Anti-social norms, political leadership and Covid-19

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1 Motivation and justification

The rapid global spread of COVID-19 has sparked numerous policy responses seeking to control the death toll of the epidemic and minimize the impact on people's livelihoods. A common feature in these responses, absent a pharmaceutical solution, is their reliance on significant and large-scale behavioral change. Among others, individuals are expected to wash their hands and follow other hygiene guidelines, report symptoms, wear masks, protect the vulnerable, and abide by social distancing guidelines.

These individual efforts for coordinated action require a strong sense of collective purpose and cooperation, especially since many of these behaviors may not be individually "rational" (Taleb & Norman, 2020). Also, they must rely on collective, non-coercive means of enforcement, since many of these practices are either only privately observable or too costly to enforce via direct observation and sanctions.

Therefore, if pro-social behavior is widespread, societies are better equipped to deal with the pandemic's challenges. Instead, individualism, distrust towards each other, and distrust toward the government are potential hurdles to promote coordinated behavioral change. Moreover, people's response to threats and risks during the pandemic could either become a catalyst for positive collective action or exacerbate underlying anti-social and individualistic behaviors.

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This project focuses on these issues in the context of Colombia, where interpersonal distrust, distrust of institutions, and widespread social norms that limit the extent of pro-social behavior are prevalent. We set to answer the following questions:

1. Does exposure to the Covid-19 pandemic exacerbate or weaken anti-social norms that deter pro-social behavior?

2. Can political leadership during the pandemic help coordinate individuals' pro-social behavior?

3. Is political polarization a possible hurdle that limits the effectiveness of leaders' efforts to promote this behavior?

We now discuss the relevance of each of these questions. Then, we briefly discuss the Colombian context, explain why it is ideal for exploring these issues, and explain how we will approach these questions.

Covid-19 and pro-social behavior: The Covid-19 shock has potentially conflicting effects on collective behavior. On the one hand, a sense of common fate can emerge, strengthening a shared social identity and motivating support to others and coordination of behavior (Drury, 2018). Along these lines, Engle-Warnick et al. (2013) show that people were more likely to coordinate on their responses to surveys on appropriate social norms following the H1N1 epidemic in Canada. Also, examples of solidarity, even in the context we study with weak social capital, are easy to find (see, for example France 24, 2020).

On the other hand, this sense of shared identity can be undermined if others are perceived as competitors (Van Bavel et al., 2020). Even if cooperation amongst communities has been the norm, epidemics have stoked fear as well as mistrust towards others (Cohn, 2016). Social violence has sometimes erupted, usually targeted towards "outgroups" or "dominant classes", who become frequent targets of such distrust. In the current crisis, for instance, we have seen reports of fear and xenophobia, especially against ethnic-Chinese (see, for example, The Economist, 2020). Similar reactions occurred during the 2003 SARS epidemic (Eichelberger, 2007).

Importantly, these effects may persist. Historical evidence suggests that societies' experiences with, and strategies against, a pandemic have long-lasting effects. For instance, descendants from

Colombians quarantined in leper colonies during the early 20th century are more pro-social, have a higher in-group bias, and mistrust science and government health policies (Ramos-Toro, 2020).

Leadership and collective behavior: A key question is whether political leaders can help society coordinate on the positive response to the pandemic. "Leaders" can play a vital role in promoting pro-social behavior. Komai, Stegeman, and Hermalin (2007) show, for instance, that leaders can solve coordination problems or counteract moral hazard inefficiencies when recognized as having relevant and credible private information.[1] Therefore, credibility is fundamental, as is the capacity to cultivate the necessary shared social identity and instill in citizens a sense of collective self-efficacy (Fransen et al., 2015; Haslam, Reicher, & Platow, 2011).

A global survey at the onset of Covid-19 reveals both the limits and the possibilities of effective leadership (Fetzer et al., 2020). The perception of a weak government and public response is associated with higher levels of worries and depression. Instead, strong government reactions correct misperceptions about others' behavior in the pandemic and reduce worries and depression.

However, neither leader credibility nor their promotion of shared social identity can be taken for granted. When leaders change previously announced policies, this can hurt credibility and citizen compliance with policies, as Briscese et al. (2020) illustrate for quarantine extensions in Italy. When leaders are perceived as self-serving, it is also more challenging to encourage pro-social behavior (Mulder & Nelissen, 2010).

Political polarization: This discussion leads us to the third focus of our study. Political polarization can be one barrier for leadership credibility, thus limiting the ability of leaders to spur coordinated collective action (Van Bavel et al., 2020).

If political leaders are perceived as representing just one part of the population, it is harder to build a collective purpose. Moreover, with diverging political views, the crisis itself may be used strategically by exploiting fear to exacerbate divisions for political and electoral gain, as Campante, Depetris-Chauvin, and Durante (2020) show for the case of Ebola in the US. The possible effects include more division, mistrust, and, therefore, anti-social behavior. Also, this could spur biased interpretation of messages and information when viewed under a partisan lens and greater sus-

[1] Relatedly, Vesterlund (2003) and Andreoni (2006) show that a big donor serving as a first mover (acting as a leader) when raising money for charities, could signal potential donors about the quality of the charity and increase total donation.

ceptibility to believing fake news (Kahan et al., 2017; Van Bavel & Pereira, 2018). Suggestive evidence that political views and polarization affect social behavior during this pandemic comes from observing that US counties with a higher voter share for Trump in the 2016 elections have a lower propensity to stay at home and practice social distancing (Barrios & Hochberg, 2020). When the media replicates partisan interpretations, this can also affect actual behavior, as has been shown for the case of Covid-19 and Fox News in the US (Bursztyn et al., 2020; Simonov et al., 2020).

In short, the Covid-19 can be a catalyst for coordinated and cooperative collective action, or could spur divisions and individualism. Leadership can help determine the direction that citizens' take in response to the risks and fears produced by the crisis. Yet political polarization is likely to limit the effectiveness of leaders' efforts to spur cooperation and cultivate a sense that "we are in this together".

To study these issues, we focus on the Colombian case. Distrust in Colombia, both between citizens and towards the government, is remarkably high, as are anti-social behaviors like justifying norm-breaking. Between 1996-2018, only 18% of Colombians thought one could trust others. In 2018, less than 23% of respondents thought that one could trust the Judiciary, the Government, or Congress (Latinobarómetro, 2015).

These numbers reflect underlying social norms prevalent in Colombia, which we have studied in related research. In Fergusson, Guerra, and Robinson (2020), we emphasize the importance of the common expression and associated norm "no sea sapo" (don't be a "sapo" or toad, where "sapo" pejoratively describes citizens inviting others to behave correctly). This expression conveys the idea that citizens should "mind their own business" and not snitch on other people, even if they are acting in an anti-social way. Adhering to this norm undermines the effectiveness of third parties intervening to sanction pro-social behavior (Fehr & Fischbacher, 2004; Henrich et al., 2006; Ensminger & Henrich, 2014). Therefore, it epitomizes the breakdown of efforts to attain collective endeavors that cannot be enforced through policing, as is the case of desirable collective behavior during a pandemic.

Our approach leverages the existence of this norm by implementing, through laboratory experiments, a series of treatments aimed at evaluating each of the three critical questions outlined before. In our experiments, we exploit the well-known fairness game where a player decides over the split of a given endowment between himself and a second player. The chosen split could be

fair or unfair, and a third player can punish unfair behavior. Players selecting an unfair division can choose to enforce the "no sea sapo" norm upon the third party, insisting that everyone should fend for themselves and discouraging social enforcement of desirable outcomes.

This setting, therefore, gives us a measure of individualistic, anti-social behavior: unfair divisions upheld by a "no sea sapo" norm reveal the breakdown of socially-enforced collective efforts where individuals must pay a private cost for the broader good.

Our treatments then measure whether: (i) exposure to the Covid-19 pandemic increases or decreases the relevance of the "no sea sapo" norm, (ii) leadership helps alleviate the behavioral effects from such norm of conduct, and (iii) political polarization limits leaders' ability to disincentivize this behavior.

We now summarize our project's objectives and highlight their importance (Section 2). We then describe in detail the methods and treatments to answer our three key guiding questions (Section 3). The research team is described in Section 4, and the set of expected outcomes of the project in Section 5. We close with the expected timeline and budget (in Sections 6 and 7, respectively).

2 Objectives

Our objectives are defined by our three guiding questions, which we rephrase here to emphasize the relevant social implications of each of them:

1. Has the Covid-19 pandemic exacerbated anti-social norms that weaken pro-social behavior? In particular, has it exacerbated the social norm that citizens should not invite other fellow citizens to behave pro-socially? Or, has it produced the opposite effect?

   Immediate efforts from governments and civil society to assessing the Covid-19 pandemic have focused on identifying and trying to counteract its effect on public health, employment, inequality, and overall economic performance, as measured by aggregate statistics. This project helps assess whether the pandemic may also affect the social fabric itself. This is seldom observed in aggregate data sources, and therefore often overlooked. However, it likely is a crucial input for short-term economic recovery and a determinant of the long-run effects of the crisis.

2. Can political leaders promote coordination towards social efficiency, and counteract anti-social norms and behavior? More broadly, can crises become an opportunity for leaders to help undermine anti-social norms and promote pro-social behavior instead?

   Our second objective focuses on the role that leaders might play in improving society. Several studies suggest that effective leadership promotes good behavior in a variety of domains, but we know less about leaders' second-order effects on promoting better social norms.

3. To which extent might political polarization stand in the way of achieving the latter objectives?

   Identifying whether political and ideological polarization impedes the emergence of shared social norms promoting efficiency is one first crucial step to design smarter ways to promote positive collective behaviors. Effective political leaders should better understand these potential consequences to balance the political benefits from strategically relying on identity politics with the costs of inciting further social division. Moreover, since politicians may not fully internalize the costs given short-term electoral incentives, then some messages from authorities might need to be detached from partisan labels and electoral incentives.

These questions are also relevant from a broader perspective. A basic fact of economic history is the massive divergence in per capita income across countries (Pritchett, 1997), implying huge differences in levels of economic wellbeing. Following North (1991), the "institutional" foundations of these differences in prosperity have received considerable attention (Acemoglu, Johnson, & Robinson, 2005). These "institutions", or humanly devised constraints or "rules of the game" that shape incentives in social interaction, have deep historical roots and reflect hard-to-change societal equilibria (see, among others Acemoglu, Johnson, & Robinson, 2001; Banerjee & Iyer, 2005; Dell, 2010).

At the same time, social change is ubiquitous, and crises such as the one provoked by the Covid-19 are often "critical junctures" that may lead society to new equilibria. The social norms that we study in this project are a vital part of the institutions in a society that could either improve or deteriorate during crises. Indeed, while like more formal institutions social norms tend to persist over time, they *can* change and do so rapidly (Bicchieri, 2016). Understanding what features of

society and actions by leaders may help countries take on a positive path after critical historical episodes is a crucial first step to promoting positive social change.

In critical junctures, small differences between societies can lead to widely diverging paths (Acemoglu & Robinson, 2012). We will focus on asking whether effective leadership and political polarization can be part of the differences shaping these different paths. In addition, by collecting data on trust, we will also explore whether that may play a role as well.

3 Methods

We now describe our strategy to study the effects of Covid-19 on anti-social norms' pervasiveness. We plan to run a series of laboratory experiments to study whether Covid-19 increases or decreases the relevance of the norm "no sea sapo" in defining behavior. As explained, we focus on this norm since it epitomizes the breakdown of efforts to attain collective endeavors that must be enforced informally. To study the impact of Covid-19, we leverage on: (i) our experimental manipulation of the saliency of the pandemic and (ii) the extent to which subjects have been "naturally" exposed to it. Of course, the first approach attains cleaner causal identification, but the second reflects real-world experiences better, so we view them as complementary.

We will then study how messages from political leaders promoting coordination during the pandemic affect behavior, and examine whether socially-desirable outcomes improve despite the presence of the "no sea sapo" norm. We will experimentally expose subjects to short clips of real messages from political leaders. To emphasize the efforts to counteract a "mind your own business mentality" and following the literature on effective leadership (Fransen et al., 2015), we will focus on messages that cultivate a sense that "we are in this together".

Finally, to explore the role of political disagreement and polarization, we will explore how subjects respond to these different interventions depending on their political views and, in particular, on whether those views match or mismatch the leaders' views.

Our laboratory experiments will enroll university students (from Universidad de Los Andes) in Colombia and involve two stages and an exit questionnaire. In the first stage, we expose students to the treatments. We will randomly vary whether students get: (i) information on Covid-19 exposure priming its relevance and risks, (ii) a message from a political leader inviting citizens to behave

pro-socially for the common good during the pandemic. For the second treatment, we will select messages from political leaders situated at different points in the left-to-right political spectrum.

In the second stage, subjects play a fairness game. A first student decides over the split of a given endowment between himself and a second student. The chosen split could be fair or unfair. A third student may can then punish unfair behavior from the first student. In one additional experimental arm, students behaving anti-socially (i.e., choosing an uneven split), enforce the "no sea sapo" norm upon the third party.

The exit questionnaire collects information on subjects' political ideology and exposure to the Covid-19 pandemic (in addition to basic demographic characteristics).

Our design builds on ongoing work where we have confirmed that adhering to the "no sea sapo" norm undermines the effectiveness of third parties intervening to sanction behavior that violates norms, like honesty or (as in the proposed design) fairness (Fergusson et al., 2020). The possibility of enforcing such norm reduces the willingness to invite fellow citizens to behave pro-socially and increases the deviation from fair and cooperative social outcomes. Therefore, measuring whether Covid-19 exposure increases or reduces the prevalence of the "no sea sapo" norm is ideal for evaluating the pandemic's implications on pro-sociality. Similarly, comparing subjects exposed to the leaders' messages with those not exposed, we can test whether leaders can improve collective outcomes. Heterogenous effects as a function of the match or mismatch between the political ideology of subjects and leaders can finally reveal the potential costs of political polarization for effective leadership.

We next explain in more detail our experimental variations and the expected outcomes.

3.1 Fairness game

The fairness game uses the dictator game (Berg, Dickhaut, & McCabe, 1995) with third-party punishment studied by Fehr and Fischbacher (2004). We randomly allocate students into groups composed of three members: P1 is the dictator, P2 is the recipient, and P3 is the third party.

Actions and payoffs in the fairness game

P1 gets an endowment of 100 Experimental Tokens (ET) and has to decide an amount to send to P2. P2 is endowed with 0ET and remains passive throughout the experiment. P1 is ultimately deciding whether to split his endowment fairly (sending P2 a share of 50ET) or unfairly (sending P2 a share strictly lower than 50ET).

P3 receives a fixed endowment of 50ET and observes the decision from P1. P3 may also punish P1 by spending his ET in deduction points for P1. Every ET spent in punishing P1 reduces P1's payoff in 3ET.

Once P1 receives any deduction points from P3 he can decide to pay 1ET to send P3 a message highlighting that he should "mind his own business", that is, a message enforcing the "no sea sapo" norm.

In short, P3 acts as the social enforcer of cooperative behavior in this society composed of the three players. P1, on the other hand, behaves as the enforcer of the anti-social norm "no sea sapo".

Evolution of anti-social norms

We repeat the previous interaction for several decision rounds. This allows us to study the evolution of non-cooperative behavior and measure the strength of the "no sea sapo" social norm in determining it.

Also, across rounds, roles are fixed and groups form with anonymous random re-matching. In the first round, subjects do not know that the setup repeats for another couple of rounds. This round is thus comparable to the one-shot experiment amply studied in many settings. Feedback across rounds is circumscribed to players' payoffs and P1's and P3's actions. Payments depend on one randomly chosen round at the end of the experiment. The identity of each player remains entirely anonymous for participants and experimenters.

3.2 Treatment arms

To determine the interplay between Covid-19 and whether the "no sea sapo" norm stands in the way of desirable social outcomes in Colombia, we consider the following experimental treatments. Treatment variations occur at the first stage of each session.

T.1 **Third-party punishment institution**. The basic interaction described above in the fairness game.

Rationale for T.1: We can measure the baseline level of unfair behavior where third parties can punish non-cooperative behavior.

T.2 **Third-party punishment with "no sea sapo" institutions**. Same as **T.1** but now P1 can enforce, upon P3, the "no sea sapo" norm by sending him a message stating that he should "mind his own business".

Rationale for T.2: We study whether the mere possibility of using a message akin to "no sea sapo" determines social behavior. We establish whether this social norm counteracts third-party punishment, eroding cooperative behavior.

T.3 **Third-party punishment with "no sea sapo" institutions and Covid-19 priming**. Same as **T.2**, but we prime subjects with statistics about the pandemic, its broad impact, and the risks of the disease.

Rationale for T.3: By making the pandemic salient, we seek to trigger a sense of vulnerability and that the pandemic has been an aggregate shock affecting society as a whole. We measure whether the "no sea sapo" behaviors (more "mind your own business" messages, less fairness in divisions) increase or decrease.

T.4-T.5 **Third-party punishment with "no sea sapo" institutions, Covid-19 priming and political leadership**. Same as **T.3** but we expose subjects to a video clip or message from a right-wing (**T.4**) or left-wing (**T.5**) politician on how to deal collectively with the pandemic.

Rationale for T.4-T.5: We expose subjects to leader's messages, choosing those that (i) emphasize unity and (ii) are classified, by an independent sample of students, as having equivalent content. Given marked differences in the political orientation of national and local Colombian leaders, we can exploit variation in political identity between the leaders and the subjects. We conjecture that political polarization matters, and pro-social behavior will be less prevalent when there is a mismatch in political identity. By guaranteeing that the content of leaders' messages is the same, we measure whether individual pro-social behavior is affected by effective leadership and its interplay with political ideology.

3.3 Exit questionnaire

We collect information on "naturally-occurring" Covid-19 exposure. We then compare the effects of our **T.2** treatment (which has the advantage of being randomized) with differences in behavior by observed real-world exposure (which could be endogenous to individual attitudes driving behavior, but has the advantage of resembling actual experience better). Combining both sources of variation, we will also study the heterogeneous effects of the pandemic priming by levels of actual exposure.

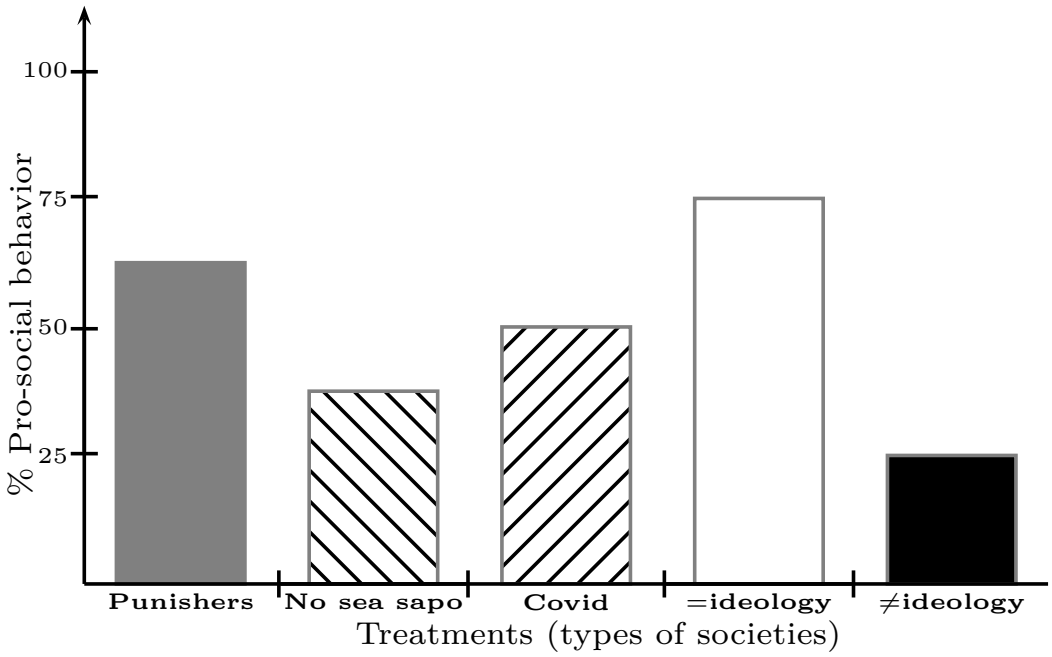
The exit questionnaire will have sections inquiring exposition to the virus and information about it, personal behaviors to cope with the pandemic, and expectations about others' prescribed actions.[2]

We also collect data on respondents' political views to check if their behavior depends on whether their views match or not those of the leader. This section of the questionnaire will follow either the Ideological Consistency Scale from the Pew Research Center (2017) or the standard political orientation question suggested by Kroh (2007) which asks respondents to identify themselves on a left–right scale. Finally, we will ask individuals a standard set of questions (as in, for example, the World Value Surveys) on trust in institutions and (generalized and particularized) trust (Inglehart et al., 2014). We predict that distrust may have similar effects as political polarization: distrust can produce socially undesirable effects just as a political mismatch between politicians and citizens.

3.4 Analysis plan

In Figure 1 we summarize the expected outcomes. We depict, on the vertical axis, the share of P1 or P3, that behave pro-socially. That is, the percentage of P1s that split the endowment evenly between him and P2s or the percentage of P3s willing to forego personal gains to enforce fair behavior. On the horizontal axis, we vary the treatment: the control condition **T.1** (depicted with the solid gray bar); the treatment where we allow for enforcing the "no sea sapo" norm (bar with downward-sloping lines); the treatment where we prime the Covid-19 pandemic (bar with the upward sloping lines); and treatments **T4-T5** with leader's messages, depicted for subjects with

[2]The questionnaire will be prepared following, among other sources, Engle-Warnick et al. (2013); Fetzer et al. (2020) and https://lifewithcorona.org/.



(Note: *Punishers* corresponds to **T.1** treatment, *No sea sapo* to **T.2**, *Covid* to **T.3** and **T.4** and **T.5** are both included in $=$ *ideology* and $\neq$ *ideology* depending on whether leader and subject have the same (different) political ideology respectively)

Figure 1: Expected percentage of subjects behaving pro-socially, by treatment

the same (white bar) or different (black bar) political ideology as the leader.

As observed in the literature, we expect the percentage of P1 (P3) who share the initial endowment evenly with P2 (punishing unfair behavior) to be larger than 50%. We also expect the share of pro-social behavior to fall with the "no sea sapo" social norm (i.e., under **T.2**). The picture conjectures less than 50% of "good behavior". Recall the "no sea sapo" norm says: "do not act as a third party punisher, it is none of your business". Therefore, third parties will be reluctant to punish an unfair P1 and, anticipating this reluctance, P1 will not behave socially in the first place.

Priming subjects to think collectively due to a pandemic, pro-social behavior could either increase or decrease for the reasons noted in the introduction. The figure depicts the case where it increases on average, but we expect this to vary depending on specific characteristics. In particular, we expect it to increase among more trusting individuals and fall for those who distrust. Finally, we expect leadership to serve as a coordination mechanism that promotes pro-social behavior if

subjects share the ideology as the political leader; however, this coordination will be weaker if subjects and leaders have opposing political views.

4 Research team

Table 1: Researchers involved and roles

Name	Affiliation	Roles
Leopoldo Fergusson	Universidad de los Andes, Colombia	PI. Econometric Analysis. Writing
José-Alberto Guerra	Universidad de los Andes, Colombia	PI. Experimental design. Writing
James Robinson	University of Chicago, USA	PI. Analysis. Writing
Research assistant	Universidad de los Andes, Colombia	Experimental implementation. Data analysis

Below is a brief profile of the researchers leading the project (see Table 1 for the roles each one will play).

Leopoldo Fergusson (Ph.D. in Economics, MIT) is Associate Professor of Economics at Universidad de los Andes. He has been a Santo Domingo Visiting Scholar at the David Rockefeller Center for Latin American Studies of Harvard University (2015), Visiting Scholar at the Pearson Institute for the Study and Resolution of Global Conflicts of the University of Chicago (2017), and Visiting Associate Professor of Economics at the Massachusetts Institute of Technology (2018). His research focuses on the interactions between economics and politics, in particular, to understand the causes and consequences of violence, state weakness, and economic prosperity.

Jose A. Guerra (Ph.D. in Economics, UCL) is Assistant Professor of Economics at Universidad de los Andes. He has been Visiting Scholar at the University of Essex (2018). In his academic work, he exploits observational and experimental data to study individual decision making and collective choice when agents are subject to social interactions, or are better described by

non-standard "boundedly-rational" models.

James A. Robinson (Ph.D. in Economics, Yale) is the Reverend Dr. Richard L. Pearson Professor of Global Conflict and Institute Director of The Pearson Institute for the Study and Resolution of Global Conflicts at the University of Chicago. Previously, he was the Wilbur A. Cowett Professor of Government at Harvard University and a faculty associate at Harvard's Institute for Quantitative Social Science and the Weatherhead Center for International Affairs. Robinson has conducted influential research in the field of political and economic development and the root causes of conflict. His work explores the underlying relationship between poverty and the institutions of a society and how institutions emerge out of political conflicts. His book with Daron Acemoglu, *Why Nations Fail*, is a global best seller and has been recognized with the Paddy Power And Total Politics Political Book Award in International Affairs, the Lionel Gelber Prize, and shortlisted for the Financial Times and Goldman Sachs Business Book of the Year Award, among other recognitions.

The project leaders will be joined by one part-time Research Assistant, a master's student at Universidad de los Andes.

5 Expected outcomes

Table 2 shows the short- and mid/long- term expected outcomes from the project, tied with observable indicators and their corresponding audiences or targets. We highlight that, aside from producing an academic paper and helping increase the human capital of the projects' research assistant, the authors will take advantage of privileged access to traditional and new media platforms. This will help spur public discussion as well as a discussion with relevant policymakers. The researchers will also exploit the "points of entry" they enjoy with relevant policymakers at both the national and local levels to discuss their findings' practical implications.

Table 2: Expected outcomes, time horizon and indicator

Time	Audience/target	Observable Indicator
Short term ($\leq$ 1 year)	Academia	Presentation in Experimental Brown bag Seminar (BEBES).
		Presentation in CEDE Seminar.
		Documento CEDE.
	Human Capital	Hiring Graduate students as RA
	Public Discussion	Blogeconomía, El Espectador, LaSillaVacía, La República summarizing results for a general audience
Mid/Long term (1-3 years)	Academia	(1-2y) Presentations in University Seminars.
		($\leq$ 3y) Paper on a Peer Reviewed Journal
	Public Policy	Discussion of results with government authorities to understand the link between pandemics and social norms

6 Work schedule

Excepting full-blown dissemination and academic publishing, the project will be completed in under 12 months. Table 3 summarizes deadlines for monthly activities.

Table 3: Work schedule by month

	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
Experimental design												
Brown bag seminar presentation												
Pilot of the experiment												
Sample adjustment, Power calculations based on pilot												
Intermediate Report												
Experiment implementation												
Data Analysis												
CEDE Seminar presentation												
Final Report (Documento CEDE)												

7 Detailed budget and justification

A detailed budget is included in Table 4 below. The amount that VR-CEDE would sponsor, if the project is selected, is **$ 29,381,448**. We highlight that sources of funding for laboratory experiments in Colombia are scarce. However, a laboratory environment is ideal given the many confounding factors to identify a causal link between the Covid-19 pandemic, political leadership, and ideological polarization.

Table 4: Total Budget by item

Item	VR-CEDE
Staff:	
Research assistant	$15,521,448
(a graduate student from PEG)	
Laboratory work:	
Recruiting and paying subjects Total subjects: 396[†] Avg payment per subject: $35,000	$13,860,000
Total	**$29,381,448**

Notes: [†] Based on power computations.

For staff costs, we request money to pay a graduate student (half-time) as Research Assistant. Other requested funds cover subjects' recruitment from our student pool and the (standard) monetary incentives to elicit their preferred behavior consistently (Smith, 1976).

For the laboratory work, we aim a statistical power of 0.8, significance level of 0.05, and a minimum between-treatment effect of the **T.1** (versus all other treatment variations) of $15pp$ on the likelihood of P3 to tell on P1's unfair behavior and on P1's decision to enforce the "no sea sapo" norm. Given the expected results in Table 1 and following (List, Sadoff, & Wagner, 2011), we compute the total necessary sample to be at least 340 subjects. Therefore, we request funds to pay at least 396 subjects (allocating the total sample in equal proportions per treatment). As our

project progresses, a pilot will better inform us on these parameters.

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