Public Trust, Policing, and the COVID-19 Pandemic:* Evidence from an Electoral Authoritarian Regime

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Abstract

We examine how trust shapes compliance with public health restrictions during the COVID-19 pandemic in Uganda. We use an endorsement experiment embedded in a mobile phone survey to show that messages from government officials generate more support for public health restrictions than messages from religious authorities, traditional leaders, or international NGOs. We further show that compliance with these restrictions is strongly positively correlated with trust in government, but only weakly correlated with trust in local authorities or other citizens. The relationship between trust and compliance is especially strong for the Ministry of Health and—more surprisingly—the police. Building on this latter result, we use a field experiment to show that an intervention designed to improve police–community relations increases trust in the police, but that the effects are small and do not result in greater public health compliance. We conclude that trust is crucial but difficult to change.

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The COVID-19 pandemic has laid bare the crucial role that trust plays in generating and sustaining compliance with public health directives during times of crisis. It has also brought into stark relief the many "varieties" of trust that shape behavior when public health is at stake. Citizens are expected to trust public health authorities to characterize crises accurately and devise policies to mitigate them effectively. They are expected to trust elected officials to enact those policies quickly, trust law enforcement agencies to enforce them equitably, and trust other citizens to comply with them consistently. They are expected to trust the safety and efficacy of treatments and vaccines, many of which are developed by the private sector (e.g. pharmaceutical companies). Especially in the Global South, citizens are also expected to trust the international NGOs and foreign aid agencies involved in disseminating vaccines and treatments to the public.

Trust matters because it increases the likelihood that citizens will take actions that are costly and disruptive for them as individuals, but necessary for public health (Blair, Morse and Tsai 2017; Kahan 2003). Especially in the early stages of the COVID-19 pandemic, when access to testing was limited and treatments and vaccines had not yet been developed, compliance with social distancing policies and other public health measures was indispensable for curbing the spread of the virus (Haug et al. 2020; Kraemer et al. 2020). Because these policies imposed tight constraints on citizens' social and economic lives, compliance was inevitably imperfect, and some degree of resistance was likely unavoidable. But the consequences of non-compliance can be severe, and refusal to adhere to COVID-19 public health restrictions has been linked to spikes in caseloads in countries around the world (Flaxman et al. 2020; Yilmazkuday 2021).

A small but growing body of research has documented the importance of trust as a predictor of compliance during previous public health emergencies, especially the 2014-15 Ebola epidemic in West Africa (Blair, Morse and Tsai 2017; Tsai, Morse and Blair 2020) and the 2018-19 Ebola crisis in the Democratic Republic of Congo (Vinck et al. 2019). A more recent extension of this literature has demonstrated the importance of trust during the COVID-19 pandemic (Bargain and Aminjonov 2020). These studies have taught us much about the relationship between trust and compliance with public health measures. But most of them have operationalized trust in rather

coarse ways, ignoring potentially significant variation in the types of agencies and authorities that citizens do and do not trust, and the types of public health messages they do and do not find persuasive (c.f. Arriola and Grossman 2020; Kao et al. 2021).

Understanding this variation is essential. Some citizens trust their doctors to prescribe treatments, but do not trust the pharmaceutical companies responsible for developing the treatments that doctors prescribe; others trust their neighbors to comply with social distancing policies, but do not trust elected officials to enact policies that will protect them from harm. Most existing studies use measures of trust that are too broad to capture these subtle but crucial distinctions.[1] Moreover, existing studies typically overlook the importance of trust in institutions that are only tangentially involved in public health in the Global North, but that serve as the primary (and sometimes only) enforcers of public health restrictions in much of the Global South—in particular, the police.

In this paper we extend the existing literature by asking three interrelated questions, each of which follows directly from the others. First, which authorities are most effective in persuading citizens to accept costly and disruptive restrictions on their behavior during public health emergencies? Are messages from local religious leaders more effective than messages from international NGOs? In the Global South in particular, are messages from traditional (or "customary") authorities more persuasive than messages from the government? Second and related, of the varieties of trust described above, which is most important in generating actual compliance with public health restrictions? In the context of low-income countries where reliable information is often hard to come by, is trust in public health authorities more important than trust in government as a whole? Is trust in the police more important than trust in other community members? Which of these varieties of trust is most strongly correlated with compliance? Finally, to the extent that trust in a particular authority is especially strongly correlated with compliance, is it possible to build trust in that authority before a crisis hits?

We answer these questions through a series of interconnected observational and experimen-

[1]For example, Bargain and Aminjonov (2020) correlate mobility data at the country level with a trust measure derived from the European Social Survey, which asks respondents about their trust in politicians in the country on a scale of 0 to 10.

tal studies in Uganda. Using an endorsement experiment embedded in a mobile phone survey conducted at the height of the pandemic, we first show that messages from government officials are more effective at generating support for public health restrictions than messages from religious authorities, traditional leaders, or international NGOs. We then show that compliance with these restrictions is strongly positively correlated with trust in government, but only weakly (and in some cases negatively) correlated with trust in local authorities or other citizens.

The correlation between compliance and trust in government does not appear to be an artifact of misinformation or misunderstanding of the virus among less trusting respondents: if anything, respondents who express less trust in government are *more* knowledgeable about the symptoms of COVID-19.[2] While compliance is higher among supporters of the ruling National Resistance Movement (NRM) party, controlling for party affiliation does not attenuate the relationship between compliance and trust in government. The correlation also does not appear to be an artifact of social desirability bias: using a pair of list experiments, we show that respondents do not over-report compliance with public health restrictions in the context of the survey.

Disaggregating these results further, we show that while trust in all government agencies is positively correlated with compliance, the relationship appears to be especially strong for trust in the Ministry of Health and—perhaps more surprisingly—the police. This latter result may reflect the pivotal and highly controversial role that the police have played in enforcing social distancing policies in Uganda (and in other developing countries). Finally, recognizing the importance of trust in the police specifically, as a more exploratory exercise we combine the mobile phone survey with a field experiment and two earlier waves of data collection to show that an inexpensive, scalable intervention designed to improve police–community relations has some weakly beneficial effects on trust, but they are small and sensitive to specification, and do not result in higher rates of compliance. Our results suggest that it is far from easy to build trust in state institutions where it is lacking. We conclude that trust is crucial but sticky, and that changing it may require more

[2]This echoes similar findings from research on the Ebola epidemic in Liberia (Blair, Morse and Tsai 2017). It is also in line with the fact the more educated Ugandans tend to be, on average, less trusting of the ruling National Resistance Movement (NRM) party.

intensive interventions before a crisis strikes (Haim, Ravanilla and Sexton 2021).

THEORETICAL FRAMEWORK

The COVID-19 pandemic has posed unique challenges for governments and public health officials around the world. Authorities have been tasked with persuading large numbers of individuals to engage in costly, disruptive behaviors in order to slow the spread of a virus that was (initially) poorly understood. Because the virus was new, guidelines for curtailing its spread inevitably shifted over time. In the US, for example, citizens were initially discouraged from wearing masks in order to ensure sufficient supply for doctors and other frontline workers; as the pandemic progressed, masks were eventually recognized as an effective tool for preventing infection, and the original guidelines were reversed (Howard et al. 2021). These reversals compounded the challenge of persuading individuals to comply with public health guidelines, as misinformation and conspiracy theories proliferated (Milosh et al. 2020).

Trust is especially important in times of crisis and uncertainty because it helps sustain compliance even as public health restrictions evolve. Theoretically, citizens who trust public health authorities should be less likely to interpret changes in their recommendations as evidence of incompetence or malevolence (Gonzalez and Maffioli 2021). Citizens who trust elected officials should be less likely to defy restrictions on movement, commerce, and public gatherings as unnecessary impositions. Especially in the Global South, citizens who trust foreign donors and international NGOs should be less likely to reject the treatments they offer as alien and dangerous.[3]

Consistent with these intuitions, recent studies have documented the myriad ways that trust has shaped citizens' willingness to comply with public health directives during the COVID-19 pandemic. In the US, for example, Brodeur, Grigoryeva and Kattan (2020) find that high-trust counties decreased their mobility significantly more than low-trust counties after lockdown measures were

[3]Of course, it is possible that citizens can be *too* trusting, for example if they naively embrace treatments that actually *are* dangerous. In settings where governments routinely prey on their citizens, some degree of distrust is warranted. But citizens who are so distrustful that they ignore public health guidelines altogether are likely to pose a threat to their own safety, and to the safety of others.

imposed (Brodeur, Grigoryeva and Kattan 2020). Similarly, in the UK, Smith et al. (2021) find that citizens who expressed greater trust in government were more likely to comply with government-imposed social distancing policies. Trust has been shown to correlate with COVID-19 mortality and other important outcomes as well. Oksanen et al. (2020), for example, find that trust in government is negatively correlated with COVID-19 deaths across 25 European countries.

Other studies have shown that the relationship between trust and compliance is conditioned by partisanship, especially in the US (Kubinec et al. 2020). Goldstein and Wiedemann (2021) find that trust in other citizens (or "social trust") is positively correlated with compliance, but that the strength of the correlation is lower in Republican-leaning counties, where many residents rejected social distancing measures as oppressive. Grossman et al. (2020) similarly find that social distancing policies were more effective in reducing mobility in Democratic-leaning counties than in Republican-leaning ones. These studies complement and extend an existing (smaller) literature focused on the relationship between trust and compliance during earlier epidemics, including Ebola (Blair, Morse and Tsai 2017; Dhillon and Kelly 2015; Tsai, Morse and Blair 2020), HIV/AIDS (Dionne and Poulin 2013), and H1N1 (Freimuth et al. 2014).

Our study aims to address two limitations of this emerging literature. First, much of the research on trust and compliance during the COVID-19 pandemic focuses on rich consolidated democracies (Barrios et al. 2021; Chan et al. 2020; Devine et al. 2021).[4] This is a potentially important shortcoming, as political and institutional configurations in the Global South often differ dramatically from those in the Global North. In Niger, for example, chiefs and other traditional leaders have played a prominent role as conduits of information during the pandemic, partnering with international NGOs to encourage masking, hand washing, and social distancing at the community level.[5] The same is true in Nigeria[6] and other sub-Saharan African countries. Traditional leaders have played similarly influential roles during earlier vaccination drives on the conti-

[4]There are some exceptions, for example Arriola and Grossman (2020) and Kao et al. (2021). Bosancianu et al. (2020) and Brück et al. (2020) include developing countries in cross-national analyses.

[5]See Juan Haro and Rosman Gosmane, "Traditional leaders in Niger: 'The virus is real,"' *UNICEF*, April 20, 2020, available at https://www.unicef.org/wca/stories/traditional-leaders-niger-virus-real.

[6]See Charity Warigon, "Nigeria rallies over 7000 traditional leaders against COVID-19," *WHO*, March 12, 2021, available at https://www.afro.who.int/news/nigeria-rallies-over-7000-traditional-leaders-against-covid-19.

nent (Grossman, Phillips and Rosenzweig 2018). Trust in these authorities is arguably less relevant in most rich industrialized countries, but it may be crucial in the developing world.

Similarly, while the police have been only tangentially involved in enforcing social distancing policies in the US and Western Europe, they have played a much more central (and much more contentious) role in Kenya (Mearak and Ombuor 2020), South Africa (Parkinson and Bariyo 2020), and other countries in the Global South. Criminologists have long argued that citizens' willingness to obey the law and cooperate with the police hinges crucially on their perceptions of the police as legitimate and procedurally fair (Bottoms and Tankebe 2012; Tyler 2006). This same insight may apply to compliance with public health restrictions that are enforced by the police. Trust in the police may be unrelated to compliance with public health restrictions in more developed countries. But—again—it may be essential in less developed ones.

Second and related, most studies of trust and compliance during the COVID-19 pandemic focus on very generalized measures of trust in government (Bargain and Aminjonov 2020) or other citizens (Goldstein and Wiedemann 2021).[7] These measures are informative, but they may disguise significant variation in citizens' attitudes towards different individuals and institutions. Variation of this sort may have important implications for compliance, especially in settings where different authorities at different levels of government enact conflicting policies. In Brazil, for example, state governors and city mayors imposed restrictions on public gatherings that would have forced many churches to close, at least temporarily. Church leaders resisted these measures, encouraging their congregations to worship in person. The Brazilian Supreme Court sided with the governors and mayors; President Jair Bolsonaro sided with the church (Pooler 2021). Similar clashes over policy emerged in many countries, including the US. Under these conditions, the magnitude and even the direction of the correlation between trust and compliance may depend entirely on the object of that trust—a possibility that existing scholars generally have not explored (Devine et al. 2021).

We address these complexities through a combination of observational and experimental research designs. We begin by testing whether endorsements of public health restrictions are more

[7] Again, there are exceptions. Kao et al. (2021), for example, use a conjoint experiment in Malawi to show that citizens are more responsive to some authorities over others.

persuasive when they are delivered by government officials, rather than by religious authorities, traditional leaders, or international NGOs. Next, we distinguish trust in government (e.g. the Ministry of Health) from trust in local authorities (e.g., in the Ugandan context, Local Council chairpeople) and other citizens. We then disaggregate trust in government further, distinguishing between trust in the central government, the district government, the Ministry of Health, and the police. Finally, in a more exploratory exercise, we assess whether an inexpensive, scalable intervention designed to build trust in the police specifically is effective in generating compliance with public health policies. These analyses extend the relatively narrow scope of existing studies by disaggregating trust and incorporating actors and institutions that play a pivotal role in COVID-19 prevention in the Global South, despite their more peripheral role in most of the Global North.

SETTING

Our study focuses on Uganda, an electoral authoritarian regime that has been ruled by the same party (the National Resistance Movement, or NRM) and president (Yoweri Museveni) since 1986. Uganda is an instructive setting for our study due to its similarities with many other low-income countries. Uganda is in the mid-range of the World Bank's ranking of low-income countries in terms of economic growth (as captured by GDP per capita) and human development (as captured by HDI). Authoritarian regimes that hold periodic elections like the one in Uganda are common throughout the Global South, and are the modal regime type in sub-Saharan Africa. As with any study of a single country, we cannot know for certain how far our results will travel. Nonetheless, these similarities suggest that lessons learned in Uganda may be generalizable to other African countries, and potentially to other developing countries as well.

During the COVID-19 pandemic the Ugandan central government, including the President and Prime Minister, oversaw the implementation of public health directives in partnership with district governments, which are the highest tier of government below the national level. On March 24, 2020, three days after the pandemic was formally announced in Uganda, the government published

a comprehensive set of regulations to control the spread of the virus.[8] These rules specified the responsibilities of government officials and health and medical practitioners, and also imposed a set of restrictions on individual behavior punishable by law. These include a duty to report COVID-19 cases to the authorities (article 3) and a ban on attending large public gatherings such as bars and movie theaters (article 9b), churches and mosques (article 9c), wedding parties, vigils, and funerals (article 9e), and political rallies and cultural conferences (article 9f). The regulations also mandate quarantines for anyone with direct contact with COVID-19 patients. On May 4, Museveni announced a mask mandate and extended a lockdown that had already been in place since April 1 (Reuters 2020; XinhuaNet 2020).

The Uganda Police Force (UPF) has been actively involved in efforts to enforce these policies, and has in some cases engaged in excessive force to punish non-compliance. UPF officers have also used the pandemic as a pretext to suppress protests by opposition politicians and their supporters, including, most notably, the musician-turned-activist Bobi Wine (Burke and Okiror 2020). The police have justified these abuses as necessary to contain the spread of the virus, but in many cases their actions have disproportionately targeted critics of the ruling party (Okiror and Burke 2020). This is part of a more general pattern in which President Museveni and the NRM deploy the UPF to harass, intimidate, imprison, and in some cases kill members of the opposition (Curtice and Behlendorf 2021). Some UPF officers also helped distribute food aid, at least early in the crisis.

In addition to the central government (including the Ministry of Health and UPF), other actors and institutions played a key role in educating the public about ways to reduce the risk of COVID-19 transmission. These include Local Council chairpersons (LC1s), traditional leaders, religious authorities, and local and international NGOs. Following the government guidelines, several traditional leaders—most notably the Kabaka (king) of the Buganda Kingdom, Ronald Muwenda Mutebi II—issued public statements about the importance of respecting social distancing measures and mask mandates (The Independent 2020). Top clerics of various Christian de-

[8] See *The Uganda Gazette* No. 19, Volume CXIII, Statutory Instruments No. 52, entitled "The Public Health Control of COVID-19 Rules."

nominations also issued proclamations banning church gatherings across the country (Isiko 2020). These efforts by traditional and religious leaders are ongoing. In March 2021, for example, the Archbishop of the Church of Uganda, Dr. Stephen Kaziimba Mugalu, appealed to leaders at all levels to help debunk fears and misconceptions about the AstraZeneca vaccine and to encourage their followers to get vaccinated (The Independent 2021). Whether these messages have been effective remains an open question.

RESEARCH DESIGN

MOBILE PHONE SURVEY AND ENDORSEMENT EXPERIMENT

To test which authorities are most effective in generating support for public health restrictions, we use an endorsement experiment that was embedded in an original mobile phone survey of 2,587 respondents across 288 villages spanning 13 districts[9] and all four regions of Uganda (north, central, east, and west). The survey constituted the third wave of a panel that began in June 2018 as the baseline for a field experiment on community policing, described in detail below. We randomly sampled six male and six female respondents in each of 288 villages to participate in the baseline. These same respondents were resurveyed in December 2019 as the endline for the field experiment, then again between July and September 2020 for our study of trust and compliance during the pandemic. All surveys were implemented by Innovations for Poverty Action (IPA), Uganda.

The first two survey waves were conducted in person; the third was implemented at the height of the pandemic amidst the government's recently imposed restrictions on travel and public gatherings, and was therefore conducted by mobile phone in order to mitigate any potential risks to the health of our enumerators and respondents. Given the upheaval of the pandemic and the change

[9]Uganda is divided into 134 districts. Our survey covers the districts of Mbarara, Lira, Mbale, Gulu, Mityana, Kamuli, Jinja, Tororo, Iganga, Kabale, Rakai, Arua, and Ntungamo. UPF selected these districts for inclusion in a community policing study completed in February 2020, prior to the onset of the pandemic. UPF used two selection criteria: equal representation of Uganda's four regions, and, within each region, relatively high crime rates.

in format, it is perhaps unsurprising that we observed an attrition rate of roughly 30% between the first and third waves of the survey.[10]

The endorsement experiment allows us to test whether respondents' support for public health guidelines varies with the identity of the authority with whom those guidelines are associated. Respondents were randomly assigned to hear two messages attributed to one of four authorities: the government, international NGOs, traditional leaders, or religious authorities. The two messages included endorsements of two policies: a ban on public gatherings[11] and a recommendation that citizens maintain six feet of social distance while interacting with anyone other than family members.[12] Respondents were randomly assigned to the same condition (and thus the same endorser) in both experiments. They were then asked how much they support each of the two policies on a 5-point scale.

The survey also included modules of questions on trust in a variety of state and non-state actors, knowledge of COVID-19, perceptions of public health restrictions, and compliance with those restrictions. We use these modules to test the observational relationship between compliance and different "varieties" of trust, and between trust and knowledge of COVID-19. To measure knowledge of COVID-19, respondents were asked a series of simple factual questions about who can contract the virus, whether there is a "cure," and the symptoms of infection. To measure public health compliance, respondents were asked seven questions about their behavior over the preceding seven days, including avoiding large public gatherings and wearing masks. We describe our approach to operationalizing these variables in further detail below.

To help address potential over-reporting of compliance, we also administered two separate list experiments designed to measure violations of Uganda's mask mandate and its ban on at-

[10]We surveyed 3,456 respondents at baseline. Wherever possible we interviewed the same respondents at endline, replacing them only when they were unavailable or had died or moved away. In total, we replaced 510 respondents, for an attrition rate of about 15% between the baseline and endline. Of the 3,456 respondents interviewed at endline, 2,370 could be reached to complete the mobile phone survey. An additional 217 baseline respondents who could not be reached at endline nonetheless responded to the mobile phone survey.

[11]Specifically, respondents were asked: "[Government / International NGOs / Traditional leaders / Religious leaders] say there can be no large public gatherings and no church/mosque at this time. Do you disagree or agree with this rule?"

[12]"[Government / International NGOs / Traditional leaders / Religious leaders] say we should maintain a distance of 2 meters between people outside of the same household. Do you disagree or agree with this suggestion?"

tending religious services outside the home. Respondents were randomly assigned to the same condition, treatment or control, for both experiments. In the first experiment, respondents were asked whether they had engaged in each of four activities in the last seven days. The list included three non-sensitive items[13] and one sensitive item: "You walked around the village without a face mask." For the second experiment, respondents were again asked whether they had engaged in each of four activities in the last seven days, including three non-sensitive items[14] and one sensitive item: "You attended church or mosque service." Respondents were asked to report the number of activities they had engaged in without specifying which ones, thus allowing them to report any non-compliance indirectly. We use these experiments in our observational analysis to rule out significant over-reporting of compliance as measured via direct survey questions.

FIELD EXPERIMENT

Finally, to test whether an intervention designed to enhance trust in the police also improves compliance with public health restrictions that police officers are mandated to enforce, we use a downstream experimental evaluation of a community policing program implemented in collaboration with YIDO, a local NGO. Community policing aims to build trust between citizens and the police by improving the frequency and quality of contact between them (Greene and Mastrofski 1988; Skogan and Hartnett 1999). The program we evaluate was designed and implemented by the UPF with input from the Ministry of Justice and various Ugandan civil society groups, thus ensuring a high level of local ownership and buy-in.

All Ugandans regardless of political party are susceptible to threats of crime, violence, and insecurity—threats that the UPF is mandated to address, and that may become especially pronounced during times of crisis. Establishing more cooperative police–community relations may improve perceptions of rank-and-file officers and increase their responsiveness to citizens. This, in turn, may build citizens' trust in the police and encourage them to delink the UPF as a national-

[13] "You went for a stroll outside the house;" "You asked a relative for a small loan;" "You sent someone mobile money."

[14] "You were asked by a relative for a large loan;" "You had to skip some meals;" "You spoke about coronavirus with a friend or family member."

level institution—one that is clearly allied with the NRM—from individual UPF officers at the local level, who tend to be less overtly politicized. Importantly, community policing in Uganda was not intended to increase compliance with public health regulations specifically (though it was intended to increase compliance with the police), or to build trust in the UPF's role as an enforcer of those regulations (though it was intended to build trust in the UPF more generally). We therefore interpret this analysis as exploratory. Nonetheless, it may help illuminate the important but understudied connection between policing and public health in the Global South.

The program we evaluate consisted of three core components:

1. **Town hall meetings** to establish more constant police presence in communities; educate citizens about police roles, responsibilities, obligations, and constraints; and build rapport between citizens and the UPF. The target was for town hall meetings to take place once every two months, for a total of four meetings per community over a period of eight months, though in practice the number varied widely.[15]

2. **Door-to-door visits** to create opportunities for more interpersonal interaction and direct dialogue between citizens and UPF officers than is typically possible in the context of a town hall meeting. The target was for door-to-door visits to take place once a month, for a total of eight visits per community, though in practice it was difficult to monitor the number of visits that actually occurred.[16]

3. **Formation of Community Watch Teams (CWTs)** to monitor crime, establish a more direct line of communication between civilians and the police, and create a cadre of residents that better understand police procedures and resources. Through phone calls with LC1s we were

[15]We monitored the implementation of town hall meetings through phone calls with LC1s and UPF officers and observations from our implementing partners in YIDO, IPA, and the UPF. We were able to confirm that at least 92% of all treatment communities held one or more town hall meetings over the course of the study, at least 69% held two or more, at least 48% held three or more, and at least 33% held four or more. Some villages also exceeded the target: at least 25% of all treatment communities held five or more town hall meetings, at least 14% held six or more, and at least 9% held seven or more. A small minority of treatment communities (seven out of 144) held eight or more meetings, and an even smaller minority (three out of 144) held nine or more.

[16]UPF officers conducted these visits on their own, without YIDO or IPA accompaniment, and typically did not coordinate the timing of their visits with LC1s. While we requested that patrolling officers complete handwritten logs detailing their activities, compliance with this monitoring mechanism was spotty.

able to confirm the existence of a CWT in at least 79% of all treatment communities, though it is possible that other CWTs were formed after our monitoring activities were complete.

The program began in June 2018 and continued through November 2019.[17]

We block randomized assignment to the program within each of Uganda's four regions in order to maximize the degree of similarity between treatment and control units. We used the 2014 census to construct 11 blocking variables at the police station level:[18] population; % male; average age; % literate; average household size; average years of education; average number of meals eaten per day; % involved in an occupation other than subsistence agriculture; a standardized household asset index; a standardized household quality index; and a standardized index of social services available in the community. We also constructed six additional blocking variables capturing the number of parishes, villages, police posts,[19] and police officers under the jurisdiction of each station, as well as the distance to Kampala and distance to the district capital. We organized stations into blocks of four using the Mahalanobis distance between covariates, then randomly assigned two stations to the treatment group and two to control in each block of four. We then randomly selected four villages from within the jurisdiction of each station for surveying, for a sample of 288 villages in total.

Successful community policing is typically assumed to require a high level of community interest and commitment. To complement the third core component of the intervention and increase community engagement, CWT members received additional training from YIDO and UPF in half of all treatment communities, selected at random. YIDO offered an initial half day of training at the beginning of the program, followed by a half day of "refresher" training several months later. The training focused on strategies CWTs can use to improve security in their communities (e.g. through patrols) and increase coordination with the UPF (e.g. through more frequent communication with UPF officers deployed to the nearest police post or station). Training was randomly assigned at

[17]The program was designed to last for eight months, but some town hall meetings were held, and some CWTs were formed, even months after the "official" end of the intervention.

[18]Census data was collected at the parish level. We aggregated up to the station level, weighting by parish population (for variables recorded as percentages).

[19]Each police station supervises a number of smaller posts.

the village level, and only among villages that fell under the jurisdiction of police stations that also received the community policing intervention.

RESULTS

ENDORSEMENT EXPERIMENT

Are some authorities more effective than others at convincing citizens to embrace restrictions on their behavior during public health crises? Our endorsement experiment is designed to address this question. Table 1 presents our results. The dependent variables in columns 1 and 2 are 5-point Likert scales measuring support for the government's ban on large public gatherings (column 1) and its recommendations for social distancing outside the home (column 2). Both Likert scales are standardized for ease of interpretation. The dependent variable in column 3 is a standardized additive index of support for the two policies. We regress each dependent variable on dummies indicating endorsement by international NGOs, religious authorities, and traditional leaders; the base category is endorsement by the government. Standard errors are clustered at the village level. We do not include any control variables, though our results are substantively similar if we do. Figure 1 plots fitted values and 95% confidence intervals based on the results in column 1 of Table 1, using an unstandardized 5-point Likert scale to better illustrate base rates of support.

On average, we find that respondents expressed greater support for the ban on gatherings when it was endorsed by the government than when it was endorsed by any of the other three authorities (column 1). The difference is largest for religious leaders, though as we show in Figure 1, predicted levels of support for the ban are not statistically distinguishable across the three non-governmental treatment groups. A similar but weaker pattern holds for social distancing guidelines (column 2), though in this case our treatment effect estimates are not statistically different from one another at conventional thresholds. This could be due in part to ceiling effects, since overall support for social distancing was higher than support for the ban on gatherings. The ban on gatherings is also arguably more onerous than the guidelines on social distancing; it could be that government

Table 1: Endorsement Experiment

	(1) Support for Ban on Gatherings	(2) Support for Social Distancing Rules	(3) Index of Support
Base category: Government			
International NGOs	-0.09^{+}	-0.06	-0.09^{+}
	(0.05)	(0.06)	(0.06)
Religious leaders	-0.15**	-0.07	-0.14**
	(0.05)	(0.05)	(0.05)
Traditional leaders	-0.10*	-0.04	-0.09^{+}
	(0.05)	(0.05)	(0.05)
Constant	0.09*	0.04	0.08*
	(0.04)	(0.04)	(0.04)
Observations	2584	2584	2584

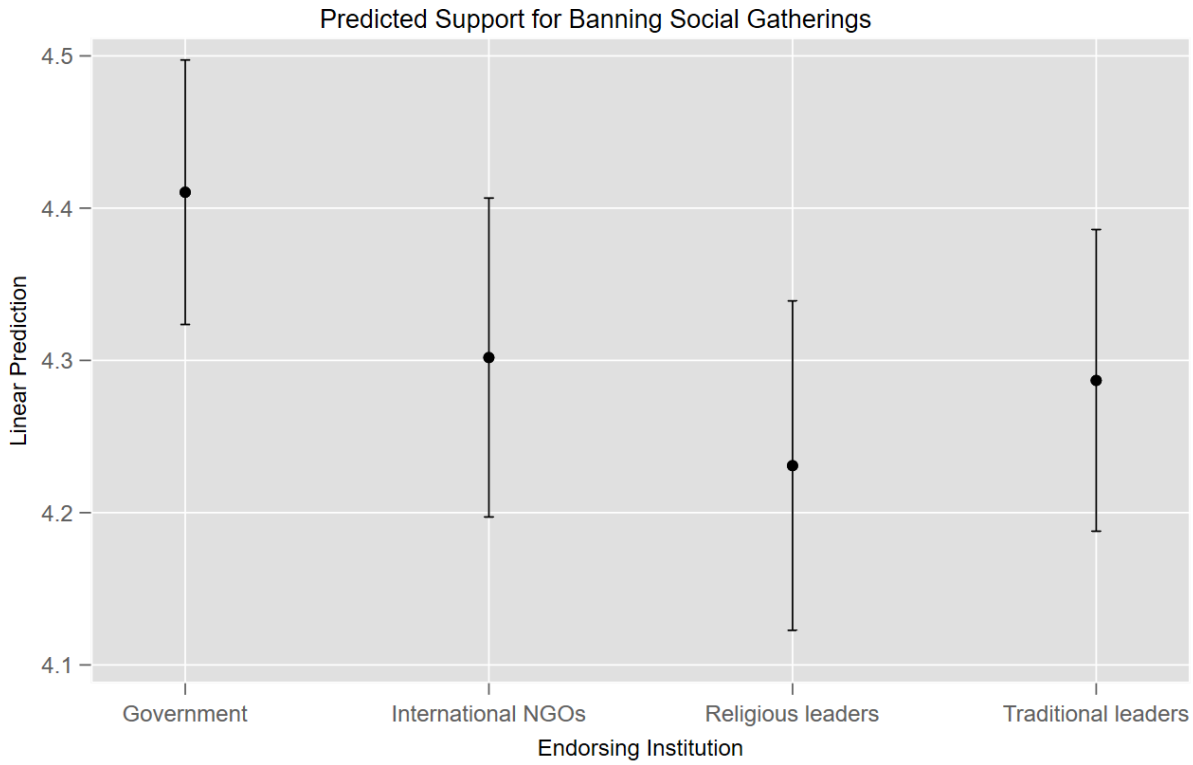
Notes: OLS regression models with standard errors clustered at the village level.
DVs: (1) Agreement with ban on gatherings; (2) Agreement with social distancing rules; (3) Index of agreement with ban and social distancing rules.
$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

endorsement is especially important for public health restrictions that severely curtail citizens' activities. Respondents also expressed greater support for the two policies combined when they were endorsed by the government, rather than by international NGOs, traditional leaders, or religious authorities (column 3).

OBSERVATIONAL ANALYSIS

Our endorsement experiment suggests that government officials are more effective at generating support for public health restrictions than other domestic (e.g. traditional leaders and religious authorities) or foreign (e.g. international NGOs) actors, even in an electoral autocracy in which citizens may have cause to distrust the government. Does trust in government also important for ensuring actual compliance with these public health policies? Is it more important than trust in more localized (and less overtly politicized) authorities? Is it more important than trust in other citizens—i.e. "social trust?" Even within the government, a variety of different actors and agencies are responsible for enacting and enforcing public health restrictions. Which "variety" of trust is

Figure 1: Support for Ban on Gatherings by Endorsement Experiment Treatment Condition



Notes: Predicted values estimated from Model 1 in Table 1 with 95% confidence intervals.

most important for promoting compliance? Observational analysis of our mobile phone survey data allows us to answer these questions.

We measure compliance with a standardized additive index comprising seven items, scaled such that larger values indicate greater compliance:[20] 1) number of days spent at home without leaving; 2) number of times attending church or mosque; 3) number of times going to a restaurant, bar, or cafe; 4) number of times attending a community meeting; 5) number of times attending large social gatherings like weddings, funerals, or parties; 6) frequency practicing social distancing; and 7) frequency of using a mask when in public. We measure trust in government with another standardized additive index comprising trust in four government institutions: the central government, the Ministry of Health, the district government, and the police. As we show in Table

[20]This excludes an item on the frequency of hand-washing specified in our pre-analysis plan. Adding this item to the index does not change our results.

D.1 in the appendix, there is a positive correlation between these different varieties of trust, but they are not so highly correlated as to suggest that they are simply proxies for the same underlying phenomenon. We also measure trust in other members of the community and trust in the LC1 chairperson. These are potentially important local forms of trust that are less directly related to trust in government, both theoretically and—as we show in Table D.1—empirically.

Table 2 presents results from a series of OLS regressions where the dependent variable is our compliance index. The key independent variables of interest are 1) trust in government, 2) trust in the LC1 chairperson, and 3) trust in other community members. While these are correlations rather than relationships of cause and effect, we include a host of covariates and village fixed effects to mitigate confounding. Covariates include information on demographics, employment, income, access to food and government aid, and partisanship. To facilitate comparison, all continuous and categorical variables (including our three measures of trust) are standardized such that a one unit increase is equivalent to a shift of one standard deviation on that variable.

As in the endorsement experiment, we find that trust in government is consistently positively correlated with compliance with public health restrictions. Across all models, the point estimate on trust in government is much larger than the point estimates on trust in the LC1 chairperson or trust in other community members. These more local varieties of trust appear to have little to no relationship with compliance. In contrast, trust in government remains strongly positively correlated with compliance even after accounting for demographics (column 1), receipt of government aid (column 2), income and employment (column 3), and partisanship (column 4). This final result is especially important given that NRM membership is key to understanding citizens' perceptions of government in Uganda, where the ruling party systematically favors its own loyalists over supporters of the opposition. Our results suggest that trust in government still helps explain public health compliance even when conditioning on this key predictor of citizens' perceptions.

Table 2 tests the relationship between compliance and trust in government broadly defined. But as noted above, the state is not a unitary actor, and perceptions of different government institutions may vary in systematic ways. It is also possible that specific government agencies may

Table 2: Correlates of Public Health Compliance

	(1)	(2)	(3)	(4)
	Index of Compliance			
Trust in State (Index)	0.14***	0.14***	0.14***	0.13***
	(0.04)	(0.04)	(0.04)	(0.04)
Trust in LC1	-0.01	-0.01	-0.01	-0.01
	(0.03)	(0.03)	(0.03)	(0.03)
Trust in other community members	0.04	0.04	0.04	0.04
	(0.03)	(0.03)	(0.03)	(0.03)
Female	0.27***	0.27***	0.26***	0.26***
	(0.04)	(0.04)	(0.04)	(0.04)
Age	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)
Education	-0.01	-0.01	-0.00	-0.00
	(0.02)	(0.02)	(0.02)	(0.02)
Religiosity	-0.04	-0.04	-0.04	-0.04
	(0.03)	(0.03)	(0.03)	(0.03)
Received government aid		0.01	0.01	0.01
		(0.06)	(0.06)	(0.07)
Farmer			-0.01	-0.01
			(0.07)	(0.07)
Business owner/self-employed			-0.12	-0.12
			(0.08)	(0.08)
Unemployed and looking for work			0.07	0.09
			(0.12)	(0.12)
Unemployed and not looking for work			0.07	0.07
			(0.11)	(0.11)
Has difficulty accessing food			0.01	0.01
			(0.01)	(0.01)
Change in earnings last week			0.05	0.05
			(0.03)	(0.03)
NRM supporter				0.08+
				(0.05)
Constant	0.02	0.02	-0.17	-0.18
	(0.14)	(0.14)	(0.19)	(0.19)
Village FE	YES	YES	YES	YES
Observations	2531	2531	2531	2531

Notes: OLS regression models with standard errors clustered at the village level.

DV: Index of public health compliance.

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

vary in their importance for promoting compliance with public health restrictions. To explore this possibility, in Table 3 we disaggregate our index of trust in government into its four constituent parts: trust in the central government, the Ministry of Health, the district government, and the UPF. While these four measures are moderately positively correlated with one another, there is enough variation in perceptions that we can generate at least suggestive evidence about the relative importance of different varieties of trust for explaining public health compliance.

Perhaps surprisingly, in Table 3 we find that after accounting for the other varieties of trust, trust in the central and district governments is only weakly correlated with compliance. The point estimates for these variables are small across all specifications, and are never statistically significant. Trust in the Ministry of Health and the UPF are more strongly positively correlated with compliance, with point estimates that are statistically significant at the 90% confidence level in most specifications. Both of these institutions have been at the forefront of the government's response to COVID-19, though with different roles. The Ministry of Health has led public health messaging about the virus and the need for restrictions to reduce its spread, while the UPF has assumed responsibility for enforcing those restrictions, sometimes brutally.

Our survey also allows us to probe two possible explanations for the results above. First, it is possible that respondents who express higher levels of trust in government are more receptive to the government's public health messaging, and therefore become more knowledgeable about COVID-19 and ways to avoid contracting it. In this case, trust in government may increase compliance through the mechanism of information. We explore this possibility by regressing two indices of knowledge about COVID-19 on our measures of trust. The first index is the sum of respondents' correct answers to a series of three simple true/false questions about the virus; the second index is the sum of COVID-19 symptoms that respondents were able to identify. As we show in Tables D.2 and D.3 in the appendix, respondents who expressed higher levels of trust in government knew as much or even *less* about COVID-19 than those who expressed lower levels of trust. While not conclusive, these results suggest that the positive correlation between compliance and trust in government is unlikely to be driven by information alone.

Table 3: Correlates of Public Health Compliance Disaggregating Trust in Government

	(1)	(2)	(3)	(4)
	Index of Compliance			
Trust in central government	0.03	0.03	0.03	0.02
	(0.03)	(0.03)	(0.03)	(0.03)
Trust in police	0.05^{+}	0.05^{+}	0.05^{+}	0.04
	(0.03)	(0.03)	(0.03)	(0.03)
Trust in Ministry of Health	0.07^{+}	0.07^{+}	0.07^{+}	0.06
	(0.04)	(0.04)	(0.04)	(0.04)
Trust in district government	0.01	0.01	0.01	0.01
	(0.02)	(0.02)	(0.02)	(0.02)
Trust in LC1	-0.01	-0.01	-0.01	-0.01
	(0.03)	(0.03)	(0.03)	(0.03)
Trust in other community members	0.04	0.04	0.04	0.04
	(0.03)	(0.03)	(0.03)	(0.03)
Female	0.26***	0.26***	0.25***	0.25***
	(0.04)	(0.04)	(0.04)	(0.04)
Age	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)
Education	-0.00	-0.00	-0.00	-0.00
	(0.02)	(0.02)	(0.02)	(0.02)
Religiosity	-0.04	-0.04	-0.04	-0.04
	(0.03)	(0.03)	(0.03)	(0.03)
Received government aid		0.01	0.00	0.01
		(0.06)	(0.06)	(0.07)
Farmer			-0.01	-0.01
			(0.07)	(0.07)
Business owner/self-employed			-0.12	-0.12
			(0.08)	(0.08)
Unemployed and looking for work			0.08	0.09
			(0.12)	(0.12)
Unemployed and not looking for work			0.07	0.08
			(0.11)	(0.11)
Has difficulty accessing food			0.01	0.01
			(0.01)	(0.01)
Change in earnings last week			0.05	0.05
			(0.03)	(0.03)
NRM supporter				0.08^{+}
				(0.05)
Constant	-0.48**	-0.48**	-0.67**	-0.63**
	(0.18)	(0.18)	(0.23)	(0.23)
Village FE	YES	YES	YES	YES
Observations	2531	2531	2531	2531

Notes: OLS regression models with standard errors clustered at the village level.
DV: Index of public health compliance.
$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Second, it is possible that the correlation between compliance and trust is an artifact of social desirability bias, especially if more trusting respondents are prone to over-reporting their compliance with government-imposed public health restrictions. To probe this possibility, we use two list experiments that should mitigate social desirability concerns by allowing respondents to report non-compliance indirectly (Tourangeau and Yan 2007). Table D.4 in the appendix reports results from the first list experiment, which includes a sensitive item for "walking around the village without a mask." We find that an estimated 51% of respondents reported walking around the village without a mask in the last 7 days. This is in line with our estimate from a direct question in which 47% of respondents said they wore a mask "every time they left the home" in the past 7 days (compared to 26% saying "most of the time," 14% "sometimes," and 13% "not at all").

Table D.5 in the appendix reports results from our second list experiment, which includes a sensitive item for "attending church or mosque service." Based on the list experiment, we estimate that approximately 5% of respondents attended a religious service in the past week. Again, this is close to our direct question estimate in which 4.68% of respondents reported attending church or mosque at least once in the last 7 days. While we cannot conclusively test whether the gap between our direct and indirect estimates of compliance is larger for more trusting respondents,[21] taken together, our results in Tables D.4 and D.5 suggest that our direct questions are capturing the prevalence of non-compliance relatively accurately, and that social desirability bias is therefore unlikely to explain the correlation between compliance and trust in government in our observational analyses.

Field Experiment

The results from our observational analyses suggest that trust in the police is an important predictor of compliance with public health restrictions. This may be due to the pivotal role that the UPF has

[21] We cannot observe which respondents answered the sensitive item affirmatively, and so cannot estimate the discrepancy between the list experiment and the direct questions for any given respondent. Nonetheless, if it were true that more trusting respondents systematically over-reported compliance in response to direct questions, then to explain the close correspondence between our direct and indirect estimates of compliance, less trusting respondents would have to systematically *under*-report compliance. This strikes us as unlikely.

Table 4: Downstream Effects of Community Policing

	(1) Trust in Police	(2) Trust in Police to Respond to COVID-19	(3) Index of Compliance
Community Policing	-0.01	-0.07	-0.03
	(0.05)	(0.05)	(0.06)
CWT training	0.12^{+}	0.09	0.07
	(0.06)	(0.06)	(0.07)
Constant	-0.44^{***}	-0.14	0.27^{**}
	(0.10)	(0.12)	(0.10)
Block FE	YES	YES	YES
Observations	2578	2578	2578

Notes: OLS regression models with standard errors clustered at the village level.
DVs: (1) Trust in police; (2) Trust in police to respond to COVID-19;
(3) Index of compliance.
$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

played in enforcing these restrictions in Uganda. As discussed above, however, relations between civilians and the UPF have long been strained by the UPF's reputation for repressing dissent, especially around national elections. The UPF also engages in more routine acts of corruption and malfeasance, further eroding trust. As an exploratory exercise, we test whether a relatively inexpensive intervention aimed at improving relations between civilians and the UPF can help build trust in the police and generate compliance with government-mandated public health policies. We test the impact of the intervention on three "downstream" outcomes, all measured in the mobile phone survey: 1) trust in the police in general, which is measured on a 4-point scale and then standardized for ease of interpretation; 2) trust in the police to respond to COVID-19 specifically, also measured on a 4-point scale and then standardized;[22] and 3) our standardized additive index of compliance with public health regulations.

We estimate the downstream intention-to-treat (ITT) effect of the intervention using a series of OLS regressions with block fixed effects and standard errors clustered at the community level. We use a specification similar to the one we registered in our pre-analysis plan (PAP) for the

[22]Respondents were asked: "How much do you trust the police to do what it takes to minimize the spread of the Coronavirus (by, for instance, enforcing public health policies for social distancing)?"

broader community policing evaluation,[23] and include indicator variables for both the main treatment (community policing) and the sub-treatment (CWT training) conditions.[24] Table 4 reports our results. Overall, we find little to no evidence of downstream effects. The community policing treatment does not increase trust in the police either in general or in the context of COVID-19, nor does it increase compliance with public health restrictions. (Indeed, if anything community policing *reduces* trust.) Increased community engagement through the CWT training does appear to improve trust in the police, though the effects are weak and sensitive to specification. This (weakly) increased trust does not seem translate into increased compliance with public health regulations.

DISCUSSION

In this study we examine the role of trust in shaping citizens' compliance with public health restrictions in an electoral autocracy. Our study is motivated by the idea that citizens' responses to public health emergencies is shaped by their trust in multiple state and non-state institutions, not just the government in general. We extend existing research by distinguishing between multiple potential targets of trust, and by assessing whether some of these targets are more important than others in generating support for, and compliance with, costly and disruptive public health policies. We then explore whether it is possible to build trust in the institutions responsible for enforcing these policies, focusing in particular on the central but highly controversial role of the police. We answer these questions in the context of the COVID-19 pandemic in Uganda.

Through a series of interconnected experimental and observational studies, we show that (1) endorsements by the government are more effective in generating support for public health restrictions than endorsements by traditional leaders, religious authorities, or international NGOs; (2) that trust in government is strongly positively correlated with compliance with these restrictions, while trust in local authorities and other citizens is not; (3) that the correlation between compliance

[23] In our PAP for the broader community policing evaluation we proposed controlling for baseline measures of each of our dependent variables. Because we did not include compliance with public health restrictions or trust in the police to respond to COVID-19 in our baseline survey (since the pandemic had not yet begun at that time), we omit baseline measures in our analysis here.

[24] Attrition between the endline survey and the mobile phone survey is not correlated with treatment assignment.

and trust in government is unlikely to be a function of differential knowledge of COVID-19 among more and less trusting individuals, and is also unlikely to be an artifact of social desirability bias; (4) that trust in the Ministry of Health and trust in the police appear to be especially important predictors of compliance; and (5) that a community policing intervention designed to build confidence in the police specifically has only weak and inconsistent effects on trust, and no effect on compliance.

Taken together, our results suggest that the relationship between trust and compliance during public health crises is complex and multifaceted. Our results also suggest that trust is sticky, perhaps especially in a setting where the government in general—and the police force in particular—has a reputation for repression. Our downstream analysis of Uganda's community policing program is exploratory, and it is possible that a more intensive intervention might have yielded a larger and more sustained improvement in compliance and police–community relations, though we note that other recent studies similarly point to the difficulties of building trust in widely distrusted police forces in the Global South (Blair, Karim and Morse 2019; Blair et al. 2021).[25] These findings are especially important given the tendency of governments throughout the developing world to rely on their police forces to ensure compliance in times of crisis. Further exploration of the important but underappreciated link between policing and public health in low-income countries strikes us a fruitful avenue for future research.

[25]Though interventions to build trust in other state institutions have shown more promise, including during the COVID-19 pandemic; see, for example, Haim, Ravanilla and Sexton (2021).

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APPENDIX

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A DESCRIPTIVE STATISTICS

Table A.1: Summary Statistics

	Obs	Mean	S.D.	Min	Max
Summary Compliance Index	2586	0.16	1.01	-8.2	2.0
Stayed Home (Last 7 Days)	2587	2.63	2.42	0.0	7.0
N. Times Religious Service (Last 7 Days)	2587	0.10	0.60	0.0	7.0
N. Times Restaurant/Cafe (Last 7 Days)	2587	0.50	1.40	0.0	7.0
N. Times Comm. Meeting (Last 7 Days)	2587	0.19	0.58	0.0	7.0
N. Times Social Gathering (Last 7 Days)	2587	0.39	0.76	0.0	7.0
Kept Social Distance	2587	2.71	1.08	1.0	4.0
Worn Face Mask	2586	3.08	1.05	1.0	4.0
Agreement with lockdown	2587	4.22	1.24	1.0	5.0
Agreement with ban on gatherings	2586	4.31	1.22	1.0	5.0
Agreement with social distancing	2585	4.69	0.71	1.0	5.0
Trust Government	2569	3.19	0.93	1.0	4.0
Trust Ministry of Health	2585	3.58	0.68	1.0	4.0
Trust Police	2583	2.88	1.04	1.0	4.0
Trust Police on COVID	2581	3.08	0.99	1.0	4.0
Trust District Govt	2552	2.39	1.08	1.0	4.0
Trust in State Index	2536	-0.00	1.00	-3.2	1.4
Trust LC1	2585	3.25	0.88	1.0	4.0
Trust Other People in Community	2584	2.85	0.92	1.0	4.0
NRM Party ID	2617	0.65	0.48	0.0	1.0
N. Correct Symptoms Named	2587	2.89	0.40	0.0	3.0
N. COVID Facts Correct	2587	2.33	0.75	0.0	3.0
Female	2617	0.48	0.50	0.0	1.0
Age	2617	43.33	14.29	18.0	95.0
Education	2617	1.62	1.38	0.0	7.0
Religiosity	2587	3.15	0.82	1.0	5.0
Food Access Difficulties	2587	3.25	2.08	0.0	7.0
Change in Earnings Last Week	2585	4.47	0.71	1.0	5.0
Received Government Aid	2587	0.23	0.42	0.0	1.0
Received Other Aid	2587	0.05	0.22	0.0	1.0
Police Enforce Bans	2582	2.96	1.64	1.0	5.0
Community Enforce Bans	2587	2.72	1.64	1.0	5.0

B MAPS OF STUDY SAMPLE

Figure B.1: Location of Districts in Sample

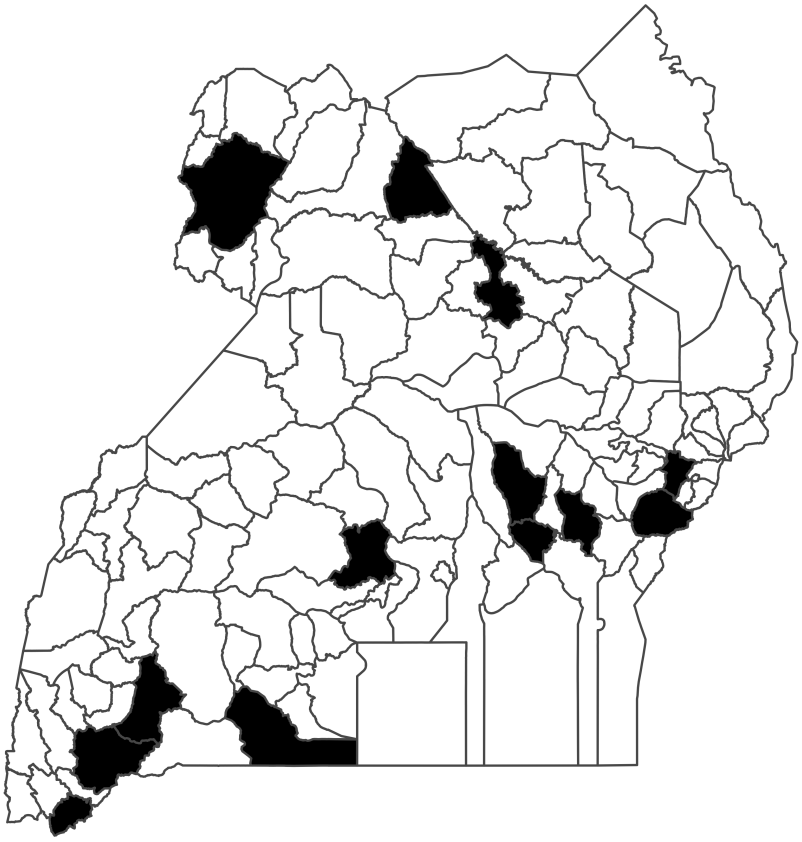
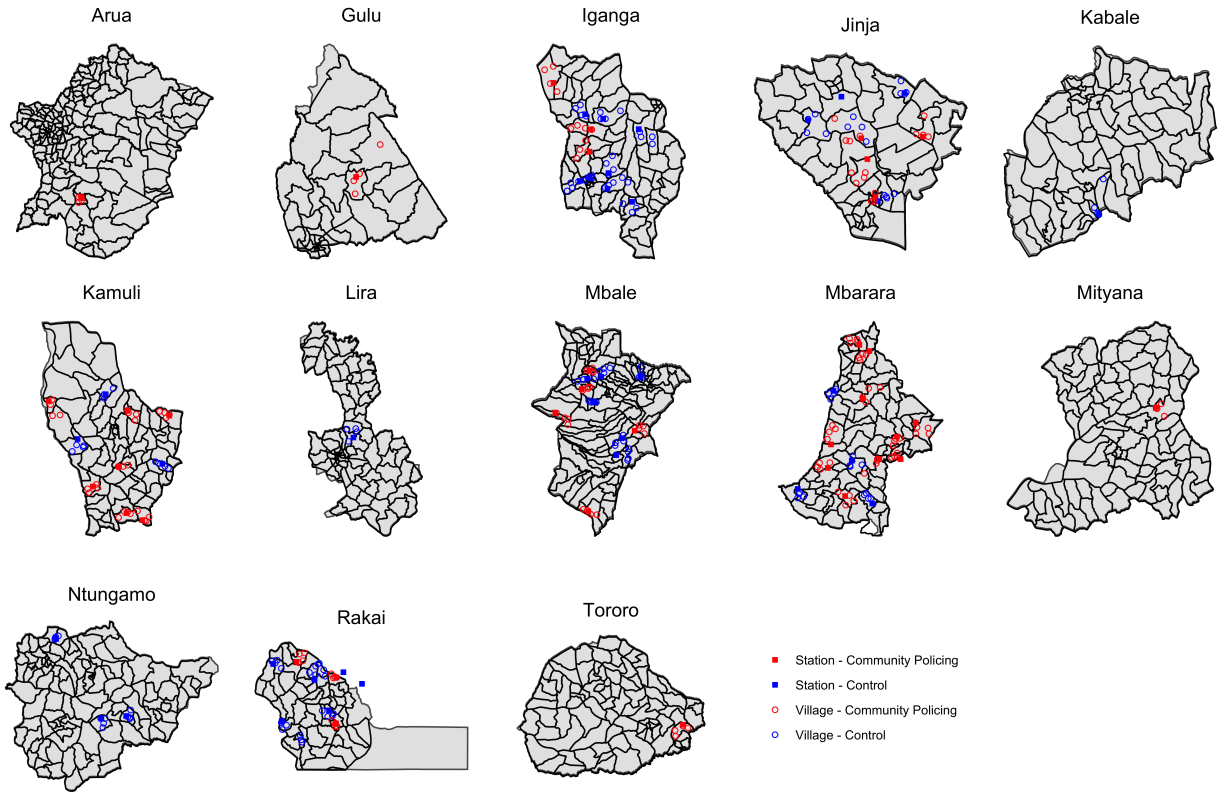


Figure B.2: Location of Field Experimental Conditions within Districts



C ETHICS

C.1 MOBILE PHONE SURVEY

Studying public health compliance in the initial wave of the COVID-19 pandemic has important ethical implications. Our main aim throughout was to learn from and contribute to prior research on this topic while ensuring that minimal risk was posed to survey respondents. A primary ethical concern was making sure that our efforts would not contribute to the spread of the virus. A secondary concern was reducing anxiety around discussing difficult or socially sensitive issues. We took several steps to address these concerns before implementing our study. Most important, our study relied on a mobile phone survey rather than face-to-face interviews, which reduced the risk of spreading the virus. The mobile phone survey built on a previous in-person survey that

was conducted as part of the endline for a field experiment on community policing (addressed below) in February 2020. Endline survey respondents indicated whether they were willing to be contacted again in future research. This provided a unique opportunity for us to follow up with an existing sample of respondents with whom our implementing partner IPA had already established a relationship, this time focusing on both policing and public health.

To reduce anxiety around socially sensitive issues, we repeatedly reassured respondents that they could skip individual questions or entire modules if they experienced any discomfort during the survey. We also worked closely with both university IRBs and Ugandan review boards to ensure that best ethical practices were used throughout. Our study was approved by one of the author's university IRB, MILDMAY Uganda Research and Ethics Committee (MUREC), and the Ugandan National Council for Science and Technology (UNCST) (ID numbers redacted for anonymity during peer review). Our study was preregistered in the American Economic Association's registry for randomized controlled trials (ID number redacted for anonymity during peer review).

C.2 Field experiment

We were interested in studying community policing in Uganda because we believed it had the potential to improve strained relations Ugandan citizens and the UPF—a belief that many other local stakeholders shared. Crime and insecurity are problems for all Ugandans, regardless of their political leanings, and UPF is constitutionally mandated to serve and protect all citizens, not just allies of the NRM. While UPF has a reputation for advancing the interests of the ruling party, it is important to note that not all UPF officers are politicized. Given the impressive track record of community policing in the Global North, even in places where the police have spotty reputations, we and our implementing partners believed that COP had the potential to generate significant benefits for citizens.

But given the nature of the regime in Uganda and the UPF's role in sustaining it, our study also had important ethical implications that we sought to address from the outset. Politicization is much less of a problem in rural areas than in urban centers, where clashes between security

forces and the political opposition tend to be most common. For this reason, we decided to focus exclusively on rural regions. Politicization is also less of a problem in the years between electoral cycles. For this reason, we focused on the period from 2018 to 2019, between the 2016 and 2021 general elections. In addition, many clashes between political activists and the UPF involve specialized, quasi-militarized units that are often deployed to quell opposition rallies and protest marches. These militarized units operate under a different organizational hierarchy and command structure. We excluded them from the study altogether.

The intervention involved increased police presence in and around rural Ugandan communities. This had important ethical implications in a setting where police officers have a reputation for petty corruption and bribe-seeking. To guard against the risk that increased contact would exacerbate these abuses, we developed a robust monitoring and reporting system, which allowed us to observe many (though not all) of the interactions between civilians and police officers that occurred in the context of the intervention. It is possible, however, that "fee for service" requests and other forms of petty corruption may have occurred without our monitors noticing. We address this possibility in the discussion section.

The intervention also involved strengthening the role that CWTs play in providing security for their communities. This component of the program had important ethical implications as well, especially given Uganda's experience with Crime Preventers, some of whom became embroiled in scandals involving political intimidation, vigilantism, and human rights abuses. In their efforts to organize CWTs, YIDO and UPF repeatedly emphasized that CWTs have no legal authority to arrest, adjudicate crimes, or otherwise act as substitutes for the police. YIDO and the UPF also explicitly distinguished CWTs from Crime Preventers, and framed the CWT initiative as an attempt to strengthen police/community partnerships while avoiding the adverse unintended consequences of the Crime Preventers program.

The COP program we evaluate was designed and implemented by UPF with input from Ugandan civil society groups and other government agencies. The structure of the program represents what Ugandan stakeholders believed was the most effective model given local conditions,

subject to tight budget constraints. The research team had no control over the UPF's decision to implement the program, which constituted part of a progression of increasingly ambitious COP initiatives in Uganda. Relatedly, the research team made no direct contribution in-cash or in-kind to the UPF, which self-funded all implementation activities.

Finally, we took a variety of precautions to ensure the safety and wellbeing of the respondents who participated in our baseline and endline surveys. All surveys were conducted in private, and respondents were given the option of skipping individual questions or entire sections if they felt uncomfortable. They were also free to discontinue the survey at any time. While we collected some personally identifiable information to help us contact baseline respondents at endline, this information was kept secure on encrypted, password-protected servers managed by IPA Uganda. Written voluntary informed consent was sought and documented for the surveys and all other research activities.

D ADDITIONAL ANALYSES

Table D.1: Correlation Matrix - Trust

	Trust					
	Central Govt	MoH	District Govt	Police	Community	LC1
Trust Central Govt	1.00					
Trust MoH	0.38	1.00				
Trust District Govt	0.40	0.23	1.00			
Trust Police	0.45	0.38	0.34	1.00		
Trust Community	0.20	0.18	0.27	0.23	1.00	
Trust LC1	0.25	0.18	0.26	0.28	0.41	1.00

Table D.2: Correlates of COVID Knowledge (True/False Questions)

	(1)	(2)	(3)	(4)
	Number of Questions Answered Correctly			
Trust in State (Index)	-0.06*	-0.06*	-0.06*	-0.05+
	(0.03)	(0.03)	(0.03)	(0.03)
Trust in LC1	-0.01	-0.01	-0.01	-0.01
	(0.02)	(0.02)	(0.02)	(0.02)
Trust in other community members	-0.01	-0.01	-0.01	-0.01
	(0.02)	(0.02)	(0.02)	(0.02)
Female	-0.14***	-0.14***	-0.14***	-0.14***
	(0.03)	(0.03)	(0.03)	(0.03)
Age	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)
Education	0.08***	0.08***	0.07***	0.07***
	(0.01)	(0.01)	(0.01)	(0.01)
Religiosity	0.01	0.01	0.01	0.01
	(0.02)	(0.02)	(0.02)	(0.02)
Received government aid		0.10*	0.09+	0.09+
		(0.05)	(0.05)	(0.05)
Farmer			-0.00	-0.00
			(0.05)	(0.05)
Business owner/self-employed			0.00	0.00
			(0.04)	(0.05)
Unemployed and looking for work			-0.05	-0.06
			(0.12)	(0.12)
Unemployed and not looking for work			-0.11	-0.11
			(0.09)	(0.09)
Has difficulty accessing food			-0.02**	-0.02*
			(0.01)	(0.01)
Change in earnings last week			0.06**	0.06**
			(0.02)	(0.02)
NRM supporter				-0.04
				(0.04)
Constant	2.33***	2.31***	2.12***	2.12***
	(0.10)	(0.10)	(0.13)	(0.13)
Observations	2531	2531	2531	2531

Notes: OLS regression models with standard errors clustered at the village level.

DV: Count of true/false questions answered correctly (0-3).

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table D.3: Correlates of Knowledge of COVID Symptoms

	(1)	(2)	(3)	(4)
	Number of Symptoms Known			
Trust in State (Index)	-0.01	-0.01	-0.01	-0.01
	(0.02)	(0.02)	(0.02)	(0.02)
Trust in LC1	-0.02	-0.02	-0.02	-0.02
	(0.01)	(0.01)	(0.01)	(0.01)
Trust in other community members	0.01	0.01	0.01	0.01
	(0.01)	(0.01)	(0.01)	(0.01)
Female	-0.00	-0.00	0.01	0.01
	(0.02)	(0.02)	(0.02)	(0.02)
Age	-0.00^{+}	-0.00^{+}	-0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)
Education	0.01	0.01	0.01	0.01
	(0.01)	(0.01)	(0.01)	(0.01)
Religiosity	0.03**	0.03**	0.02*	0.02*
	(0.01)	(0.01)	(0.01)	(0.01)
Received government aid		0.04^{+}	0.05^{+}	0.05^{+}
		(0.03)	(0.03)	(0.03)
Farmer			-0.03	-0.03
			(0.03)	(0.03)
Business owner/self-employed			0.00	0.00
			(0.02)	(0.02)
Unemployed and looking for work			-0.05	-0.05
			(0.09)	(0.09)
Unemployed and not looking for work			-0.15*	-0.15*
			(0.08)	(0.08)
Has difficulty accessing food			0.01	0.01
			(0.00)	(0.00)
Change in earnings last week			-0.01	-0.01
			(0.01)	(0.01)
NRM supporter				0.04
				(0.02)
Constant	2.99***	2.98***	3.02***	3.02***
	(0.06)	(0.06)	(0.07)	(0.07)
Observations	2531	2531	2531	2531

Notes: OLS regression models with standard errors clustered at the village level.

DV: Number of COVID symptoms correctly identified (0-3).

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table D.4: List Experiment on Not Wearing Masks

	(1)
Delta	
Constant	0.51***
	(0.04)
Gamma	
Constant	1.51***
	(0.02)
Observations	2586

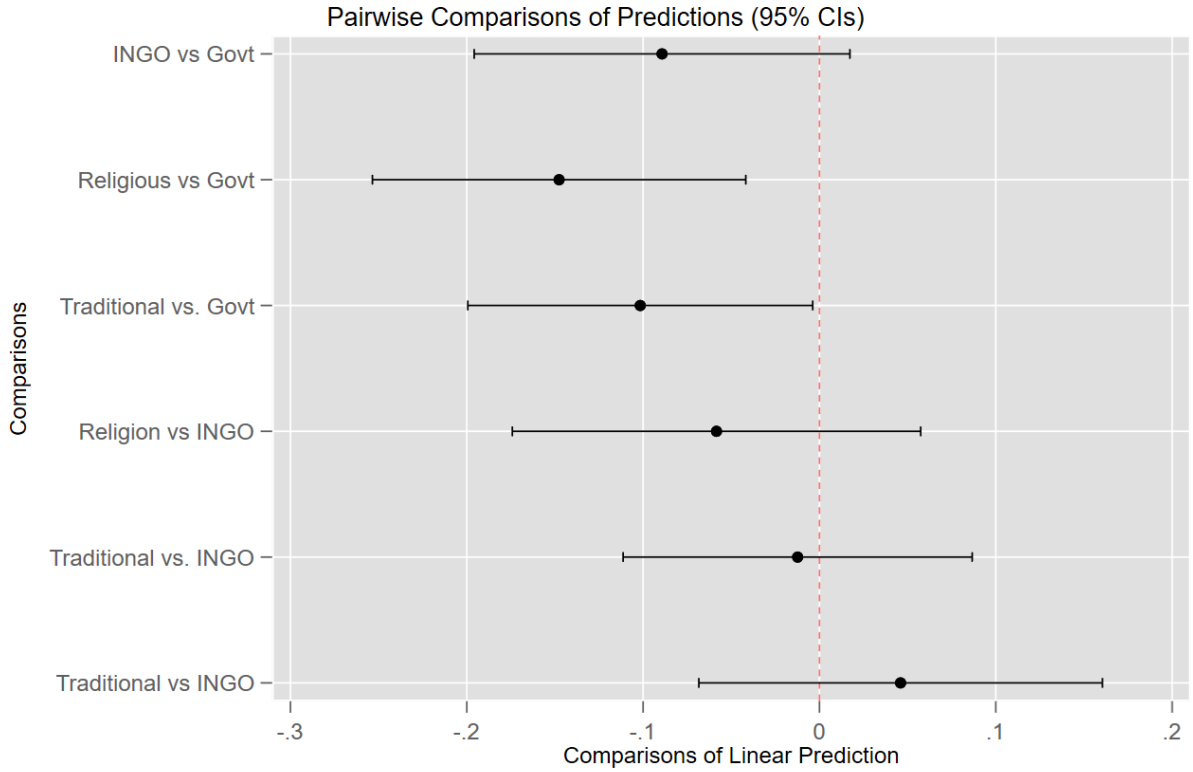
Notes: Least squares linear estimator with standard errors clustered at the village level.
Delta = estimated proportion of sample not wearing mask in public.
Gamma = predicted number of affirmative answers to non-sensitive items.
$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table D.5: List Experiment on Attending Religious Service

	(1)
Delta	
Constant	0.05
	(0.03)
Gamma	
Constant	1.49***
	(0.02)
Observations	2587

Notes: Least squares linear estimator with standard errors clustered at the village level.
Delta = estimated proportion of sample attending church or mosque in last 7 days.
Gamma = predicted number of affirmative answers to non-sensitive items.
$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure D.1: Support for Banning Gatherings (Pairwise Comparisons)



Notes: Pairwise comparisons of linear predictions from Model 1 in Table 1 with 95% confidence intervals. Standard errors are clustered at the village level.