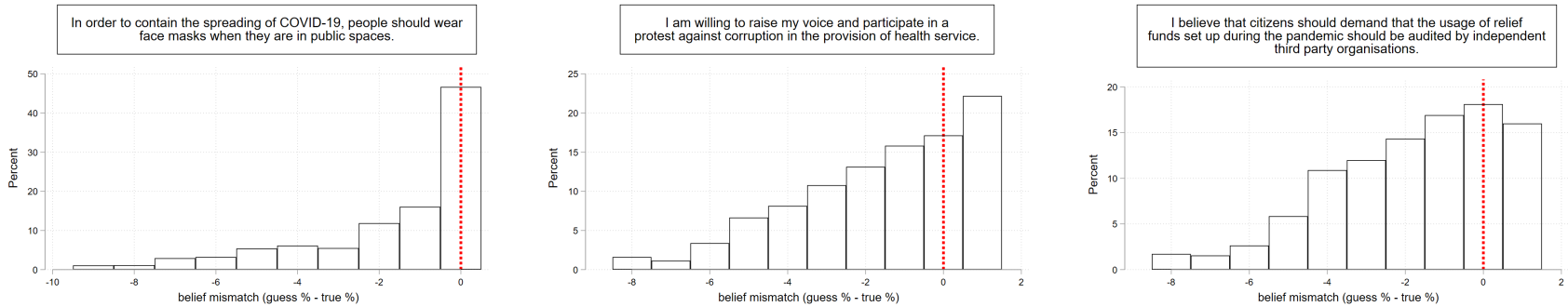
Note: The figure shows the net benefit of different actions, based on the survey responses of a comparable sample of 849 Indian men, which were involved in the study in 2022. To calculate the benefit associated with an action, we asked subjects how likely it would be for the action to induce the government to act on corruption if 'N' people decided to take the action on a scale from extremely unlikely (1) to extremely likely (5). Subjects answered this question for 'N'= 0/ 100/ 1000/ 10,000/100,000. Similarly, in order to capture the expected cost associated with an action, we asked subjects how likely it would be for the action to induce the government to punish citizens, on a scale from extremely unlikely (1) to extremely likely (5) if 'N' people decided to take the action. The net benefit is calculated as the difference between the average expected benefit and the average expected cost of each action for every N people taking that action.

Figure A2: Geographic Distribution of Study Sample (by State of Residence)



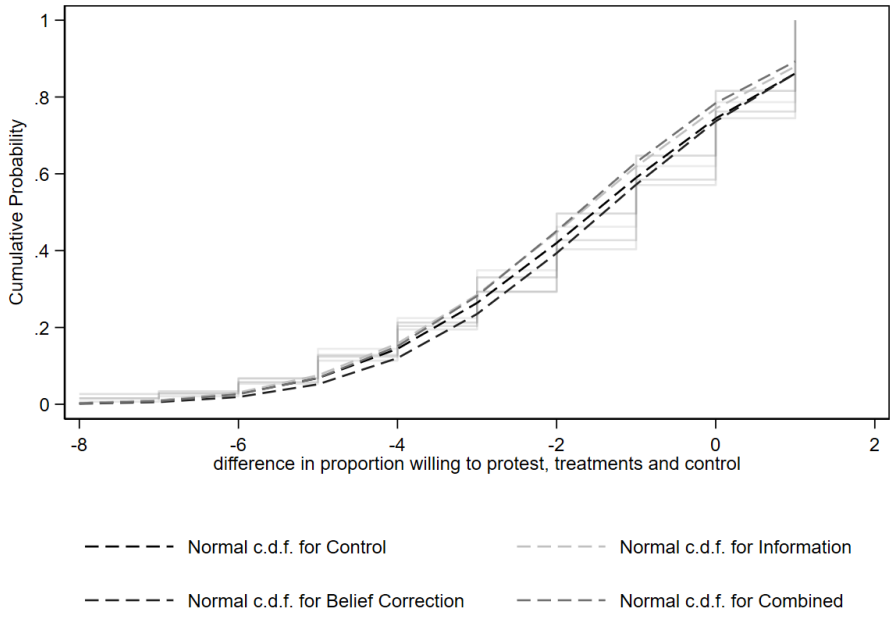
Source: Authors' own calculation

Figure A3: Belief Mismatch



Note: The figure shows the distribution of belief mismatches in perceptions of (1) "In order to contain the spread of COVID-19, people should wear face masks when they are in public spaces." (2) "I believe that citizens should demand that the usage of relief funds set up during the pandemic should be audited by independent third party organization." and (3) "I am willing to raise my voice and participate in a protest against corruption in the provision of health service." For each of these statements, belief mismatches are calculated as the difference between subject's guess about the percent of Stage 1 participants agreeing with the statement and the true percent of Stage 1 participants agreeing with the statement (Bursztyn et al., 2020).

Figure A4: Distribution of Beliefs about Others' Willingness to Protest, by Treatment



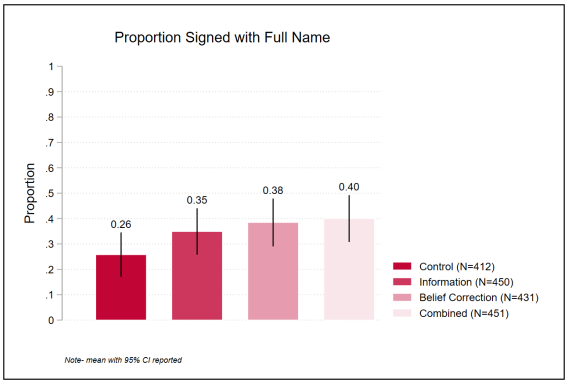
Note: The figure plots the cumulative distributions of individual beliefs about others' willingness to protest for the cause, by activism treatment. The value 0 in x axis indicates the '80-90 percent' category, which contained the true willingness to protest. Each unit below or above 0 indicates belief mismatch by 10 percentage points. For instance, -2 indicates the beliefs that 50-60 percent of others agreed with the statement on willingness to protest against corruption in health.

Kolmogorov-Smirnov Test of Equality of Belief Distributions (p value)

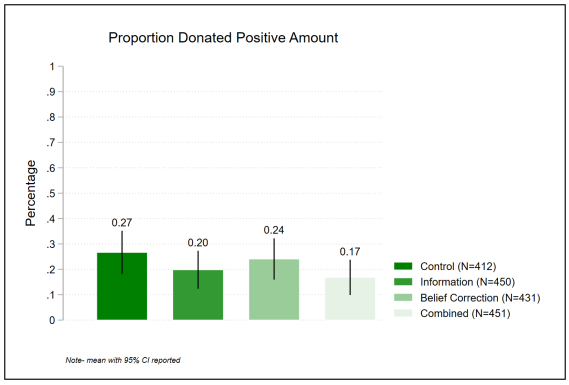
control=information	0.529
control=belief correction	1.000
control=combined	0.250
information=belief correction	0.438
information=combined	0.952
belief correction= combined	0.044

Figure A5: Activism Treatments and Actual Take-up of Actions

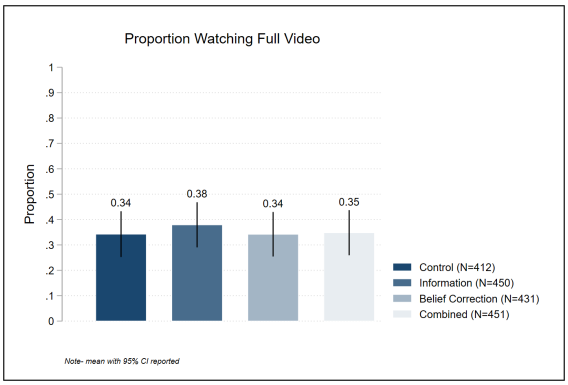
(a) Petition



(b) Donation



(c) How-to-Act Video



Note: The figures show the percentages of participants who signed petition with full name (a), made a positive donation (b), and watched the full informational how-to-act video (325 seconds) (c) in each activism treatment (Control, Information, Belief Correction and Combined). Subjects were presented with one of the three actions or given a choice between the actions, at the end of the survey, as part of our experimental design. The figures display percentages and 95 percent confidence intervals.

Table A1: Summary Statistics

	N	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

Note: The statistics in Panel A are all proportions between 0 and 1.SC (Schedule Caste) and ST (Scheduled Tribe) are socio-economically deprived individuals in India; 'Income' indicates subjects with monthly household income below INR 30 thousand in the previous month; 'elderly' indicates subjects who say 'yes' to the question "In your household, do you have elderly (above 60) living with you?"; Locus of control, risk and pro-sociality indices are standardized measures of self-assessment as mentioned in subsection C.2; They are expressed in standard deviations from the Control group mean. The statistics in Panel C are all proportions between 0 and 1. Questions related to corruption are described in subsection C.2.

Table A2: Comparison between National and Experimental Sample

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

Note: For each demographic characteristic, we report proportions in the experimental sample and the national sample. 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 our experimental sample.

Table A3: Balance on Observable Characteristics (by Action Treatments)

Variable	Total (1)	Petition (2)	Donation (3)	Video (4)	Choice (5)	Difference (2)-(3)	(2)-(4)	(2)-(5)	(3)-(4)	(3)-(5)	(4)-(5)
A. Demographics											
Age 45+	0.145	0.134	0.142	0.158	0.145	-0.008	-0.023	-0.011	-0.016	-0.004	0.012
Married	0.490	0.468	0.483	0.504	0.505	-0.015	-0.037	-0.037	-0.022	-0.022	-0.000
SC\ST	0.264	0.252	0.245	0.296	0.264	0.007	-0.044	-0.012	-0.051*	-0.019	0.032
Hindu	0.769	0.765	0.751	0.749	0.811	0.014	0.016	-0.046*	0.002	-0.061**	-0.062**
College	0.782	0.784	0.762	0.791	0.789	0.022	-0.007	-0.004	-0.029	-0.027	0.002
Income	0.494	0.472	0.517	0.500	0.484	-0.045	-0.028	-0.012	0.017	0.033	0.016
Elderly	0.563	0.566	0.574	0.520	0.591	-0.008	0.046	-0.025	0.054	-0.017	-0.071**
B. Preferences											
Locus of Control	0.059	0.083	0.091	0.056	0.005	-0.008	0.027	0.078	0.035	0.086	0.051
Risk	0.001	-0.028	0.046	0.019	-0.034	-0.074	-0.047	0.006	0.027	0.080	0.053
Pro-sociality	-0.034	-0.010	-0.051	-0.014	-0.059	0.041	0.005	0.049	-0.037	0.008	0.045
C. Corruption											
Perception	0.053	0.070	0.011	0.059	0.073	0.059	0.011	-0.002	-0.048	-0.061	-0.014
Information (Rights)	0.027	-0.029	0.013	0.067	0.053	-0.041	-0.096	-0.082	-0.055	-0.040	0.015
Tolerance	0.052	0.028	0.118	0.029	0.034	-0.090	-0.001	-0.006	0.089	0.083	-0.006
Civic Engagement	0.064	0.066	0.056	0.015	0.122	0.010	0.052	-0.056	0.041	-0.066	-0.107*
D. Belief and Earning from Survey											
Bias (↑)	0.222	0.242	0.233	0.202	0.211	0.009	0.040	0.031	0.031	0.022	-0.009
Confidence	4.268	4.276	4.314	4.242	4.241	-0.038	0.034	0.035	0.071	0.073	0.001
Expected Bonus Earning	138.801	137.002	139.963	139.087	139.059	-2.961	-2.084	-2.057	0.877	0.904	0.028
Belief about others' willingness to protest (percent)	64.077	65.468	64.508	63.444	62.977	0.960	2.023	2.490	1.064	1.531	0.467
N	1744	417	437	450	440						
F-test of joint significance [p-value]						[0.946]	[0.723]	[0.868]	[0.540]	[0.487]	[0.497]

Note: The statistics in Panel A are all proportions between 0 and 1.SC (Schedule Caste) and ST (Scheduled Tribe) are socio-economically deprived individuals in India; 'Income' indicates subjects with monthly household income below INR 30 thousand in the previous month; 'elderly' indicates subjects who say 'yes' to the question "In your household, do you have elderly (above 60) living with you?"; Locus of control, risk and pro-sociality indices are standardized measures of self-assessment as explained in subsection C.2; indices of corruption perception, information (rights), corruption tolerance and civic engagement are created by aggregating standardized responses of relevant survey questions as described in subsection C.2. They are expressed in standard deviations from the Control mean. 'Bias(↑)' is a dummy equal to 1 if the subject overestimated the true willingness to protest, 0 otherwise; 'Belief about others' willingness to protest' indicates subjects' guess about percentage of previous participants agreeing with the statement "I am willing to raise my voice and participate in a protest against corruption in the provision of health service."; 'confidence' indicates how confident a subject is, in his aforementioned belief on a scale of 1 to 5, with 5 being the most confident; 'expected bonus earning' is the subject's guess about his bonus earnings from this experiment. p-values of F-tests of joint significance of variables reported in square brackets. * $p < .10$, ** $p < .05$, *** $p < .01$.

Table A4: Treatment Effects on Decision to Act, Conditional on Type of Action

	(1)	(2)	(3)
Information	0.004	0.009	-0.059
	(0.031)	(0.031)	(0.038)
Belief Correction	0.010	0.013	-0.036
	(0.032)	(0.031)	(0.040)
Combined	-0.009	-0.002	-0.087**
	(0.031)	(0.030)	(0.037)
Petition		0.212***	0.062
		(0.027)	(0.053)
How-to-act Video		0.206***	0.164***
		(0.026)	(0.056)
Information x *Petition*			0.174**
			(0.074)
Information x *How-to-act Video*			0.071
			(0.077)
Belief Correction x *Petition*			0.169**
			(0.077)
Belief Correction x *How-to-act Video*			0.012
			(0.076)
Combined x *Petition*			0.237***
			(0.074)
Combined x *How-to-act Video*			0.074
			(0.076)
Controls?	YES	YES	YES
Observations	1554	1554	1554

Note: The dependent variable is a dummy that equals 1 if the respondent chose to take any action when offered to sign a petition or watch a video, and 0 if he chose to take any action when offered to donate. Controls include 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, attitude towards corruption and past civic engagement; belief about others' willingness to protest, confidence in that belief, expected earning from the experiment, time and state of residence dummies. Robust standard errors in parentheses. * $p < .10$, ** $p < .05$, *** $p < .01$

Table A5: Petition: Correction for Multiple Hypothesis Testing

	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]

Note: Conventional p-values are given in parentheses, under the coefficients. FDR-adjusted p-values, computed following Anderson (2008) are reported in square brackets below. Controls include 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, attitude towards corruption and past civic engagement; belief about others' willingness to protest, confidence in that belief, expected earning from the experiment, time and state of residence dummies.

Table A6: Robustness: Treatment effects on Activism - Double LASSO Method

	Willing to Sign	Signed with Name	Signed with Full Name	Willing to Donate	Donated Positive Amount	Percent Donated	Willing to Watch Video	WatchedFull Video	Seconds Watched
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Information	0.207***	0.130*	0.105	-0.059	-0.065	2.086	-0.030	0.028	0.231
	(0.071)	(0.069)	(0.066)	(0.056)	(0.056)	(3.222)	(0.066)	(0.067)	(23.468)
Belief Correction	0.147**	0.151**	0.147**	-0.021	-0.041	0.477	-0.057	-0.031	-25.151
	(0.073)	(0.072)	(0.068)	(0.056)	(0.054)	(3.017)	(0.068)	(0.067)	(23.239)
Combined	0.236***	0.156**	0.156**	-0.091*	-0.119**	-3.845	-0.097	-0.004	-16.965
	(0.069)	(0.070)	(0.067)	(0.054)	(0.052)	(2.500)	(0.069)	(0.067)	(23.560)
Equality of treatments [p-value]									
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	0.343	149.198
Controls?	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	417	417	417	437	437	437	450	450	450

Note: Each column includes the sub-sample of the relevant action group (Petition: columns 1-3; Donation: columns 4-6; Video: columns 7-9) and the choice group. For petition, the outcome variable is a dummy that equals 1 if the respondent was willing to sign a petition (column 1), or if signed with full name (column 2) or if signed with any name (column 3). For Donation, the dependent variable is a dummy that equals 1 if willing to donate (column 4), or if donated a positive amount of their bonus earnings (column 5) or the percentage of earnings donated (column 6). For Video, the dependent variable is a dummy that equals 1 if the subject is willing to watch the video (column 7), or if he watched more than 325 seconds (full length) of the video (column 8) or the seconds spent watching the video (column 9). Controls are selected by the Double Lasso method. Robust standard errors in parentheses; p-values reported in square brackets. * $p < .10$, ** $p < .05$, *** $p < .01$.

Table A7: Heterogeneity by Belief Mismatch (Separating Unbiased and Downward Biased)

	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)
Information	0.162	0.118	0.019	-0.040	-0.020	6.554	-0.132	-0.171	-42.900
	(0.141)	(0.142)	(0.135)	(0.108)	(0.107)	(6.553)	(0.145)	(0.144)	(48.654)
Belief Correction	-0.236*	-0.139	-0.169	-0.016	-0.053	1.638	-0.149	-0.177	-67.303
	(0.136)	(0.145)	(0.133)	(0.101)	(0.094)	(4.302)	(0.147)	(0.149)	(52.566)
Combined	-0.001	0.055	0.114	-0.087	-0.089	-2.828	-0.179	0.026	-40.127
	(0.142)	(0.148)	(0.146)	(0.098)	(0.098)	(4.097)	(0.167)	(0.173)	(58.841)
Information x Correct	0.226	0.172	0.220	0.116	0.092	1.646	-0.004	0.074	-1.479
	(0.223)	(0.226)	(0.209)	(0.187)	(0.185)	(9.088)	(0.218)	(0.229)	(76.987)
Belief Correction x Correct	0.447**	0.385*	0.426**	0.194	0.231	13.744	-0.145	-0.064	-36.042
	(0.213)	(0.214)	(0.194)	(0.177)	(0.170)	(9.063)	(0.240)	(0.242)	(82.478)
Combined x Correct	0.248	0.146	0.142	0.227	0.248	10.121	0.075	-0.115	11.621
	(0.210)	(0.225)	(0.214)	(0.185)	(0.183)	(7.037)	(0.242)	(0.245)	(82.015)
Information x Bias (↓)	0.076	0.013	0.108	-0.058	-0.090	-6.918	0.167	0.275	62.215
	(0.164)	(0.166)	(0.160)	(0.128)	(0.127)	(7.806)	(0.168)	(0.168)	(58.457)
Belief Correction x Bias (↓)	0.573***	0.409**	0.437***	-0.088	-0.067	-6.946	0.158	0.245	71.102
	(0.164)	(0.175)	(0.164)	(0.124)	(0.117)	(6.044)	(0.172)	(0.169)	(59.571)
Combined x Bias (↓)	0.331**	0.132	0.040	-0.089	-0.131	-6.744	0.125	-0.003	38.088
	(0.168)	(0.172)	(0.170)	(0.124)	(0.122)	(5.574)	(0.186)	(0.191)	(65.249)
Correct	-0.121	-0.096	-0.126	-0.021	-0.029	-3.243	-0.098	0.079	7.322
	(0.161)	(0.154)	(0.135)	(0.120)	(0.116)	(4.332)	(0.161)	(0.173)	(58.347)
Bias (↓)	-0.286**	-0.097	-0.026	0.075	0.068	5.439	-0.210*	-0.203*	-69.203
	(0.115)	(0.119)	(0.115)	(0.089)	(0.087)	(3.825)	(0.122)	(0.123)	(43.324)
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	417	417	417	437	437	437	450	450	450

Note: Each column includes the sub-sample of the relevant action group (Petition: columns 1-3; Donation: columns 4-6; Video: columns 7-9) and the choice group. For petition, the outcome variable is a dummy that equals 1 if the respondent was willing to sign a petition (column 1), or if signed with full name (column 2) or if signed with any name (column 3). For Donation, the dependent variable is a dummy that equals 1 if willing to donate (column 4), or if donated a positive amount of their bonus earnings (column 5) or the percentage of earnings donated (column 6). For Video, the dependent variable is a dummy that equals 1 if the subject is willing to watch the video (column 7), or if he watched more than 325 seconds (full length) of the video (column 8) or the seconds spent watching the video (column 9). 'Bias(↓)' is a dummy equal to 1 if the subject strictly underestimated the true willingness to protest, 0 otherwise. 'Correct' is a dummy equal to 1 if the subject correctly estimated the true willingness to protest, 0 otherwise. Robust standard errors in parentheses; p-values reported in square brackets. * $p < .10$, ** $p < .05$, *** $p < .01$.

Table A8: Heterogeneity by Income

	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)
Information	0.163	0.196**	0.164*	0.011	-0.001	5.758	-0.114	-0.114	-44.710
	(0.099)	(0.096)	(0.091)	(0.072)	(0.072)	(3.567)	(0.097)	(0.101)	(33.032)
Belief Correction	0.189**	0.248***	0.252***	0.000	-0.016	2.404	-0.040	-0.148	-52.647
	(0.094)	(0.094)	(0.090)	(0.078)	(0.075)	(3.409)	(0.093)	(0.098)	(32.074)
Combined	0.277***	0.250***	0.226**	-0.025	-0.043	-1.069	-0.040	-0.095	-35.699
	(0.092)	(0.094)	(0.092)	(0.076)	(0.075)	(2.809)	(0.095)	(0.098)	(32.390)
Information x Income <INR 30	0.099	-0.123	-0.114	-0.125	-0.104	-5.232	0.154	0.249*	78.866*
	(0.143)	(0.139)	(0.133)	(0.108)	(0.107)	(5.849)	(0.130)	(0.138)	(47.183)
Belief Correction x Income <INR 30	-0.082	-0.206	-0.240*	-0.053	-0.056	-3.443	-0.056	0.231*	50.117
	(0.142)	(0.141)	(0.133)	(0.114)	(0.110)	(5.761)	(0.139)	(0.138)	(46.678)
Combined x Income <INR 30	-0.120	-0.212	-0.145	-0.161	-0.179*	-7.779	-0.099	0.184	42.967
	(0.142)	(0.140)	(0.134)	(0.110)	(0.106)	(4.936)	(0.140)	(0.138)	(48.333)
Income <INR 30	-0.043	0.069	0.011	0.106	0.099	5.904	0.037	-0.189*	-39.332
	(0.099)	(0.095)	(0.089)	(0.083)	(0.083)	(3.998)	(0.101)	(0.104)	(36.365)
I + I x Income [p value]	[0.010]	[0.470]	[0.602]	[0.162]	[0.200]	[0.915]	[0.649]	[0.149]	[0.308]
BC + BC x Income [p value]	[0.323]	[0.699]	[0.904]	[0.510]	[0.348]	[0.823]	[0.344]	[0.387]	[0.941]
COM + COM x Income [p value]	[0.150]	[0.720]	[0.419]	[0.020]	[0.003]	[0.036]	[0.175]	[0.359]	[0.837]
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	417	417	417	437	437	437	450	450	450

Note: Each column includes the sub-sample of the relevant action group (Petition: columns 1-3; Donation: columns 4-6; Video: columns 7-9) and the choice group. For petition, the outcome variable is a dummy that equals 1 if the respondent was willing to sign a petition (column 1), or if signed with full name (column 2) or if signed with any name (column 3). For Donation, the dependent variable is a dummy that equals 1 if willing to donate (column 4), or if donated a positive amount of their bonus earnings (column 5) or the percentage of earnings donated (column 6). For Video, the dependent variable is a dummy that equals 1 if the subject is willing to watch the video (column 7), or if he watched more than 325 seconds (full length) of the video (column 8) or the seconds spent watching the video (column 9). Controls include indicators of age, marital status, religion, education, SC/ST dummy, income, presence of elderly at home. We also include indices for: locus of control, risk, pro-sociality, perceptions of corruption, information about corruption and about rights and entitlements, tolerance of corruption and past civic engagement. Finally, we control for belief about others' willingness to protest, confidence in that belief, expected earning from the experiment, and state of residence. 'Income' indicates subjects with monthly household income below INR 30 thousand in the previous month. Robust standard errors in parentheses; p-values reported in square brackets. * $p < .10$, ** $p < .05$, *** $p < .01$.

Table A9: Heterogeneity by Education

	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)
Information	0.132	-0.056	-0.050	0.021	0.026	-0.845	0.140	0.104	15.367
	(0.154)	(0.143)	(0.142)	(0.121)	(0.121)	(5.898)	(0.152)	(0.169)	(53.142)
Belief Correction	0.091	0.043	-0.000	0.022	-0.010	1.960	0.029	0.143	14.090
	(0.155)	(0.152)	(0.140)	(0.111)	(0.103)	(7.027)	(0.149)	(0.137)	(47.923)
Combined	0.147	0.101	0.091	-0.047	-0.078	-3.962	0.106	0.193	43.830
	(0.146)	(0.147)	(0.140)	(0.109)	(0.102)	(4.983)	(0.153)	(0.156)	(51.986)
Information x College	0.105	0.243	0.203	-0.096	-0.105	4.922	-0.201	-0.102	-21.052
	(0.175)	(0.167)	(0.163)	(0.137)	(0.136)	(7.058)	(0.168)	(0.186)	(60.129)
Belief Correction x College	0.077	0.134	0.178	-0.064	-0.046	-1.783	-0.110	-0.216	-49.755
	(0.180)	(0.180)	(0.166)	(0.129)	(0.122)	(7.787)	(0.168)	(0.157)	(54.987)
Combined x College	0.097	0.064	0.085	-0.079	-0.075	-1.448	-0.233	-0.234	-69.103
	(0.167)	(0.172)	(0.164)	(0.130)	(0.122)	(5.897)	(0.173)	(0.173)	(58.722)
College	-0.002	-0.025	-0.078	0.035	0.038	-1.230	0.010	0.108	5.291
	(0.124)	(0.125)	(0.123)	(0.096)	(0.094)	(4.647)	(0.131)	(0.118)	(41.282)
I + I x College [p value]	[0.003]	[0.022]	[0.045]	[0.229]	[0.202]	[0.275]	[0.408]	[0.982]	[0.831]
BC + BC x College [p value]	[0.047]	[0.042]	[0.032]	[0.515]	[0.373]	[0.957]	[0.293]	[0.349]	[0.188]
COM + COM x College [p value]	[0.003]	[0.050]	[0.029]	[0.056]	[0.018]	[0.082]	[0.102]	[0.591]	[0.343]
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	417	417	417	437	437	437	450	450	450

*Note:*Each column includes the sub-sample of the relevant action group (Petition: columns 1-3; Donation: columns 4-6; Video: columns 7-9) and the choice group. For petition, the outcome variable is a dummy that equals 1 if the respondent was willing to sign a petition (column 1), or if signed with full name (column 2) or if signed with any name (column 3). For Donation, the dependent variable is a dummy that equals 1 if willing to donate (column 4), or if donated a positive amount of their bonus earnings (column 5) or the percentage of earnings donated (column 6). For Video, the dependent variable is a dummy that equals 1 if the subject is willing to watch the video (column 7), or if he watched more than 325 seconds (full length) of the video (column 8) or the seconds spent watching the video (column 9). Controls include indicators of age, marital status, religion, education, SC/ST dummy, income, presence of elderly at home. We also include indices for: locus of control, risk, pro-sociality, perceptions of corruption, information about corruption and about rights and entitlements, tolerance of corruption and past civic engagement. Finally, we control for belief about others' willingness to protest, confidence in that belief, expected earning from the experiment, and state of residence. 'College' indicates subjects who were at least college educated. Robust standard errors in parentheses; p-values reported in square brackets. * $p < .10$, ** $p < .05$, *** $p < .01$.

Table A10: Heterogeneity by Civic Engagement

	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)
Information	0.210***	0.131*	0.107	-0.056	-0.058	2.885	-0.023	0.023	-1.088
	(0.070)	(0.069)	(0.066)	(0.055)	(0.055)	(3.099)	(0.067)	(0.069)	(23.614)
Belief Correction	0.148**	0.147**	0.138**	-0.027	-0.046	0.542	-0.063	-0.029	-26.464
	(0.072)	(0.073)	(0.069)	(0.054)	(0.053)	(2.939)	(0.068)	(0.069)	(23.665)
Combined	0.225***	0.155**	0.157**	-0.109**	-0.136**	-5.031*	-0.092	-0.004	-15.214
	(0.070)	(0.071)	(0.068)	(0.055)	(0.053)	(2.602)	(0.069)	(0.068)	(23.659)
Information x Civic Engagement	-0.078	-0.024	-0.027	0.117**	0.087	6.491*	-0.050	-0.067	-31.240
	(0.057)	(0.070)	(0.069)	(0.058)	(0.058)	(3.801)	(0.075)	(0.079)	(25.219)
Belief Correction x Civic Engagement	-0.184***	-0.160**	-0.106	0.020	0.019	0.851	-0.046	-0.043	-15.578
	(0.066)	(0.071)	(0.069)	(0.047)	(0.045)	(2.719)	(0.075)	(0.075)	(24.606)
Combined x Civic Engagement	-0.131**	-0.118	-0.068	0.027	0.024	0.011	0.061	0.010	-1.959
	(0.060)	(0.072)	(0.071)	(0.049)	(0.047)	(2.483)	(0.073)	(0.082)	(27.016)
Civic Engagement	0.136***	0.110**	0.070	-0.004	-0.005	2.037	0.004	0.033	13.022
	(0.047)	(0.056)	(0.054)	(0.032)	(0.031)	(1.384)	(0.060)	(0.064)	(20.110)
I + I x Engagement [p value]	[0.129]	[0.300]	[0.419]	[0.445]	[0.708]	[0.074]	[0.470]	[0.676]	[0.350]
BC + BC x Engagement [p value]	[0.718]	[0.901]	[0.750]	[0.920]	[0.698]	[0.730]	[0.286]	[0.490]	[0.229]
COM + COM x Engagement [p value]	[0.299]	[0.722]	[0.370]	[0.247]	[0.104]	[0.167]	[0.752]	[0.955]	[0.645]
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	417	417	417	437	437	437	450	450	450

Note: The dependent variable is a dummy that equals 1 if the respondent was willing to sign a petition (col 1), signed with a name (col 2) or with full name (col 3); dummy indicating the subject was willing to donate (col 4), donated a positive amount of their experimental earnings (col 5) or percent donated (col 6); dummy indicating the subject was willing to watch the video (col 7), watched more than 325 seconds (full length) of the video (col 8) or seconds spent watching the video (col 9). The symbols I, BC and COM stand for information, belief correction and combined treatments respectively. Controls include 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, attitude towards corruption and past civic engagement; belief about others' willingness to protest, confidence in that belief, expected earning from the experiment, time and state of residence dummies. Civic engagement is an aggregated index that is standardized around the control mean. Therefore, it is expressed in standard deviations from the Control mean. The index aggregates questions related to an individual's answers to questions regarding their past participation in different types of activism, such as protests, strikes, and petitions, and the extent of their civic involvement through a set of actions, such as voting, and membership in community groups, as explained in subsection C.2. Robust standard errors in parentheses; p-values reported in square brackets. * $p < .10$, ** $p < .05$, *** $p < .01$.

Table A11: Heterogeneity by Pro-sociality

	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)
Information	0.218***	0.142**	0.113*	-0.052	-0.054	3.257	-0.027	0.022	-1.960
	(0.071)	(0.070)	(0.066)	(0.055)	(0.055)	(3.168)	(0.067)	(0.069)	(23.655)
Belief Correction	0.156**	0.154**	0.142**	-0.025	-0.044	0.611	-0.062	-0.027	-25.510
	(0.072)	(0.073)	(0.069)	(0.055)	(0.053)	(2.962)	(0.068)	(0.069)	(23.665)
Combined	0.227***	0.158**	0.164**	-0.113**	-0.139***	-5.298**	-0.086	0.002	-13.084
	(0.071)	(0.072)	(0.069)	(0.055)	(0.053)	(2.590)	(0.069)	(0.069)	(23.756)
Information x Pro-sociality	0.102	0.086	0.079	0.004	0.022	2.022	0.046	-0.008	15.293
	(0.070)	(0.069)	(0.067)	(0.060)	(0.059)	(3.790)	(0.071)	(0.069)	(23.309)
Belief Correction x Pro-sociality	-0.032	-0.020	0.018	0.029	0.034	-0.171	0.029	0.010	13.137
	(0.069)	(0.073)	(0.069)	(0.047)	(0.047)	(2.686)	(0.075)	(0.072)	(24.236)
Combined x Pro-sociality	0.087	0.115	0.118	-0.053	-0.033	-2.422	0.001	0.006	8.811
	(0.072)	(0.072)	(0.073)	(0.050)	(0.049)	(2.171)	(0.072)	(0.068)	(23.175)
Pro-sociality	-0.081	-0.053	-0.055	-0.012	-0.014	0.081	-0.018	0.031	-2.674
	(0.050)	(0.050)	(0.048)	(0.035)	(0.035)	(1.632)	(0.052)	(0.049)	(16.799)
I + I x Pro-sociality [p value]	[0.001]	[0.020]	[0.040]	[0.564]	[0.695]	[0.333]	[0.843]	[0.885]	[0.677]
BC + BC x Pro-sociality [p value]	[0.217]	[0.177]	[0.093]	[0.953]	[0.890]	[0.915]	[0.750]	[0.866]	[0.716]
COM + COM x Pro-sociality [p value]	[0.003]	[0.009]	[0.007]	[0.025]	[0.017]	[0.025]	[0.396]	[0.929]	[0.894]
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	417	417	417	437	437	437	450	450	450

Note: Each column includes the sub-sample of the relevant action group (Petition: columns 1-3; Donation: columns 4-6; Video: columns 7-9) and the choice group. For petition, the outcome variable is a dummy that equals 1 if the respondent was willing to sign a petition (column 1), or if signed with full name (column 2) or if signed with any name (column 3). For Donation, the dependent variable is a dummy that equals 1 if willing to donate (column 4), or if donated a positive amount of their bonus earnings (column 5) or the percentage of earnings donated (column 6). For Video, the dependent variable is a dummy that equals 1 if the subject is willing to watch the video (column 7), or if he watched more than 325 seconds (full length) of the video (column 8) or the seconds spent watching the video (column 9). Controls include indicators of age, marital status, religion, education, SC/ST dummy, income, presence of elderly at home. We also include indices for: locus of control, risk, pro-sociality, perceptions of corruption, information about corruption and about rights and entitlements, tolerance of corruption and past civic engagement. Finally, we control for belief about others' willingness to protest, confidence in that belief, expected earning from the experiment, and state of residence. Pro-sociality is an aggregated index that is standardized around the control mean. Therefore, it is expressed in standard deviations from the Control mean. The index aggregates indices related to trust, altruism and reverse-coded retaliation measures, as explained in subsection C.2. Robust standard errors in parentheses; p-values reported in square brackets. * $p < .10$, ** $p < .05$, *** $p < .01$.

Appendix

B Activism Decision Screens

Petition Decision Screen

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

Donation Decision Screen

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 ○

Video Decision Screen

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.

VIDEO ○ EXIT THE SURVEY ○

Choice Decision Screen

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 necessary instructions.

If you prefer **to exit the survey**, please click the "EXIT THE SURVEY" button below.

EXIT THE SURVEY	PETITION	DONATION	THE VIDEO
○	○	○	○

Petition Signing Page

Now is the time to put pressure on our leaders to safeguard our health! The healthcare sector has enjoyed unbridled growth because of government subsidies and the lack of implementation of regulatory laws.

Overcharging and unethical practices are frequent concerns in 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.

Sign our petition to the Health Minister of India to show support for the following demands:
1. Adoption of regulatory laws like the Clinical Establishment Act, 2010
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; and the government introduces and implements strict regulations for hospitals.

This petition is addressed to:
1. Union health minister: Dr. Harsh Vardhan (hfm[at]gov[dot]in)
2. health ministers of the states:

Click here to download a pdf copy of the petition.
If you would like to sign this petition, please write your full name below:

Donation Page

You can support A.I.D.A.N. by donating part or all of your bonus earnings from Section D of the survey. You can donate any amount between 0 and 100% of your bonus earnings.

How much would you like to donate to A.I.D.A.N out of your bonus earnings from Section D?

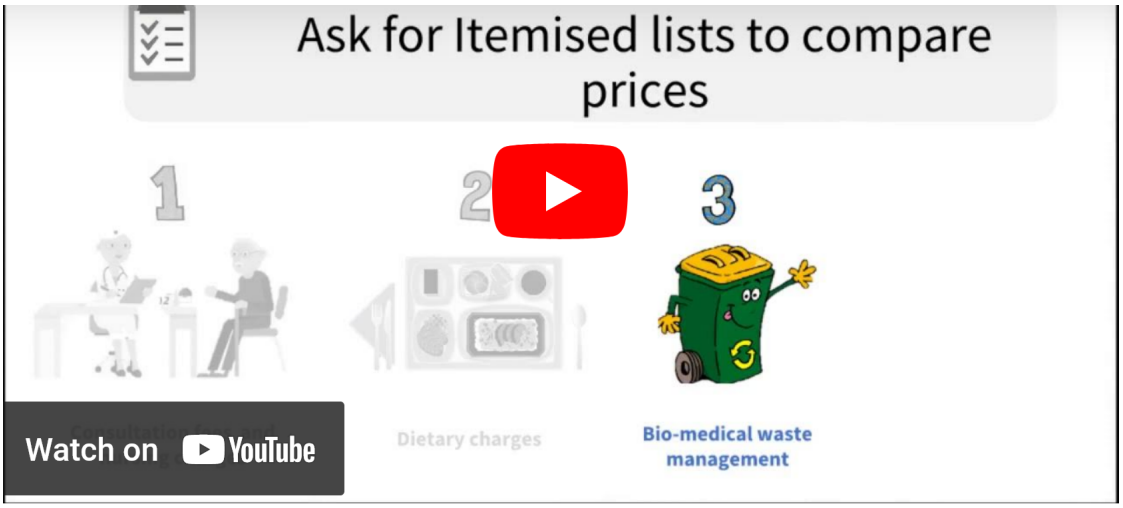
0% of bonus	60% of bonus
10% of bonus	70% of bonus
20% of bonus	80% of bonus
30% of bonus	90% of bonus
40% of bonus	100% of bonus
50% of bonus	

Video Pages

We are now going to show you the video.

Please make sure that you can listen to the video by putting headphones on or raising the volume of your device. If you are on mobile, you want to consider switching to landscape mode for better viewing experience. Once you have done that, please click the arrow on bottom right to proceed.

Once you have finished watching the video in the next page, please click the arrow on bottom right to end the survey.



Appendix

C Data Appendix

Subjects were recruited through Qualtrics Panel, which is a subdivision of Qualtrics. The Qualtrics Panel participants are recruited through multiple market research panels or "vendors". We contacted Qualtrics for subject recruitment who provided an estimate of about 6 USD per complete response. Subjects were paid directly through Qualtrics.

C.1 Sampling

In order to measure whether the subjects are paying attention to the survey, we employ a variety of checks and screener questions within the survey.

- The first screener question is a simple one to catch subjects who paid the least attention. Following the suggestions of Oppenheimer et al. (2009), we include the following question: "People are very busy these days and many do not have time to follow what goes on in the government. Some do pay attention to politics but do not read questions carefully. To show that you've read this much, please ignore the question below and just select the option C from the four choices below. That's right, just select the option C from the four choices below.

  How interested are you in information about what's going on in government and politics? (answer choices: option A/ option B/ option C/ option D)"

  Subjects who failed to pick option C are considered as 'inattentive'. We don't outright disqualify these subjects from continuing the survey, but they are not included in the final analysis sample.

- We then place three training questions prior to the belief questions that were incentivized, to make sure that subjects understand how much they're going to earn from the incentivized questions. Using the set of training questions, we measure the number of failed attempts for each subject to grasp their prospective earnings.

- Finally, we include a descriptive question; "Some people who are asked to pay bribes do not complain about it. Why do you think this is the case? Please type your response in the text box below."

Overall, we find that these three indicators of attention are highly correlated. Inattentive subjects are also more likely to have a much higher number of failed attempts in the training

questions, and are more likely to leave a gibberish answer in the descriptive question. We do not find the proportion of inattentive subjects to vary significantly between treatment groups. Hence, from the main analysis sample, we decide to exclude them. This brings our subject pool to 1744, from 2296.

C.2 Procedure for Standardization and Index Construction

We constructed indices for capturing perception of corruption, information on rights and entitlements and tolerance of corruption, and civic engagement of subjects. These are the average of the relevant standardized variables, as listed in below. The procedure is as follows-

- Individual variables are coded such that the positive direction always corresponded with "higher" outcome for all sub-components of the aggregate index, 0 otherwise.
- Each variable is normalized by subtracting the overall sample mean and dividing by the control group standard deviation. The index is then generated by averaging over relevant components.
- The final index is then re-scaled such that the control group mean is 0 and the standard deviation is 1.

C.2.1 Preferences

The questions on preferences are listed in section B of Table 1.

- *Locus of control index* (a personal belief about whether outcomes of behavior are determined by one's actions or by forces outside one's control) is the internal sub-scale of the KMKB measure of locus of control (Kovaleva, 2012). It comprises of a five-point Likert response scale, ranging from positive to negative pole, for the statements:
  - I like taking responsibility
  - I find it best to make decisions myself, rather than to rely on fate
  - When I encounter problems or opposition, I usually find ways and means to overcome them

  The self-assessment indices of risk, trust, retaliation and altruism are calculated following Falk et al. (2018):
- The *risk index* is computed using response to "Please tell us, in general, how willing or unwilling are you to take risks, using a scale of 0 to 10 below (0 indicates completely

unwilling, and 10 indicates very willing to take risks.) (answer choices: completely unwilling 0/ 1/ ..../very willing 10)"

- *Trust* is computed using response to "Please tell us whether the following statement describes you as a person: you assume that people only have the best intentions, using a scale of 0 to 10 below (0 indicates that the statement does not describe you at all, and 10 indicates that the statement describes you perfectly). (doesn't describe you at all 0/1/ .../ describes you perfectly 10)."
- *Retaliatory behavior* is based on response to
  - "Please tell us whether, if you are treated very unjustly, you will take revenge at the first opportunity, even if there is a cost to do so, using a scale of 0 to 10 below (0 indicates you are completely unwilling to take revenge, 10 indicates you are very willing to take revenge)."
  - "Please tell us how willing you are to punish someone who treats you unfairly, even if there may be costs for you, using a scale of 0 to 10 below (0 indicates you are completely unwilling to do so, 10 indicates you are very willing to do so)."
  - "Please tell us how willing you are to punish someone who treats others unfairly, even if there may be costs for you, using a scale of 0 to 10 below (0 indicates you are completely unwilling to do so, 10 indicates you are very willing to do so)."
- *Altruism* is measured by response to "Please tell us how willing you are to give to good causes without expecting anything in return, using a scale of 0 to 10 below (0 indicates you are completely unwilling to give, 10 indicates you are very willing to give) (answer choices: completely unwilling to give 0/ 1/ ..../ very willing to give 10)."

The trust, altruism and reverse-coded retaliation measures are combined to create the pro-sociality index using the same process described above.

C.2.2 Corruption Perception

The corruption perception index aggregates the following survey questions, for which the corresponding summary statistics are listed in section C of Table A1.

- "Please consider all the contact you or members of your household had with health workers in clinics or hospitals since April 2020 till date. How many times did you have to pay extra money to obtain a medical service? (never/1/2/.../10/more than 10 times)." [46]

[46] response coded into a continuous variable.

- "In your opinion, has the level of corruption in the health sector during the COVID-19 pandemic - (increased a lot/ increased somewhat/ stayed the same/ decreased somewhat/ decreased a lot)?" [47]

- "According to your experience, the current level of corruption in the health sector is - (not a problem at all/ a small problem/ a moderate problem/ a major problem)". [48]

C.2.3 Information (Rights)

Subjects' information on rights and entitlements are captured through this index, which aggregates the following survey questions. The corresponding summary statistics are listed in section C of Table A1.

- "Do you know what is the rate you have to pay per day for an ICU bed at your local hospital?" [49]

- "Do you think you or a member of your household were illegally overcharged by the healthcare professionals for the hospital stay? - (does not apply / don't know or can't say/ no/ yes)" [50]

C.2.4 Corruption Tolerance

The corruption tolerance index aggregates the following survey questions, for which the corresponding summary statistics are listed in section C of Table A1.

- "Please tell us for each of the following actions whether you think it can never be justified, always be justified or something in between using a scale of 1 to 10 below (1 denotes never justifiable, and 10 denotes always justifiable)". [51]
  - avoiding fare on a public transport
  - doctors overcharging for a hospital bed during COVID-19 pandemic
  - someone accepting a bribe in course of their duties.

- "How many people in your community do you think expects you to complain if you are overcharged or asked to pay a bribe by a doctor? (nobody/ a few people/ many people/ most people/ everybody)". [52]

[47] response coded into a continuous variable with higher value indicating increase in corruption.
[48] response coded into a continuous variable with higher value indicating bigger problem.
[49] response coded into a dummy=0 if subject answered with 'don't know', 1 otherwise.
[50] response coded into a dummy=1 if subject answered with a 'yes.
[51] responses coded into a continuous variable.
[52] response coded into a dummy=1 if subject answered with 'nobody'.

C.2.5 Civic Engagement

The civic engagement index aggregates the following survey questions[53], for which the corresponding summary statistics are listed in section D of Table A1.

engagement "Do you agree or disagree with the following statements, on a scale of: strongly agree/ somewhat agree/ neither agree nor disagree/ somewhat agree/ strongly agree".

- you play an active role in one/more voluntary organizations
- you don't like to discuss politics with other people (reverse-coded)
- being involved in your neighborhood is important to you
- you don't get involved in political protests (reverse-coded)
- you generally vote in elections

past action "Prior to COVID-19 pandemic (since April 2020 till date), have you ever been involved in any of the following actions to help solve a problem that mattered to you? - with answer choices: never/ yes, 1-3 times/ yes, 4-6 times/ yes, 7-10 times/ more than 10 times".

- protests
- walkouts or strike
- boycott
- petition
- lodging complaints
- marching
- donation to an organization

[53] responses for each set were coded into continuous variables.