

Letter

Sustained Government Engagement Improves Subsequent Pandemic Risk Reporting In Conflict Zones

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Community information sharing is crucial to a government's ability to respond to a disaster or a health emergency, such as a pandemic. In conflict zones, however, citizens and local leaders often lack trust in state institutions and are unwilling to cooperate, risking costly delays and information gaps. We report results from a randomized experiment in the Philippines regarding government efforts to provide services and build trust with rural communities in a conflict-affected region. We find that the outreach program increased the probability that village leaders provide time-sensitive pandemic risk information critical to the regional Covid-19 Task Force by 20%. The effect is largest for leaders who, at baseline, were skeptical about government capacity and fairness and had neutral or positive attitudes towards rebels. A test of mechanisms suggests that treated leaders updated their beliefs about government competence and shows that neither security improvement nor project capture by the rebels are primary drivers. These findings highlight the important role that government efforts to build connections with conflict-affected communities can play in determining public health outcomes during times of national emergencies.

When humanitarian crisis strikes—whether a typhoon, earthquake, or global pandemic—conflict-affected communities are often hard-hit victims. Annually, “natural” disasters affect

nearly 160 million people; from 2005–2009 nearly 60% of deaths from disasters occurred in conflict-affected states (Harris, Keen, and Mitchell 2013). A central challenge to disaster mitigation and public health response during ongoing conflict is achieving smooth communication between government agencies and skeptical communities (Blair, Morse, and Tsai 2017; Grundy and Biggs 2019). Without timely information, emergency responses are slow and inaccurate, often failing to arrest the human toll of developing crises (Gensheimer et al. 1999). This is particularly important in the realm of global public health, as conflict zones frequently serve as “ground-zero” for infections that ultimately spread worldwide (Gayer et al. 2007).¹

How can governments improve community participation with crisis-response systems in areas experiencing conflict? We contend that a lack of community responsiveness is a specific symptom of distrust in the government more generally. Citizens and local leaders are disinclined to share pertinent information with the government in conflict zones due to low state legitimacy (Berman and Matanock 2015).² A burgeoning literature suggests that during “normal” times, delivering economic services to communities in conflict zones can build trust in the government, change perceptions of capacity

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The full Supplemental Information for the article is found at the American Political Science Review Dataverse: <https://doi.org/10.7910/DVN/C139OP>. The SI on the CUP website is an abridged version. We thank our partners in the intervention and data collection, especially the leadership at the Region V PNP, most notably Col. Ronaldo Cabral, the Region V DSWD, especially Katrina Manaya, and Grace Labalan Research Management. We are also grateful to Graeme Blair, Christopher Bryan, Susanna Campbell, Iza Ding, Tom Pepinsky, Mike Findley, Stephan Haggard, Jake Shapiro, Scott Desposato, Andrew Yeo, Mai Nguyen, and seminar participants at the Mansfield Foundation for helpful comments on this manuscript, as well as useful feedback from Eli Berman, Cesi Cruz, Allen Hicken, Craig McIntosh, Jacob Shapiro, and seminar participants at SEAREG and ESOC on the intervention and research design. Baseline surveying was carried out by Innovations for Poverty Action, Manila. Research carried out under UCSD Institutional Review Board authorization #182096S; the study was preregistered in the EGAP registry #20200324AB. Authorship is listed in alphabetical order; authors contributed equally to theory, experimental implementation, empirics and writing. Replication files are available at the American Political Science Review Dataverse: <https://doi.org/10.7910/DVN/C139OP>.

Received: May 19, 2020; revised: November 09, 2020; accepted: December 14, 2020. First published online: January 25, 2021.

¹ For example, lack of trust regularly inhibits mass vaccination efforts in conflict-affected locations (Kaufmann and Feldbaum 2009).

² Low state legitimacy stems from perceptions of low capacity and fairness, sympathy with insurgents, and combatants' attempts to dissuade people from coordinating with government personnel (Croft, Felter, and Johnston 2014; Sexton 2016).

and fairness, and improve information-sharing (Beath, Christia, and Enikolopov 2012; Berman, Shapiro, and Felter 2011; Crost, Felter, and Johnston 2016; Lyall, Zhou, and Imai 2020).³ In the context of a society-wide emergency, community experience with concerted government attention and service provision may result in increased willingness to cooperate with crisis response efforts, on the part of local leaders in particular.

It is not obvious that this dynamic will occur, however. On one hand, increased national solidarity or desperation during crisis could override reticence about information sharing and lead communities to cooperate *regardless* of their experience with prior government service provision (Waizenegger and Hyndman 2010). On the other hand, emergencies may heighten existing grievances and exacerbate perceptions that the government is unreliable and unresponsive, wiping out gains from the government's trust-building efforts (Harris, Holloway, and Peters 2019). These two very different responses to crisis are exemplified by the effects of the 2004 tsunami, which is credited with bringing about the conditions for peace in Aceh, Indonesia, while at the same time exacerbating conflict and increasing militant recruitment in coastal regions of Sri Lanka (Le Billon and Waizenegger 2007).

In this study, we provide causal evidence from the Philippines that government outreach efforts intended to extend services and build trust with village leaders in conflict zones can pay dividends during times of crisis. In March 2020, we were in the midst of a field experiment to evaluate the effectiveness of a program called *Usap Tayo* (trans. "Let's Talk") that sought to improve service provision in conflict-affected villages and build trust between government service providers and elected village leaders, known locally as "barangay kapitans." Kapitans are elected officials, but the rural, conflict-affected areas in our study have been excluded from the government for so long that kapitans function less as "local government" and more as intermediaries between their communities and the municipal government.⁴

In the five months immediately preceding President Duterte's COVID-19 lockdown order, leaders from randomly selected villages in a heavily conflict-affected region of the country took part in a series of focused meetings with representatives from select government agencies. *Usap Tayo* meetings were facilitated by Philippine National Police (PNP) officers who specialize in police-community relations. The purpose of the meetings was to increase programmatic service delivery to areas that have been left behind by bringing at-risk communities closer to the political networks that typically dictate service delivery (Cruz, Labonne, and Querubin 2017).

The genesis of our work with the PNP in Bicol Region has two important features. First, the collaboration was initiated by regional police leaders who acknowledged that past efforts to end the insurgency

exclusively through combat and repression had failed and who wished to test alternative approaches focused on public engagement and service delivery. Second, these officials were convinced that carrying out a reputable scientific study would give any findings greater weight with decision makers in Manila.

Recognizing the significant potential risks with conducting human subject research in conflict zones, as well as risks stemming from collaboration with state forces that have a history of abusive practices, we carefully evaluated the ethical risks and benefits of engaging in this study during a year-long due-diligence period that included two pilots. In the Research Ethics section of the appendix (section A.6), we outline the American Political Science Association's 12 ethical principles for human subjects research, identify the potential risks in each category, and describe in detail how we addressed each one. Ethical considerations were a primary factor that motivated our sampling strategy, the nature of the intervention, and outcome measurement, for example.

The COVID-19 pandemic presents a unique opportunity to test whether *Usap Tayo*'s confidence-building activities induced kapitans in conflict-affected villages to share information they otherwise would not have. Immediately after the lockdown order, the regional police leadership initiated an effort to gather data from kapitans about local risk factors crucial to the spread of COVID-19 in order to aid the region's interagency Covid Task Force.

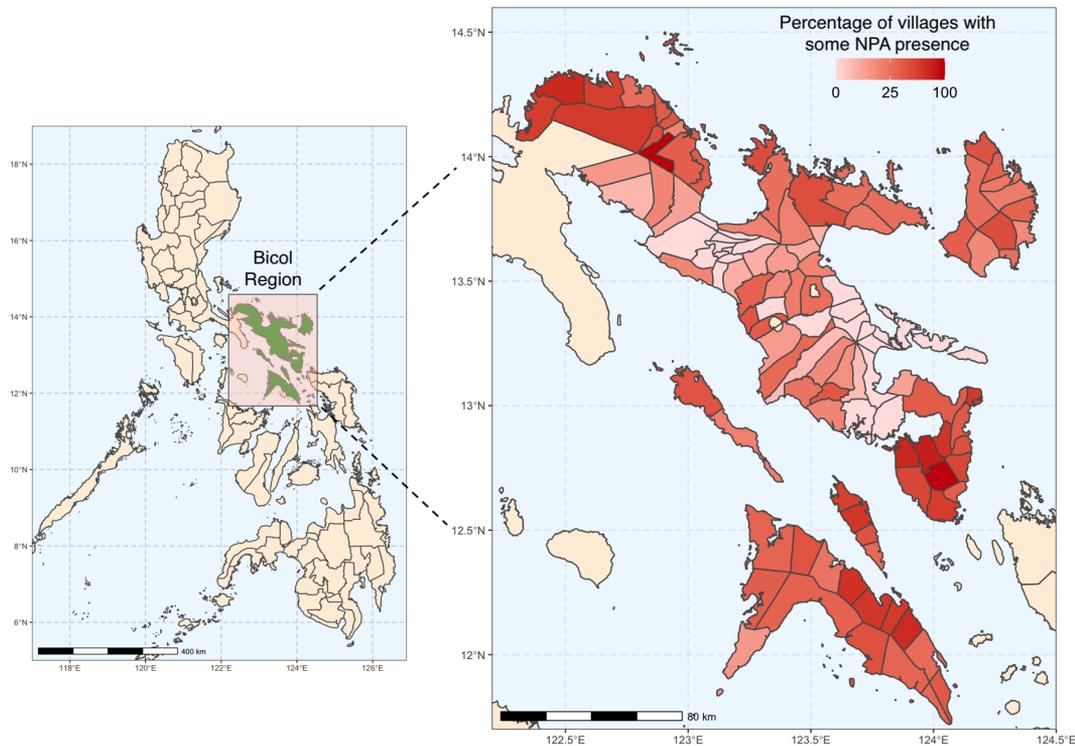
We find that kapitans from villages who participated in the *Usap Tayo* program were 20% more likely than leaders in control villages to respond to the Task Force with timely COVID-19 risk information. This finding implies that efforts to "lay a groundwork" of trust with local leaders can play an important role in determining whether cooperation happens once a crisis occurs. Examining several potential mechanisms—(1) beliefs about capacity and fairness in service delivery, (2) trust in government, and (3) attitudes towards rebels—we find the effects appear to be driven by kapitans who were previously skeptical about government capacity and fairness, who had neutral or positive attitudes towards rebels, and had ambivalent feelings about the government. Taken together, these mechanisms suggest that kapitans in "swing" areas were most susceptible to updating their beliefs about the capacity and competence of government to provide for communities.

CONTEXT

The context of our study is Bicol Region of the Philippines. Since the late 1960s, the Philippines has experienced an ongoing conflict between communist insurgents and the central government, resulting in tens of thousands of fatalities and economic stagnation for many rural areas. The government has pursued a largely punitive approach over the decades, using the army and police to attack insurgents and their supporters. In general, civilian government agencies responsible for public service provision have either tried to steer clear of conflict areas or had tremendous

³ A similar logic underlies the theory of community policing (Blair, Karim, and Morse 2019).

⁴ The municipal government plays an important role in local security implementation (Ravanilla, Sexton, and Haim *Forthcoming*). In the appendix, we further discuss similarities between kapitans' incentives and those of ordinary citizens (see page SI 3).

FIGURE 1. Conflict Activity in Bicol Region

Note: Village-level rebel presence categorized according to Armed Forces of the Philippines intelligence reports. Municipalities are shaded by the percentage of villages with some New People's Army (NPA) presence in any year during 2009–2015.

difficulty implementing projects in these areas.⁵ The New People's Army (NPA), for their part, have largely encouraged villages within their zone of influence to reject government help, even during emergencies (Walch 2014; 2018). The resulting exclusion of rural, conflict-affected villages from normal government service provision and mainstream politics has served to reinforce the sense of separation and inequality that feeds the NPA's revolutionary narrative. Bicol Region is a hotspot for the NPA conflict, and nearly all municipalities in the region have experienced some exposure to the conflict in the past decade (see Figure 1).

Acknowledging this problem, the Bicol PNP's community relations arm in mid-2018 sought to bring together police, civilian agencies, and village leaders from conflict-affected areas in an effort to build trust, improve service provision and ultimately break the “no collaboration, no cooperation” equilibrium that had prevailed on both sides of the conflict for a generation or more. Working with our research team and senior officials from other regional government agencies, the PNP developed the Usap Tayo program, began piloting in January 2019, and implemented the program in October 2019.

⁵ The government's flagship development program targeting conflict-affected areas (PAMANA) completed only 62% of budgeted projects (average completion time: 21 months) during 2011–2016.

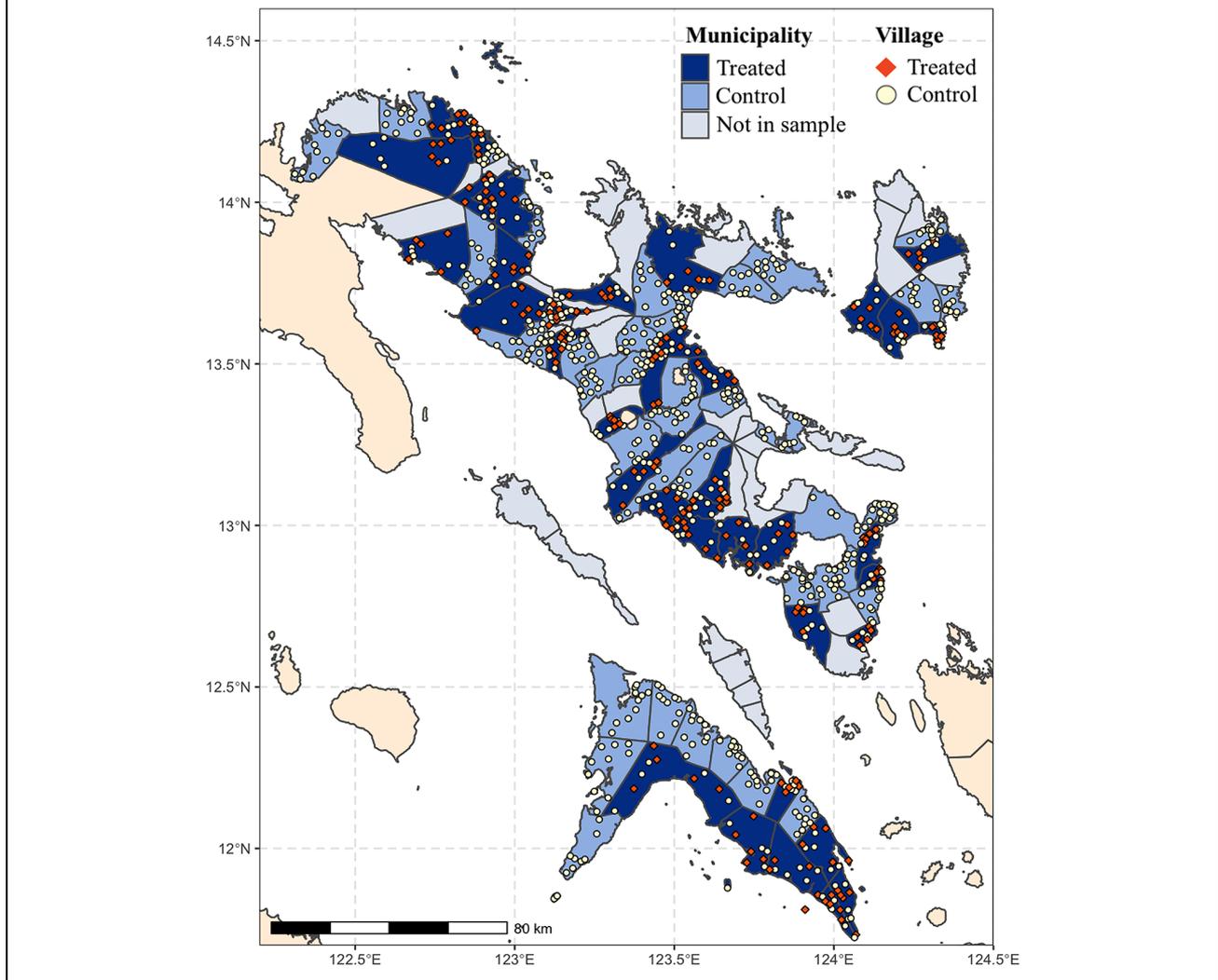
MATERIALS AND METHODS

Building on existing work on development efforts in conflict zones, the Usap Tayo intervention sought to incorporate “best practices” for building trust, including coordination between security and development agencies (Sopko 2020), a focus on small, feasible projects (Berman et al. 2013), and the repeated interactions needed to cultivate trusting personal relationships (McCloughlin 2015). The Usap Tayo intervention convened a series of meetings where village leaders met with program officers from major civilian line agencies every six weeks to match beneficiaries to government services. Meetings were coordinated and facilitated by the municipal PNP officer in charge of police–community relations at a central location in the municipality.⁶

In early meetings the agencies presented opportunities such as job training, seedling distribution, and entrepreneurship packages and the eligibility criteria for each.⁷ Village leaders were responsible for identifying eligible beneficiaries in their community and sharing enrollment

⁶ The focus on village leaders and locating the activities in municipal center is distinct from previous studies, and we think it is important for both ethical and substantive reasons. We discuss this at greater length in Appendix section A.1.3.

⁷ Meetings focused exclusively on these “soft” services rather than “hard” infrastructure projects like roads because the latter are frequent targets of rebel capture and violence.

FIGURE 2. Research Design

information with program officers. The meetings also provided an opportunity for leaders to communicate other problems with the government, including issues related to roadways, power, public security, education, and health. Details about the content and structure of the Usap Tayo intervention, including sample agendas and materials, are located in Appendix sections A.2, A.4, and A.9. Details about research ethics and measures to protect participants and the general public are located in Appendix section A.6.

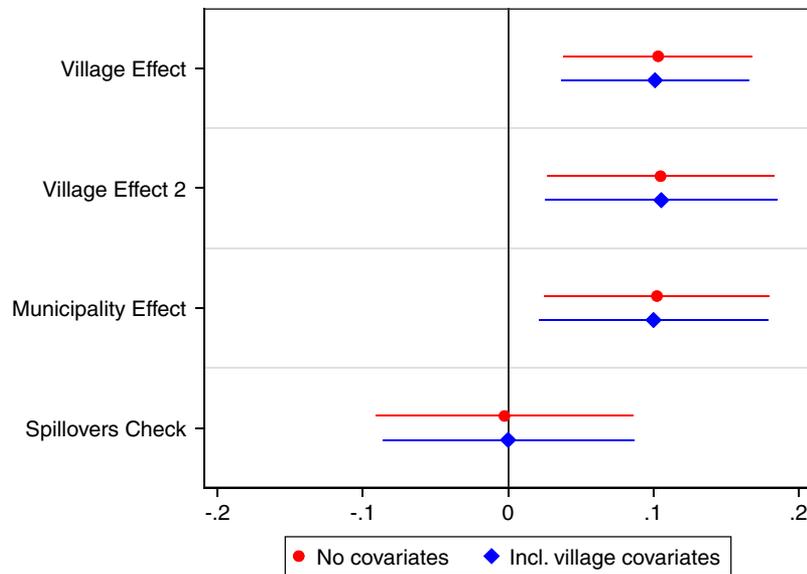
The effort was implemented as a randomized controlled trial that sampled 10 villages in each of 80 municipalities across every province of Bicol Region. Villages with significant NPA presence were avoided to protect participants; the program focused on marginal areas considered by the Armed Forces of the Philippines (AFP) to be “NPA-friendly” but not “infiltrated.”⁸ Two levels of randomization were

employed, first assigning 40 municipalities to treatment and 40 to control groups, and within each treated municipality five villages to treatment and five to control. This yields 200 treated and 600 control villages; the distribution of treated and control units around the region is illustrated in Figure 2.

Usap Tayo meetings were halted in early March 2020 due to the growing coronavirus problem. On January 30, 2020, the first case of COVID-19 was confirmed in the Philippines, launching a period of profound health concern and uncertainty in the country. As the disease spread worldwide, eventually being declared a global pandemic in March 2020, the government of the Philippines moved to contain the virus through quarantine on March 16, 2020. Although early cases were detected in Metro Manila, COVID-19 spread throughout the islands, especially on Luzon. Most traceable cases were linked to individuals who had traveled recently to

⁸ We employed a five-step sampling process that took into account AFP intelligence reports, insights from an experienced local research

team, and consultation with local stakeholders. We detail this process in Appendix sections A.1.4 and A.6.7.

FIGURE 3. Effect of Intervention on Response Rate

Note: Outcome is whether village leader provided COVID-19 risk information with Covid Task Force within five days. Control group mean is 0.51. "Village Effect" compares treated villages with all control villages. "Village Effect 2" compares treated villages with control villages in treated municipalities. "Municipality Effect" compares treated villages in treated municipalities with control villages in control municipalities. "Spillovers Check" compares control villages in treated municipalities with control villages in control municipalities. Standard errors are clustered at the municipal level in all models. Corresponding regression tables are included in the supplementary materials.

Metro Manila or abroad. Similar to other countries, most fatalities from COVID-19 occurred among the elderly and those with preexisting health conditions.

To implement the COVID-19 social-isolation, tracing, and quarantine policy, it was important for government agencies to conduct a highly localized assessment of risk factors to the spread of the pandemic. As part of the interagency Covid Task Force, the PNP regional command is responsible for helping to collect data and maintain peace and security during the pandemic response. The PNPs role is crucial for collecting information in far-flung barangays, which are relatively unsafe and difficult for agents from the Department of Health (DOH) to cover (Magno 2001). Using contact information available from the Department of the Interior and Local Government, representatives of the Police Community Relations (PCR) unit at the regional headquarters contacted kapitans in these conflict-affected communities to request information about recent travel to Manila, at-risk community members, and any apparent symptoms. Although the regional office sanctioned the Usap Tayo program, it had not directly participated in the meetings and the staff interviewers were not familiar with any of the barangay leaders they contacted. Importantly, those collecting the data were not aware of the Usap Tayo treatment status of the barangays.

RESULTS

Overall, 426 (53%) village leaders responded to the protocol, providing the information requested by the

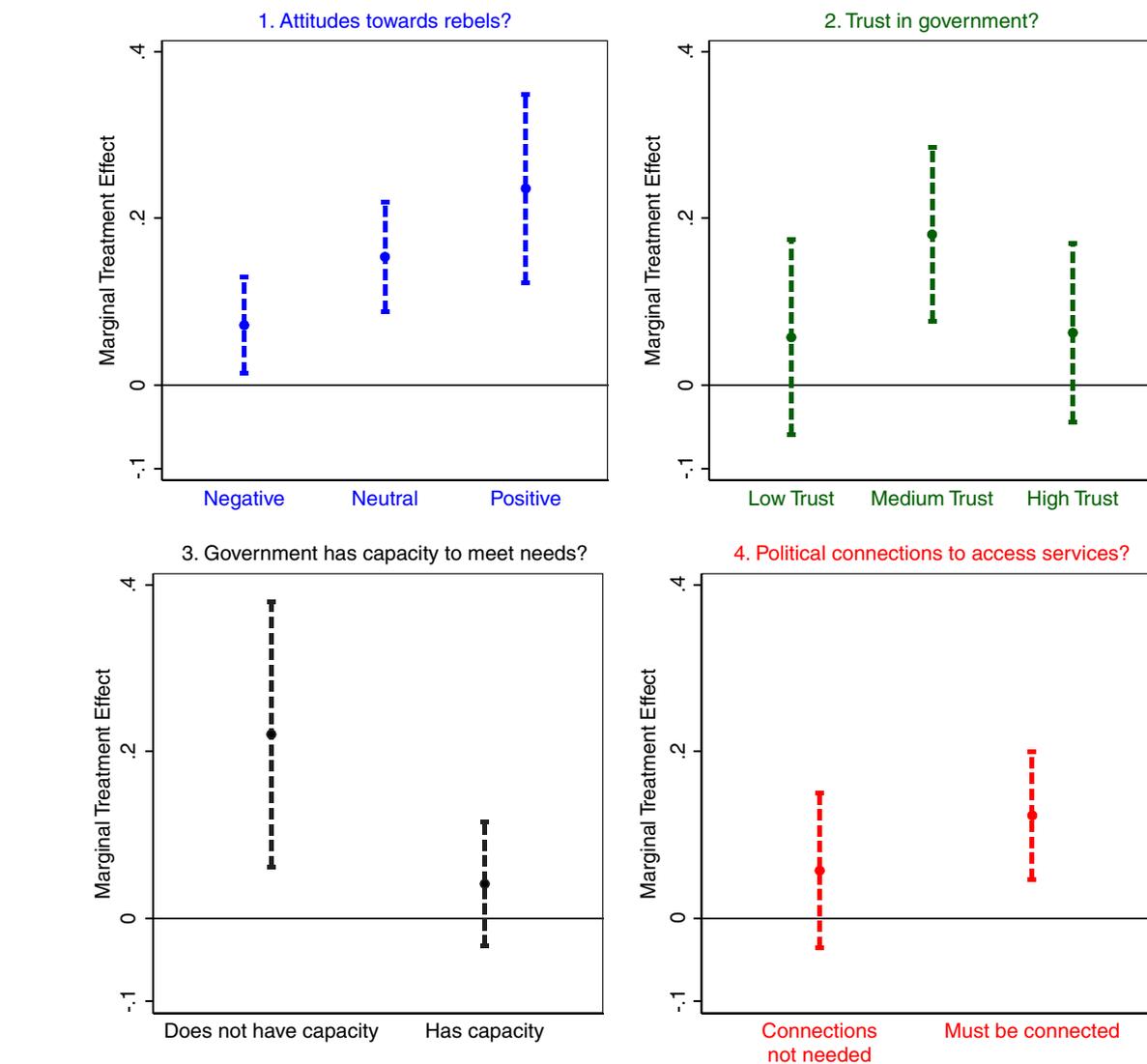
Task Force. Comparing the response rates for communities that had been participating in Usap Tayo versus those that had not, we find that treated villages were 10 percentage points (20%) more likely to respond: 61% versus 51%. This difference is statistically significant using conventional thresholds. As seen in Figure 3, this effect holds for several different comparisons: (1) treated villages versus control villages across the full sample, (2) treated and control villages in treated municipalities, and (3) treated villages in treated municipalities versus villages in control municipalities. The effects are nearly identical with and without pretreatment community and leader covariates.

Next, we test whether there were within-municipality spillovers by comparing control villages in treated municipalities with control villages in control municipalities. We find a precisely estimated null effect, which indicates no evidence of spillovers.

Mechanisms

To examine what mechanisms may be at play, we test how the treatment effect of the Usap Tayo program varies by baseline political attitudes of village leaders. Panel 1 of Figure 4 shows that the effects are strongest where leaders ex ante had neutral to favorable attitudes towards the NPA rebels. Where leaders had a positive view of rebels, the marginal treatment effect is 24 percentage points (68% vs. 44%), while the effect is only 7 percentage points for areas with anti-rebel attitudes.

We find that in control municipalities where leaders had a negative view of the rebels at baseline, risk-

FIGURE 4. Mechanisms: Heterogenous Treatment Effects by Baseline Political Attitudes

Note: Outcome is whether village leader provided COVID-19 risk information with Covid Task Force within five days of being requested. Pretreatment attitudes towards rebels based on average of two endorsement experiments. Government trust based on terciles of a 0–10 feeling thermometer. Capacity and patronage responses based on binary survey question responses. Standard errors are clustered at the municipal level in all models. Corresponding regression tables and details of survey questions are included in the supplementary materials. The effects in panels 1 and 3 are statistically significantly different from each other by conventional measures.

reporting compliance was 52%, whereas in control areas that had a positive view of rebels, average reporting was just 44%, illustrating how positive attitudes towards rebels and skepticism towards the government influence information sharing with the government during a pandemic. In treated areas, though, we find that reporting nearly converges: 59% in anti-rebel areas, 63% in rebel-neutral areas, and 64% in pro-rebel areas.

Panel 2 indicates that the Usap Tayo program's effect was greatest for leaders with medium trust in government (middle tercile, which is [7, 9] on a 10 point feeling thermometer), resulting in an 18 percentage point effect. Among those with low trust or high trust in government, the program appears not to change behavior, perhaps

because of high skepticism in those with low trust and ceiling effects for those with high trust.

Panels 3 and 4 indicate that Usap Tayo primarily motivated leaders who previously believed that the government did not have sufficient capacity to provide public services and that political connections were required to access services (via patronage). For those who already believed that the government could provide services in an equitable fashion, there was no significant effect.

Overall, the evidence indicates that the service delivery program managed to convince leaders who previously were favorable towards the NPA and ambivalent in terms of trust towards government, but felt that

government did not have capacity or fairness in distribution. Usap Tayo likely provoked these participants to update their beliefs about government competence; a review of monitoring-survey data from treated barangays indicates that over the course of the intervention, respondents steadily increased their evaluations of government service “satisfying expectations” and “program progress.”⁹

In the appendix, we test additional potential mechanisms and carry out a range of robustness checks that confirm the primary analysis and our characterization of updating of beliefs among persuadable leaders as the primary mechanism.¹⁰ We are able to rule out security improvements, project capture by the NPA, previous experience with survey data collection, previous experience with government-funded infrastructure projects, and differential attention by police stations as having driven the effects we observe.

DISCUSSION

Our study provides evidence that investing in the provision of “soft” public services can help with crisis response even in regions suffering long-term, endemic conflict between local militants and the central government. This finding is particularly important given the frequent, and uniquely devastating, overlap in the occurrence of armed conflict and crises brought on by natural hazards (Blaikie et al. 2014; Harris, Holloway, and Peters 2019; Leaning and Guha-Sapir 2013; Marktanner, Mienie, and Noiset 2015; Nel and Righarts 2008). From a policy perspective, our findings are informative for leading international development agencies that have long identified the intersection of conflict and natural disasters as a priority for study (World Bank 2007).

It is notable that the intervention worked by convincing local leaders who were previously skeptical about the government’s capacity to provide services, which in the past was a key insurgent talking point (Walch 2014). Local leaders are among the most important players that influence insurgencies, due to their role in coordinating population attitudes and behaviors. Future research may be able to determine to what extent these dynamics are replicable in other settings and whether cooperating on one dimension (in this case health) can lead to broader collaboration.

The results also contribute an important social science perspective to COVID-19 mitigation efforts and to crisis response more broadly. A growing body of research on the pandemic is primarily focused on the medical and epidemiological aspects of the crisis (Bai et al. 2020; Xu et al. 2020). However, as has been the case during past crises, the politics of disaster response and community behavior have received less attention in the scholarly literature (Siddiqi 2018). Our study is one of the first to provide systematic evidence about whether development-

style programs improve local leaders’ cooperation with the government during emergencies.¹¹

This study also sheds light on pandemic response in a region that has received less attention than have global powers like the United States, Europe, and China. Taken together, the results of this study provide evidence that concerted government efforts to deliver services and build relationships in conflict zones, even in the shadow of highly entrenched insurgencies, can pay dividends during national emergencies. Although government outreach may not be able to completely fill the confidence gap, it can play an important role.

FUNDING STATEMENT

Funding for this study was provided by Innovations for Poverty Action (IPA) Peace & Recovery Pilot Grant, Princeton Niehaus Center, UCSD Senate Seed Grant, Emory University PERS, and Dartmouth Dickey Center for International Understanding.

SUPPLEMENTARY MATERIALS

To view supplementary material for this article, please visit <http://dx.doi.org/10.1017/S0003055420001148>.

Replication materials can be found on Dataverse at: <https://doi.org/10.7910/DVN/C139OP>.

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¹¹ Our study complements recent scholarship on this topic (Christensen et al. 2020; Lazarev et al. 2014), by examining the influence of government engagement on village leaders’ behavior in a conflict-affected zone, implemented *prior to exposure* to a natural disaster, and using an intervention that was deliberately not health- or disaster-focused.

⁹ See additional details in Appendix section A.7.3.

¹⁰ We also find some inconclusive evidence that political connections between barangays and the mayor may have strengthened the treatment.

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