

# Subnational State Capacity and Trust in Governmental Responses to COVID-19: Survey Evidence From Mexico

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## Abstract

Do citizen perceptions of local state capacity shape evaluations of the national government in a crisis and public compliance with emergency rules? Recent social scientific research on COVID-19 draws on work conducted in rich countries to suggest a number of factors driving government actions, societal behavior, and health outcomes in response to the pandemic. In Latin America, where political parties are weak and poverty more rampant, other more basic factors likely matter more. Perhaps most importantly, in countries across the region state capacity tends to be weaker or more fragmented than in rich countries. We argue that subjective perceptions of state capacity, based on how citizens view the effectiveness of local services, strongly shape how they evaluate the national government's response to COVID-19. We leverage an online survey across two Mexican states, including an embedded framing experiment, to support this argument. Our findings suggest that governments that need to rapidly build public confidence in policy responses when they need it the most—during the onset of a major crisis—should be concerned about the persistence of pockets of weak state capacity at the local level and its effects on citizens' view of the national government.

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In moments of national crisis, governments rely on state capacity to marshal needed resources and elicit compliance from citizens (Levi and Sacks 2009). In much of the world, however, state capacity—or the ability of the government to implement policy and provide public goods and services—is unevenly developed throughout a country’s territory. In many developing democracies, weak state capacity is compounded by public perceptions of government corruption and unresponsive institutions that erode trust in government (Rose-Ackerman 2001; Soifer 2008). Do citizen perceptions of local state capacity shape evaluations of the national government and facilitate public compliance with emergency rules during a crisis?

In this study, we argue that individuals update their confidence in *national* government policy based on their direct experience with the state. Most citizens, however, interact with the state at the *subnational* level of government through regional and municipal authorities. The interplay between national and subnational government suggests that individual perceptions of local state capacity mediate how citizens evaluate and comply with national governmental responses to a severe crisis. Therefore, we expect that subnational variation in state capacity has highly localized and durable effects on individuals’ subjective perceptions of government, irrespective of the central state’s actual governing capacities during a sudden crisis. We hypothesize that these perceptions mediate how citizens interpret the effectiveness of the *national* government’s crisis response, on the one hand, and citizens’ compliance with government emergency mandates, on the other.

The rapid spread of the novel coronavirus (COVID-19) provides a unique opportunity to study these questions because the management of the pandemic requires national government coordination and mass compliance (physical distancing and mask-wearing) from residents. We depart from most of the emerging COVID-19 literature by placing emphasis on the political and social realities of the Global South. To date, much of the social scientific research on the pandemic solely considers rich economies, thus raising questions as to the generalizability of their conclusions. Emerging work from the United States, for instance, highlights partisanship as the greatest predictor of compliance with

recommended health behaviors (Kushner Gadarian, Goodman, and Pepinsky 2020). Still, other research on the U.S. response to COVID-19 points to poverty and economic disparities as the main culprits driving non-compliance with local shelter-in-place protocols (Wright et al. 2020). But in many developing economies, where political parties are weak and poverty more rampant, the efficacy of state institutions across levels of government is especially critical. For example, in countries across Latin America, state capacity tends to be more fragmented than in rich countries. Through their interactions with local authorities and services, Latin Americans have vastly different experiences of government, with implications, we argue, for how they evaluate national government. Our main theoretical contribution, therefore, is to consider how perceptions of local state institutions shape the national government's ability to elicit trust and compliance with protective measures in developing countries with lower levels of state capacity.

To examine the role of local state capacity in shaping public confidence in, and compliance with, government action in response to COVID-19, we draw on an original, online survey of adult citizens in two Mexican states administered during the summer of 2020. Our research design addresses issues of reverse causality in our regression models and the external validity of our findings in two ways. First, recognizing potential endogeneity in the relationship between subnational state capacity and the national government's response to crisis, we provide experimental evidence alongside our cross-sectional results. More specifically, we generate variation in perceptions of local state capacity across respondents through the use of information and framing vignettes. We then trace how these changes translate into evaluations of the federal government, providing causal evidence of the hypothesized relationship.

Second, to address issues of generalizability, we sample from the Mexican states of Puebla and Tlaxcala. Both states are similarly proximate to the federal capital of Mexico City but differ in terms of historical and contemporary indicators of state capacity. Sampling from these two states allows us to approximate variation in local state capacity across Latin America, holding constant the national government's response to the crisis. Puebla and

Tlaxcala also rank in the bottom quartile of states in terms of median household wealth and are therefore more representative of economic conditions in developing democracies in the region. Thus, to the degree that the relationship between local state capacity and evaluations of the national government holds across our sample, we are confident that this association can be generalized to most of Latin America and, more broadly, developing democracies across the Global South.

Our multi-method approach uncovers the role of subjective perceptions of state capacity (based on how citizens view the effectiveness of local services). In doing so, we demonstrate that subjective perceptions of state capacity strongly correspond to how citizens evaluate the national government's response to COVID-19. The findings suggest that policy emphasis on boosting state capacity through civil service reforms, like meritocratic promotion in bureaucracies based on education, overlook the subjective nature of trust in government as a function of more routine interactions between the state and society. Instead, governments that need to rapidly build public confidence in policy responses when they need it the most—during the onset of a major crisis—should be concerned by the persistence of pockets of weak state capacity at the local level and its effects on citizens' view of the national government.

## **1 Background**

### **1.1 State Capacity and Trust in Government**

Why is state capacity consequential for how governments and societies respond to a public health crisis on the scale of the COVID-19 pandemic? A robust literature on the link between state capacity and trust in government offer some theoretical and empirical insights on this question. First, trust in government goes hand-in-hand with broader notions of democratic legitimacy and voluntary compliance with rules. The conditional relationship between trust in government and government effectiveness is well-documented (Braithwaite and Levi

2003; Levi, Sacks, and Tyler 2009). But trust must be *earned* and depends not just on popular belief in the legitimacy of authorities but also whether the government wields the state capacity to reliably carry out important policy decisions that produce their intended effects (Levi and Sacks 2009). State capacity, or the ability of the state to exercise authority and implement decisions throughout a national territory, underwrites both the political and material basis for policy legitimacy (Soifer 2008).

Second, while the state's capacity to govern in part facilitates institutional trust among citizens, government efficacy also bolsters state capacity by encouraging compliance. Political economy scholarship establishes a positive effect of state capacity on politically salient outcomes ranging from economic growth and tax collection to the size of the welfare state (Besley and Persson 2014; Rothstein, Samanni, and Teorell 2012). For example, the ability of governments to collect detailed population information facilitates the provision of public goods and services. States that can reliably monitor economic activity among the population are more likely to induce tax compliance necessary for funding public goods provision (Lee and Zhang 2016). Alternatively, weak state capacity can generate path dependent legacies of low social and institutional trust. For instance, citizens in countries with high infant mortality rates a century ago are less trusting today and more likely to rely on political patronage over the public bureaucracy to meet their needs (Bustikova and Corduneanu-Huci 2017). In short, state capacity has macro-level implications for economic performance and social development as well as micro-level consequences for individual behavior and beliefs toward government.

Given the rapid and ongoing spread of COVID-19, research on the effects of state capacity on cross-national differences in virus outcomes remains limited as of this writing. Several observational studies on the political and social determinants of COVID-19 mortality around the world lend support to the outsized role of state capacity vis-à-vis political institutions and social structures (Bosancianu et al. 2020; Serikbayeva, Abdulla, and Oskenbayev 2020). Bosancianu et al. (2020) show that even as the highest COVID mortality rates are concentrated among higher income countries state capacity accounts for most

cross-national statistical variation in COVID deaths per capita. By measuring state capacity with indicators of state fragility, institutional trust, and government effectiveness, this study offers strong correlational evidence that state capacity and trust in government interact to shape outcomes during the crisis. Likewise, Serikbayeva, Abdulla, and Oskenbayev (2020) find that state capacity, measured by World Bank data on government effectiveness, is the strongest predictor of lower COVID mortality around the world.

The consequences of inadequate state capacity, even on one dimension, can have severe consequences even in wealthy democracies with ostensibly strong central states and generous public healthcare systems. There is some cross-national evidence that democracies are underperforming relative to non-democracies in minimizing the spread of COVID-19 (Serikbayeva, Abdulla, and Oskenbayev 2020). In Italy, for example, a lack of state capacity specifically to respond to crisis scenarios, coupled with the policy inertia of political and administrative processes of the Italian state, hindered the ability of the government to stem the rapid transmission of COVID. The country became the European epicenter of the virus tragically resulting in over 233,000 cases and 33,400 deaths by the end of May 2020 (Capano 2020). The still inchoate research on state capacity and COVID-19, however, is yet to examine the subnational dynamics of how the uneven reach of state capacities and public services shape outcomes. The empirical relationship between government effectiveness and trust *across* countries may well extend to government effectiveness *within* countries in determining whether individuals trust in their government's handling of the pandemic, and whether they comply with public health mandates.

## **1.2 Subnational State Capacity, Decentralized Authority, and Policy Beliefs**

There is a growing body of research that suggests that the political and policy implications of *subnational* variation in state capacity may prove consequential for governments and societies responding to a crisis like the COVID-19 pandemic. The uneven territorial devel-

opment of modern states show that the “strong vs. weak” state distinction is as much a subnational phenomenon as it is a national one (Soifer 2008). Large countries that evolved as “frontier states” through the gradual settlement of territory in the periphery exhibit wide geographic variation in state capacity and political culture. Comparing the frontier zones of Brazil, Canada, and the United States with their non-frontier regions, Foa and Nemirovskaya (2016) show that fiscal and administrative state capacity lags in places where settler society developed ahead of formal governance. This developmental legacy helps explain regional differences in anti-tax and anti-redistribution policy attitudes, socioeconomic inequality, and the quality and accessibility of critical public services. Such a developmental path for large swaths of a country have deleterious consequences for regional political and policy outcomes. In Northern Vietnam, for example, citizens in areas ruled by a bureaucratic state inherited from China receive more public goods and redistribution and enjoy higher living standards today than areas with more personalized patron-client relations under the Khmer Empire (Dell, Lane, and Querubin 2018).

Beyond long-term consequences, subnational variation in state capacity can also have more contemporaneous dynamics that affect state-society relations and policy outcomes. In line with findings linking state capacity to tax preferences, recent research on “tax morale” in Latin America shows that economic conditions interact with low state capacity in shaping individuals’ “willingness-to-pay” into the social contract. Specifically, a study by Castañeda, Doyle, and Schwartz (2020) finds that individuals with access to social protection via market-based mechanisms (i.e. employer-based healthcare) in low capacity states are more likely to view tax evasion as morally justifiable. Using an experimental survey administered across Mexico City, the authors show that this relationship holds at the subnational level even in a relatively high state capacity urban center with a large public healthcare sector. While these findings are unclear on rural dynamics, they portend a durable state of distrust in government in countries with uneven state capacity, high social inequality, and increasing opportunities for higher-earning individuals to opt out of public services. Most concerning from a policy standpoint is that low tax morale and distrust in the social contract extends to

trust in fellow citizens (e.g., social trust) and support for government intervention in other domains (Rothstein and Stolle 2008). These are the sort of dynamics that states should worry about in a crisis.

In developing countries, geographic distance between rural municipalities and urban political centers tends to correspond to the provision and quality of basic services (Brinkerhoff, Wetterberg, and Wibbels 2018; Harbers 2015), with implications for how citizens experience government across space. In a study of over 21,000 respondents across seventeen countries in Sub-Saharan Africa in which respondents were georeferenced for distance from urban centers, Brinkerhoff, Wetterberg, and Wibbels (2018) show that while greater citizen satisfaction with services increases their trust in government (and vice versa) the relationship is attenuated by their expectations of government given the role of the state in their daily lives. In distant, rural municipalities with weak state capacity, citizens are less likely to lose confidence in the government as a consequence of dissatisfaction with basic services than citizens living within or closer to urban centers who expect more of the state. Thus, whether citizens in rural municipalities attribute blame to national and local officials for poorer service provision may depend on the “presence” of the state where they live.

The growing body of research on subnational state capacity and its effects offer ample theoretical and empirical support for prior studies linking state capacity to macro-level outcomes such as economic growth and social policy. Research on the effects of subnational variation in state capacity also highlight spatial and micro-level dynamics that upend assumptions about strong states. Even in high-income democracies with strong centralized institutions, pockets of weak state capacity undermine trust in government while constraining the implementation of important national policy decisions. As a means to investigate the relationship between government and society in the context of the COVID-19 pandemic, we look to subnational state capacity as a promising departure point, even as it presents its own analytical challenges.

### 1.3 Methodological and Theoretical Challenges in Subnational Research

For all the robust statistical findings on the political and policy consequences of state capacity at national and subnational levels of analysis, consistent and reliable measures across territorial units of analysis remain a vexing issue for researchers (Berwick and Christia 2018; Luna and Soifer 2017). For many countries, particularly in the Global South, it is difficult to collect comparable indicators of state capacity (Cingolani 2019; Harbers 2015). Moreover, state capacity is a multi-dimensional phenomenon that includes fiscal capacity (i.e. reliable tax collection) and coercive capacity (i.e. military and police) as well as overlapping categories of public administration (i.e. provision of emergency services) and property rights protection that all present challenges for measurement validity (Hendrix 2010; Rogers and Weller 2014). This raises both methodological and theoretical hurdles for studying the political consequences of subnational state capacity.

One oft-cited methodological hurdle for state capacity research is the *modifiable areal unit problem* (MAUP). The MAUP describes statistical bias that is dependent on the geographic criteria and units of measurement of spatial variables (Lee and Rogers 2019). State capacity indicators collected at the national level to predict outcomes (i.e. economic growth, infant mortality, corruption, etc.) will likely produce results inconsistent with those collected at the provincial or municipal levels of government (and vice versa). The problem also extends beyond analyses using data collected by a country's political or administrative jurisdiction to non-jurisdictional criteria, such as economic concentration of agriculture in a given region. Since conclusions about the relationship between state capacity and important political and policy outcomes are ultimately shaped by empirical findings, the MAUP also poses a theoretical problem for researchers (Soifer 2019).

To resolve some of these issues, some researchers suggest a survey-based approach to measuring subnational state capacity (Harbers 2015; Luna and Soifer 2017). Survey-based measures offer several theoretical and methodological advantages over data collected by

governments, or state-generated data. First, the quality and quantity of state-generated state capacity data are often endogenous to existing state capacity and political institutions. Specifically, low capacity municipalities or regions often struggle to reliably collect and publish data on tax collection, civil service employment, or security personnel overall. Alternatively, low capacity states are more likely to lack oversight leaving government officials more vulnerable to political and economic incentives for manipulating official data (Luna and Soifer 2017).

Second, survey-based measures allow researchers to operationalize state capacity along dimensions most directly relevant to the question at hand. Researchers interested in redistribution may require measures of tax capacity to test their hypotheses whereas those examining trust in government might be interested in citizens' perceptions of civil service quality (Hanson and Sigman 2013). Given that state capacity broadly refers to many different forms of the state's ability to project authority and implement policy, survey-based measures allow for easier disaggregation and operationalization of state capabilities. Luna and Soifer (2017) for example, advance several measures that separately capture the reach of state institutions, fiscal capacity (e.g., tax collection), and property rights enforcement. Finally, survey-based state capacity measures have been shown to spatially correlate with difficult to collect municipal-level data on tax records or geographic data on the electricity provision, thus lending support to their validity (Harbers 2015).

In the remaining sections, we build on the broader literature on state capacity and develop several implications for uneven state capacity and government performance in response to COVID-19. We advance a theoretical argument and empirical expectations for the relationship between subnational state capacity and how citizens evaluate governmental responses to the pandemic.

## 2 Our Approach: Perceptions of Local State Capacity

We proceed from our central claim that individuals update their confidence in *national* government policy based on their direct experience with the state. We assume that the experience that individuals have with the state is largely conditioned by *local* state capacity, e.g., the reach and effectiveness of *local* state institutions where people live. Since most citizens interact with the state via public services, law enforcement, and policies as they are implemented by subnational and municipal authorities, we argue that individuals form and update their beliefs about government effectiveness based on their immediate experience with the core functions of the state. Local state capacity shapes individual expectations and preferences toward government, irrespective of national state capacity in the aggregate. We argue, in other words, that subnational variation in state capacity has highly localized effects on individuals' subjective perceptions of government, and that these perceptions mediate how citizens interpret the effectiveness of the *national* government in times of crisis, at one level, and compliance with emergency health mandates, at another. In short, we expect that perceptions of local state capacity correspond to whether individuals express confidence in the government's response to COVID-19 and report compliance with the national government's health mandates.

We derive these hypotheses from several important theoretical insights we highlight in the preceding section. First, at a fundamental level, the societal bargain with the state is premised on the government's ability to carry out the state's responsibility to protect its citizens from internal and external threats (Migdal 1988; Tilly 1985). Since the advent of modern states, the nature of threats subject to government intervention has evolved to include not just protection from physical violence, property loss, or economic displacement but also shocks such as natural disasters, recession, food shortages, and public health crises. Even in low and middle-income developing democracies, social protection is increasingly the purview of the state (Mares and Carnes 2009). We therefore assume that individuals view the national government as the first line of protection against large-scale threats to

the public, and that the COVID-19 pandemic constitutes such a threat.

Second, government performance and administrative competence shapes trust in government, in addition to perceptions of leaders' motivations (Levi, Sacks, and Tyler 2009).<sup>1</sup> The perceived ability of the state to deliver on its core functions by providing public services and infrastructure (government performance) and competently and impartially administering services (administrative competence) is, at a basic level, conditional on the "reach of the state" throughout the country. Therefore, we expect that *higher state capacity increases the likelihood of individuals holding positive evaluations of the government's response to COVID-19*.

Third, trust in government also shapes the willingness of individuals to comply with the laws and dictates of government officials (Levi, Tyler, and Sacks 2012). Compliance is generated, in part, by the belief in the legitimate authority of the government based on procedural fairness. By procedural fairness, we mean that public goods and services are distributed equitably and through impartial processes (Sunshine and Tyler 2003). But the relationship between trust, perceptions of legitimacy, and compliance is also informed by the expectation that others hold similar beliefs in the procedural fairness of the state (Levi and Sacks 2009). Where citizens are less likely to receive a fair distribution of services and/or the fair exercise of authority individuals are less likely to comply with rules. They are also less likely to believe that others in their community are complying with the rules, thus undermining social trust important for reciprocity and compliance (Braithwaite and Levi 2003). We therefore also expect that *higher state capacity increases the likelihood that individuals and their community are in compliance with mandated COVID-19 health precautions*.

In sum, we extend the implications of the relationship between state capacity, trust, and compliance to domestic government performance and societal responses at the local level in the extremely rare policy context of a global pandemic. Across both democracies and

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<sup>1</sup>For now, we set aside leader motivation as a driver of trust since it is likely confounded by patterns of political polarization, partisan affinities, and corruption.

non-democracies, regardless of level of economic development, the public recognizes the basic obligation of the state to protect the population in times of crisis. The very legitimacy of governments rests on this basic premise. We therefore examine whether the state's capacity, or lack thereof, to provide basic public goods and services shapes confidence in, and compliance with, the government's response to a crisis of the magnitude of COVID-19. In the remaining sections, we outline our research strategy followed by a discussion of results vis-'a-vis our expectations of the role of perceptions of local state capacity.

## 3 Empirical Approach

### 3.1 Setting

To examine the political and policy relationship between local state capacity and COVID-19, we look to Mexico as an important case for generalizing our implications to developing democracies around the world. As a region, Latin America, and Mexico, specifically, exhibits much of the cross-national and subnational political, economic, and social conditions characteristic of other parts of the Global South. As the *New York Times* reports, many poor vendors and workers in the country's epicenter of the Itztapalapa neighborhood of Mexico City claim they are faced with a stark choice between working at the risk of contracting the virus and being unable meet their basic needs, all while contending with a weak healthcare system and social safety net (Ahmed and Berehulak 2020). We argue that given our theoretical expectations and scope conditions Mexico offers a compelling laboratory for studying state capacity and citizens' experience with COVID-19 vis-à-vis the government for several reasons.<sup>2</sup>

First, the impact of COVID-19 in the Western Hemisphere is notable despite wide variation in political and economic development across the region. Along with the United

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<sup>2</sup>There is also a practical advantage of studying the impacts of COVID-19 in Mexico. Given the difficulty of fielding in-person surveys in poorer countries during a pandemic, survey-based research in Mexico benefits from the country's established online public polling infrastructure and large pool of online survey participants.

States, Latin America quickly emerged as one of the hardest hit regions during the 2020 outbreak of COVID-19. The region includes small, low-income countries such as El Salvador, Honduras, and Paraguay as well as middle-income countries with large and globally consequential economies like Argentina, Brazil, Mexico, and Peru. With some exceptions, such as Costa Rica and Uruguay, many Latin American countries suffer from the persistence of severe socioeconomic inequality, political instability, and weak institutions (Brinks, Levitsky, and Murillo 2020). Nevertheless, Mexico and Brazil have consistently alternated as the countries in the region that have most struggled to contain the virus and its economic fallout.<sup>3</sup>

Second, Mexico stands out as having not just one of the highest rates of infection and mortality in the region, but also the world (as of October 2020).<sup>4</sup> The institutional and political environment of Mexico presents significant challenges to national efforts at containing the virus. Like many developing democracies around the world, Mexico is riven by systemic corruption, bureaucratic deficiencies, and uneven development, all while the gains of economic growth in recent decades have been unequally distributed. Consequently, much of the population remains poor and dependent on a large informal economy.<sup>5</sup>

Third, Mexico is a geographically expansive territory with considerable subnational variation in state capacity across both urban and rural locales. This is true, of course, of most countries, but these issues are specially acute in Latin American countries. As a federal political system made up of 32 states and the Federal District of Mexico City, governance in Mexico is highly decentralized with a large role for state and municipal authorities in the implementation of national and regional policies. Similarly, state and local governments are largely responsible for administering public goods and services such as education, healthcare, infrastructure, and security government (Selee 2011). The uneven

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<sup>3</sup>See the Americas Society/Council of the Americas' (AS/COA) *The Coronavirus in Latin America* tracking report at <https://www.as-coa.org/articles/coronavirus-latin-america> for updates on national health and economic indicators related to COVID-19.

<sup>4</sup>See COVID-19 tracking data at <https://coronavirus.jhu.edu/data/mortality> for up-to-date statistics.

<sup>5</sup>According to a 2019 OECD Economic Survey, nearly 60% of the Mexican labor force relies on informal employment (OECD 2019).

development of state capacity, like in many post-colonial countries, can be traced to colonial-era institutions and political transformation since independence (Garfias 2018b, 2018a). In recent decades, private sector growth and the increasing availability of privatized social services has also contributed to the turn away from the state as a guarantor of public safety and welfare (Castañeda, Doyle, and Schwartz 2020). Nevertheless, the federal government is characterized by a strong executive branch responsible for planning and coordinating national policy interventions in response to crises, such as the country's history of severe earthquakes.

To gain empirical leverage on the role of local state capacity, we sample respondents living in the neighboring states of Puebla and Tlaxcala in order to introduce some historical and exogenous variation in state capacity at the state-level while holding the national context constant. For example, Puebla (but not Tlaxcala) was one of several Mexican states hardest hit by the 2017 earthquake and thousands of schools, hospitals, and cultural spaces are still waiting for repairs under the federal government's National Reconstruction Program (Ortiz 2020). Both states are similarly proximate to the capital region of Mexico City and rank similarly in terms of GDP per capita as of 2016 (Puebla at 26th and Tlaxcala at 29th out of 32 states) but vary across a number of official indicators of state capacity (OECD 2019).<sup>6</sup> In short, Puebla and Tlaxcala are more representative of per capita household wealth in poorer developing democracies in Latin America and the Caribbean, such as Bolivia, Guatemala, Guyana, Jamaica, and El Salvador, than other regions.<sup>7</sup> We believe that these background conditions allow us to generalize our findings not just to the rest of the region but also to many developing democracies across the Global South.

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<sup>6</sup>Subnational state capacity data set referenced from (Somuano and Nieto 2013) based on the 2013 *National Survey of Governmental Quality and Impact* administered by the Ministry of Finance and the National Bureau of Statistics (INEGI).

<sup>7</sup>Comparison based on GDP per capita, purchasing power parity (PPP) in 2017 international dollars from World Development Indicators database at [www.data.worldbank.org](http://www.data.worldbank.org).

## 3.2 Research Design

We investigate the relationship between local state capacity and two outcomes: (1) satisfaction with the federal government’s response to COVID-19 and (2) compliance with national government recommendations using subnational survey data from Mexico. As we discuss above, since state capacity is latent and not directly measurable, we collect respondent data on *perceptions* of local state capacity.

We proceed empirically using two approaches. The first leverages existing variation across respondents to assess the association between local state capacity and satisfaction with the federal government’s response to COVID-19. Specifically, we estimate:

$$y_i = \alpha_{[j]} + \gamma s_i + \mathbf{X}_i \boldsymbol{\beta} + \mu_i$$

where  $y$  is respondent  $i$ ’s satisfaction with the federal government’s COVID response or compliance with health measures,  $\alpha$  is a randomly-varying intercept for state  $j$ ,  $s$  is respondent  $i$ ’s *perception* of local state capacity,  $\mathbf{X}$  is a vector of our adjustment variables, and  $\mu$  is an idiosyncratic error term. The term of interest is  $\gamma$  which measures the association between perceptions of local capacity and evaluations of the government’s coronavirus response.

We recognize throughout that causality may run in multiple directions. The government’s coronavirus response might permeate how respondents view lower levels of government. But the direction of such bias is, *ex-ante*, unclear. Poor performance at the federal level might lead respondents to readjust expectations at the local level, improving their own views of local capacity. Our models therefore include adjustments that capture partisanship, political activity, and education levels to do our best to improve identification. Still, we make no causal claims in this design. Our aim here is to assess whether the relationship is consistent with our theoretical expectations.

Our second strategy attempts to get at causality by generating exogenous variation in

Table 1: Information Treatments Across States

State	Text
Puebla	Recently, the Department of Public Security of the State of Puebla fired 43 officers after these officers failed their respective confidence evaluations. These confidence evaluations incorporate information from blood and polygraph tests as well as psychometric and personal asset assessments. The fired officers included state troopers, local police agents, and firefighters. (El Sol de Puebla, February 22, 2020)
Tlaxcala	Recently, a municipality in the State of Tlaxcala fired 40 municipal police officers after these officers failed their respective confidence evaluations or had been found guilty of committing an act of corruption. (El Sol de Tlaxcala, 23 de agosto 2019)

perceptions of local state capacity across respondents through an information and framing experiment, and noting corresponding changes in evaluations of the federal government’s management of COVID-19. We randomly assign respondents to one of two treatment groups which varies the framing associated with a story about local government. All groups receive a few sentences about local government efforts to root out poor or corrupt performers in the local bureaucracy. We secured this information by looking for suitable stories in local newspapers. We identified stories that specifically reference the local bureaucracy so as to not confound perceptions of the federal government with that of the state government. In addition, we limited our search to stories published within the last year. The stories, which varied by state, can be seen in Table 1.

We manipulated the information provided to respondents by varying the framing that was added to the end of the story across the experimental groups. Specifically, one of the groups received a few additional lines attributed to a European researcher suggesting that the mechanism used to evaluate employees was a positive step to improve the local

Table 2: Framing Treatments Across States

Framing	Text
Positive	Some researchers have found that confidence evaluations are crucial to improve the quality of public administration. A study of 92 countries, including Mexico, shows that the use of such tools is fundamental to improve the management of state-level bureaucrats (Dr. Anders Sundell, The Quality of Government Institute, August 2012).
Negative	Some researchers have found that confidence evaluations are crucial to improve the quality of public administration. But it is not obvious that these exams can help root out all unqualified staff. A study of 92 countries, including Mexico, shows that the use of such tools is, alone, not enough to improve the management of state-level bureaucrats and other interventions are necessary to solve the problem. (Dr. Anders Sundell, The Quality of Government Institute, August 2012).

bureaucracy; the second group read instead that these mechanisms are insufficient.<sup>8</sup> To do so, we subtly changed the conclusions from a report on bureaucratic quality by Swedish researcher Anders Sundell as seen in Table 2. Our goal here was to improve the first group’s perception of *local* state capacity relative to the second group. Table 3 provides the average characteristics of individuals across the treatment conditions. We then exploit this variation to estimate its effect on evaluations of the federal government’s response to COVID-19.

Consistent with our first approach, we assume that evaluations of local government are relatively sticky. Given historical and behavioral components of state capacity (Bustikova and Corduneanu-Huci 2017; Levi and Sacks 2009), any shift in general perceptions of government effectiveness is likely to lag behind improvements in performance. Thus,

<sup>8</sup>We have a third experimental condition which served as a pure control. We exclude these observations from analysis and focus instead on the largest differences.

	Negative Mean	Positive Mean	Standardized Mean Diff	Balanced
Female	0.47	0.5	-0.03	Yes
Age	28.5	28.46	0.00	Yes
Education	4.59	4.68	-0.06	Yes
Children	0.50	0.51	-0.00	Yes
Progresa Beneficiary	0.08	0.10	-0.03	Yes
Govt Worker	0.15	0.1	0.05	Yes
Politically Active	0.54	0.60	-0.06	Yes
Votes	0.87	0.80	-0.07	Yes

Table 3: Balance Table

we expect that the treatments will affect respondents differently according to their *prior* evaluations of local government. Generally, we should expect that those with ex-ante high evaluations of local government will be more receptive to positive stories, thus improving their evaluation of the federal government. We thus estimate:

$$y_i = \alpha_{[j]} + \lambda T_i s_i + \pi T_i + \delta s_i + \mathbf{X}_i \boldsymbol{\beta} + \mu_i$$

where  $y$  is respondent  $i$ 's satisfaction with the federal government's COVID response,  $\alpha$  is a randomly-varying intercept for state  $j$ ,  $T$  is respondent treatment status,  $s$  is respondent  $i$ 's perception of local state capacity,  $\mathbf{X}$  is a vector of our adjustment variables, and  $\mu$  is an idiosyncratic error term. The term of interest is  $\lambda$  which measures the causal effect of our framing expert, given pre-established perceptions of local state capacity, on evaluations of the national government's coronavirus response across self-reported levels of local state capacity.

An important advantage of this design is that it comes with a pre-built placebo check. We would not expect the treatment to affect reports of compliance with COVID emergency measures because we ask individuals about street-level behavior, not their personal opinion. Thus, we use that set of dependent variables as placebo checks on our findings.

## 4 Data

Survey data that includes measures of perceived local capacity and measures of both satisfaction and compliance with government actions during the pandemic is not widely available. We thus administered an online survey to 770 individuals between June 8th, 2020 and July 14th, 2020, split evenly between respondents in Puebla and Tlaxcala. The mean age was 28.42 (SD = 8.58) with roughly 50% of the sample identifying as female. We contracted Qualtrics, an academic and commercial research firm, to sample from their local panels of survey participants. Information on characteristics of our sample including a breakdown by state is available in the Section A of the appendix, page 3. Exact question wording for those questions used in this analysis appear in Section B of the appendix, page 4.

### 4.1 Dependent Variables

We have two key sets of dependent variables. The first is satisfaction with the Mexican federal government's response to the COVID-19 pandemic. We ask this directly:

How satisfied are you with the response of the government of President Andrés Manuel López Obrador to the coronavirus (COVID-19) pandemic?

We reference President López Obrador (AMLO) directly to prime the federal government's handling of the pandemic and to distinguish it from perceptions related to the management of the crisis at lower levels of government. A possible concern is that by referencing AMLO we may be activating partisanship, where we are more interested in general and more abstract evaluations of the federal government's response. In truth, it would be challenging to disentangle evaluations of government performance from partisanship in this setting since these relationships are clearly endogenous. We do adjust, however, for self-reported vote choice in the 2018 elections in an attempt to directly model partisan bias. Respondents expressed their satisfaction with the federal government using a 5-point scale, where 1 is *Very Dissatisfied* and 5 is *Very Satisfied*. This measure has a mean of 2.6 and a

standard deviation of 1.2. The distribution of answers among respondents can be seen in Figure 1. The bulk of respondents qualify the federal government's response as poor.

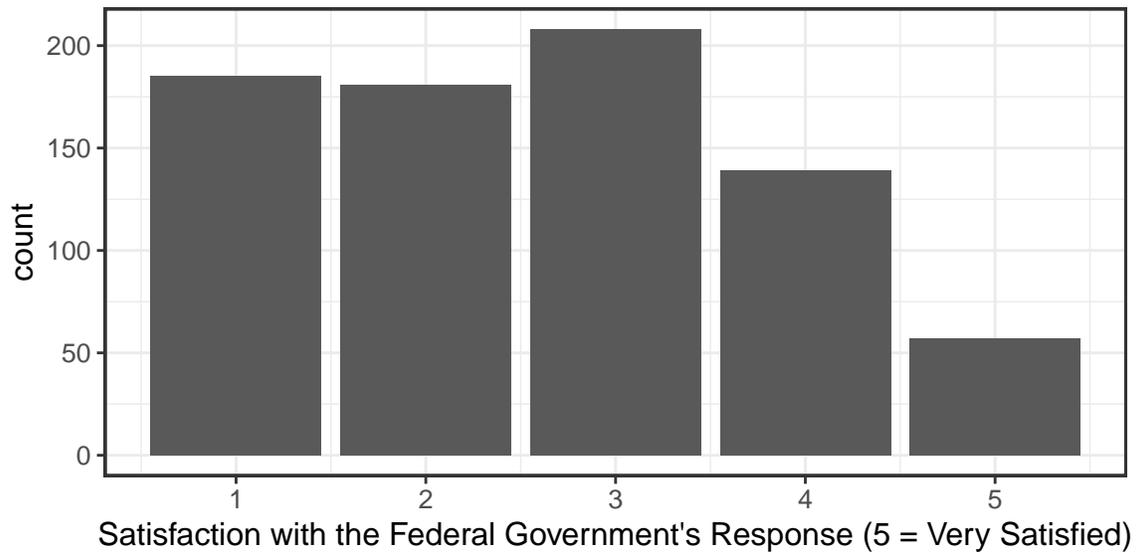


Figure 1: Dependent Variable

Second, we examine compliance with national government health mandates. Given the nature of the pandemic, the federal government has been in charge of putting out health recommendations during the crisis. We approach compliance through various angles. First, we ask respondents about their own beliefs regarding prominent federal government messaging: >Washing your hands with soap and water helps prevent the spread of the coronavirus (COVID-19). To what extent do you agree?

This question attempts to capture agreement with federal government messaging, which is one precondition of compliance, especially in weak states. Next, we ask about perceptions of neighborhood-level compliance with government mandates:

My neighbors seek to maintain a distance of between 2 to 3 arms of length between individuals when in public to protect me against the coronavirus (COVID-19). To what extent do you agree?

This question attempts to capture highly-localized perceptions of compliance with federal government health regulations and mandates. By asking directly about neighbor

rather than individual compliance, we sidestep a potential source of social desirability bias. The text for both of these questions is particularly important, and we find and match the federal government’s wording as displayed in public health campaigns. Finally, we ask about employer behavior: >My employer follows health regulations to protect me against the spread of the coronavirus (COVID-19). To what extent do you agree?

Here we seek to observe whether compliance is different across societal groups. We know from recent studies of the U.S. experience with COVID-19 that compliance with health mandates can vary according to partisan attachments or economic status (Kushner Gadarian, Goodman, and Pepinsky 2020; Wright et al. 2020). These survey items allow us to observe the behavioral consequences of perceptions of local state capacity while accounting for plausible confounders such as political preferences or income.

Respondents expressed their agreement with each of the previous statements using a 7-point scale, where 1 is *Strongly Disagree* and 7 *Strongly Agree*. Table 4 provides summary statistics for all dependent variables.

Table 4: Summary Statistics for the Dependent Variables

Variable	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Satisfaction	770	2.61	1.24	1	2	4	5
Hand-Washing	770	5.90	1.50	1	5	7	7
Physical Distancing	770	5.11	2.01	1	4	7	7
Employer Compliance	770	5.60	1.80	1	5	7	7

## 4.2 Independent Variable: Perception of Local State Capacity

Our independent variable is perception of local state capacity. Measuring the perception of local state capacity is tricky because we need to assess items that clearly separate local from national state capacity. One problem is that citizens may have difficulty articulating the level of government that is responsible for social services (the attribution of responsibility problem), particularly in developing countries (Niedzwiecki 2016). Indeed, only when it comes to particularistic benefits, such as cash transfers, do recipients attribute policy to the

right level of government. While attribution of responsibility is fuzzier for general social policies like health and education (Cutler 2004; Gélinau and Remmer 2006), citizens can and do hold local governments accountable, especially for visible programs including public works projects (Johannessen 2019). Our strategy, therefore is to ask respondents about issues where the attribution of responsibility problem is attenuated.

A second issue is that the perception of certain local services, namely health or education, are clearly endogenous to the federal government's COVID response. For example, when the federal government has failed to stem the spread of the coronavirus, local hospitals may be overrun with patients, compromising the quality of care. We thus focus on evaluations of local services that are unrelated to the pandemic.

We approximate citizen evaluations of local state capacity through two questions. First, we ask about police response time, borrowing from earlier work on capturing the reach of the state using survey-based measures of state capacity (Luna and Soifer 2017). Police are an important signal of state capacity. For one, police are tantamount to “street-level bureaucrats” and represent one of the most visible ways in which the state projects its enforcement power over distances. Second, policing has strong empirical linkages to how society evaluates the efficacy and procedural fairness of government (Sunshine and Tyler 2003). In Mexico, local law enforcement has been the purview of the states through their state police services, though some municipalities maintain municipal police forces. We ask:

Say a burglar breaks into your house and you call the police. How long do you think it would take for the police to get to your house on any given day, around noon?

Second, we ask respondents about the conditions of local roads. Local roads are an important measure of state capacity because transportation infrastructure is a public good in which management and funding often intersects federal, state, and local government jurisdiction. Most citizens are likely to be acutely aware of local road conditions and not those of other parts of the country, thereby not confounding their perceptions of state

capacity with conditions outside their local context. We ask:

Thinking about the city/area you are living in, how satisfied are you with the state of streets, roads, and freeways?

We take answers from these two questions and combine them using Principal Components Analysis (PCA), which is a common data reduction technique. Information about our constituent variables as well as the PCA is available in Section C of the appendix, page 8. We note here that we rescale the first component of our PCA such that higher values reflect higher evaluations of local state capacity. Our independent variable, therefore, is a measure of perception of local state capacity with a mean of 6.09 and standard deviation of 1.16. Figure 2 shows its distribution.

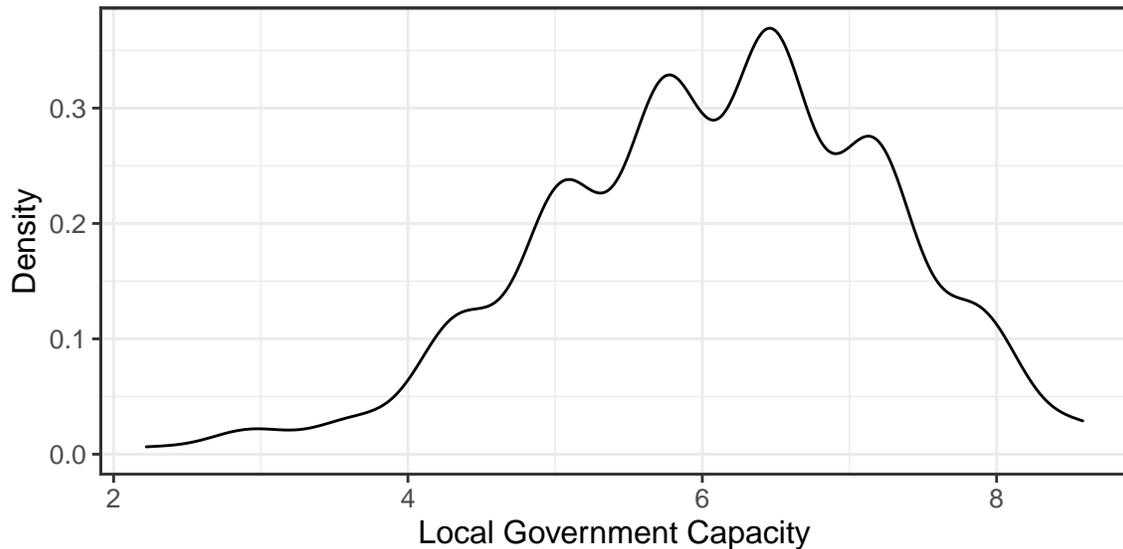


Figure 2: Independent Variable

## 5 Covariates

We adjust our regressions with a series of variables related to perceptions of the federal government and likely to affect compliance with federal government mandates. These include a series of standard demographic characteristics like gender, age, and parental

status. In addition, we ask a series of socioeconomic questions, like whether they have a job, if they work in government, and if they are beneficiaries of the Prospera conditional cash transfer program. Finally, we ask a series of political behavior questions, such as if they are politically active or if they voted in the last presidential election. Summary statistics for adjustment variables appear in Section D of the appendix, page 9.

Before proceeding with the analysis, we conduct a plausibility check by plotting the raw data. Figure 3 plots perceptions of state capacity on the x-axis versus evaluations of the federal governments' coronavirus response on the y-axis. We overlay two lines: a linear regression line in red and a LOESS line in blue. In line with our theoretical expectation, higher evaluations of local government are associated with higher evaluations of the federal governments.

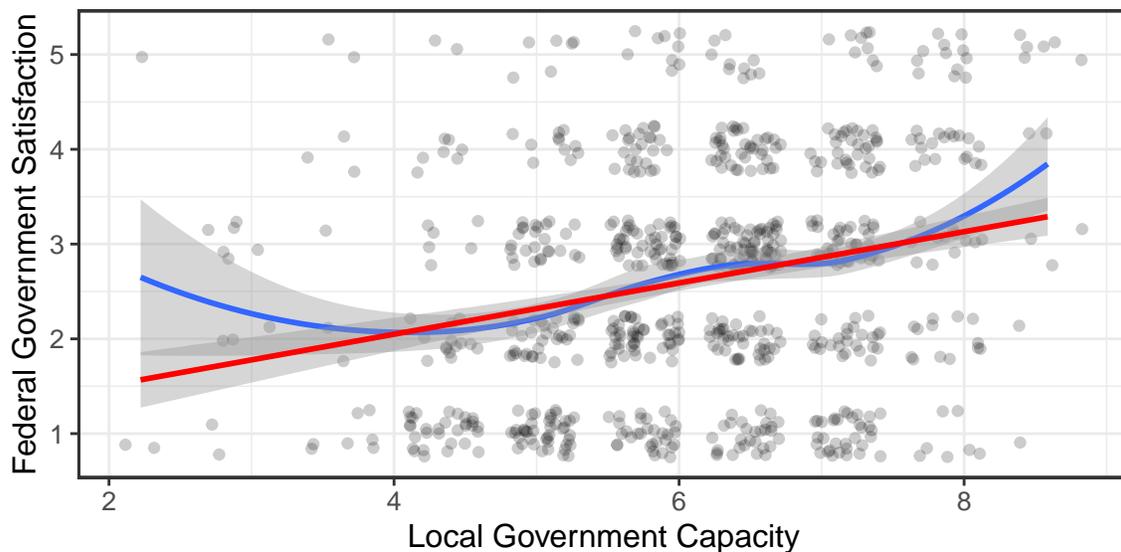


Figure 3: Perceptions of Local Capacity and Federal Govt COVID Response

## 6 Results and Discussion

The following section provides linear regression results estimating equations 1 and 2. We estimate these models via Bayesian analysis. We employ Bayesian inference because it provides an easier way to think about uncertainty in contexts without representative

samples. We provide a more extended discussion of this and other reasons in Section E.1 of the appendix, page 10. In practical terms, our Bayesian approach means simply that instead of reporting a point estimate, we provide a range of possible values that the slopes may take. This range is a *distribution* which we summarize using its median and standard error, and represents our best guess about the slope given the data and our prior knowledge. In our analysis we use vaguely informative priors which place more weight on the data than on any subjective knowledge about the relationship between the variables. More information on the exact priors is available in Section E.2 of the appendix, page 10.

In the rest of this section, we focus discussion on the our estimates of the slope of (1) perceptions of local state capacity ( $\lambda$ ), and (2) it’s interaction with our information treatment ( $\gamma$ ).

### 6.1 Associational Results

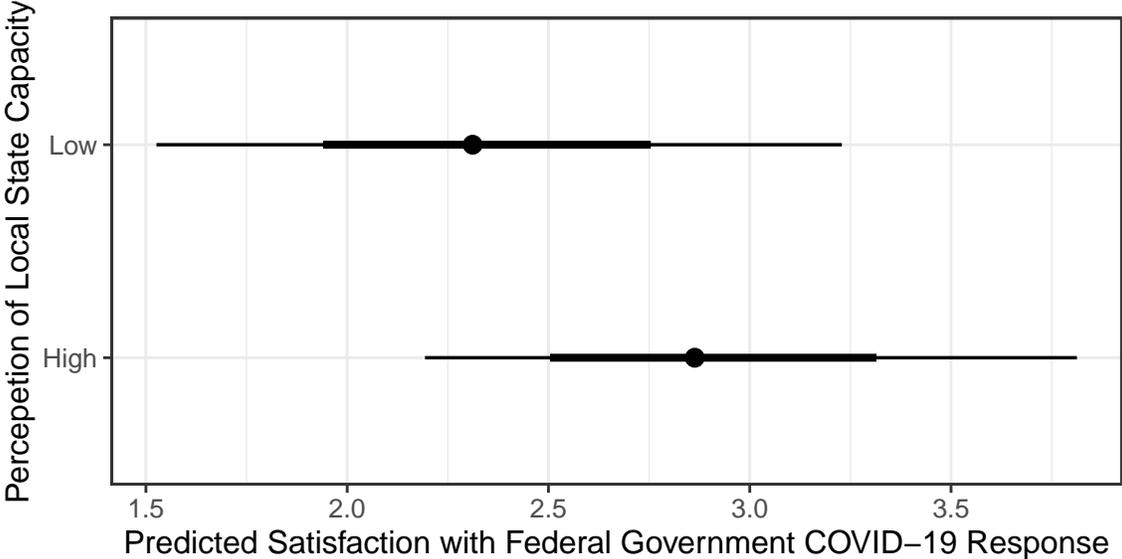


Figure 4: Predicted Evaluations of National Government, Survey Analysis

Table 5 reports results from our linear regression models for equation 1 for our four dependent variables: satisfaction with the national government’s COVID response, as well as three measures of compliance: hand-washing, physical distancing, and whether or not

employers respect national health guidelines.

In line with our expectations, perceptions of local state capacity are positively associated with evaluations of the federal government's response to the pandemic. The estimated slope is 0.22, or approximately 0.19 standard deviations of the outcome variable, a moderately strong relationship. This relationship is also estimated quite precisely, with a standard error of 0.03. In our data, respondents who rate local state capacity highly give the national government high marks in its management of the pandemic. Five other covariates are strongly associated with the dependent variable. Our estimated slopes for women, highly educated individuals, and the politically active are negative and large. By contrast, slopes for individuals that are Prospera beneficiaries and have children are large and positive.

These estimates imply large differences across respondents in their evaluations of the federal government's COVID management. Figure 4 splits respondents into two groups: those with low and high perceptions of local state capacity. To do so, we label respondents with scores above the median value of our measure of local state capacity as having high perceptions of local state capacity; the bottom half are labeled low. We then plot the median predicted satisfaction with the federal government for each of these two groups. Because we have cut the data into only two groups, this comparison is a probable *underestimate* of true differences across the distribution. Nevertheless, Figure 4 demonstrates that in our model increased perceptions of local state capacity yield large predicted increases in satisfaction with the federal government's response.

State capacity is also positively associated with various measures of compliance. At the personal level, individuals reporting high levels of state capacity are more likely to agree that hand-washing prevents the spread of COVID-19. The relationship is relatively small (0.06 SD) but it is the only predictor whose estimated slope does not cross zero. At the localized level, those reporting high levels of state capacity are more likely to report that their neighbors are respecting physical distancing guidelines. This association is moderately

	<i>Dependent Variables</i>			
	National Govt	Hand Washing	Physical Distancing	Employer Compliance
(Intercept)	1.85*	4.71*	3.79*	6.74*
	[1.25; 2.47]	[3.90; 5.52]	[2.75; 4.84]	[5.78; 7.68]
Local State Capacity ( $\gamma$ )	0.22*	0.10*	0.21*	0.02
	[0.15; 0.29]	[0.01; 0.20]	[0.08; 0.33]	[-0.09; 0.13]
Woman	-0.37*	-0.02	-0.27	0.21
	[-0.53; -0.21]	[-0.24; 0.19]	[-0.55; 0.01]	[-0.04; 0.48]
Age	-0.00	0.00	-0.00	-0.02*
	[-0.02; 0.01]	[-0.01; 0.02]	[-0.02; 0.02]	[-0.04; -0.00]
Education	-0.10*	0.04	-0.02	-0.02
	[-0.16; -0.04]	[-0.04; 0.11]	[-0.12; 0.07]	[-0.10; 0.07]
Children	0.34*	-0.13	0.16	0.14
	[0.16; 0.54]	[-0.38; 0.12]	[-0.16; 0.48]	[-0.17; 0.44]
Prospera Beneficiary	0.52*	0.25	0.67*	0.21
	[0.24; 0.81]	[-0.11; 0.62]	[0.18; 1.15]	[-0.23; 0.66]
Gov't Worker	0.13	0.25	-0.04	-0.21
	[-0.14; 0.39]	[-0.10; 0.60]	[-0.49; 0.42]	[-0.63; 0.20]
Politically Active	-0.30*	0.11	0.16	-0.10
	[-0.47; -0.14]	[-0.11; 0.33]	[-0.13; 0.46]	[-0.36; 0.16]
Votes	0.07	0.20	0.15	-0.26
	[-0.16; 0.30]	[-0.10; 0.50]	[-0.25; 0.53]	[-0.61; 0.10]
Tlaxcala	0.15	0.10	0.08	0.02
	[-0.02; 0.32]	[-0.12; 0.32]	[-0.21; 0.36]	[-0.24; 0.28]
sigma	1.15*	1.50*	1.99*	1.80*
	[1.09; 1.21]	[1.42; 1.57]	[1.89; 2.09]	[1.71; 1.89]

\* Null hypothesis value outside 95% credible interval.

Table 5: Posterior Summary

large (0.10 SD) and is the only predictor that is outside of zero, save for Progresa Beneficiary.

By contrast, citizens reporting high levels of state capacity do not appear to agree that their *employers* are doing everything they can to protect them. While the relationship is positive, the credible interval includes zero. This result serves as an important check on our findings. While perceptions of local state capacity seem to be associated with increased health guideline compliance by citizens, this does not seem to extend to other agents of society. There is some evidence that economically advantaged sectors of society, such as managers and business owners, are more likely to “opt out” of the social contract and shirk on tax compliance since they rely less on public goods and services for healthcare (Castañeda, Doyle, and Schwartz 2020). This dynamic could similarly extend to public health behavior during a pandemic. Alternatively, it could be costly for employers to adjust to federal health mandates. In poorer countries and localities with lax enforcement of worker safety regulations (or few regulations to speak of), employers and business owners may shirk on health mandate compliance as a way to minimize operating costs, particularly since the pandemic has resulted in a severe economic downturn in harder hit countries.

## 6.2 Experimental Results

Evidence from our experimental analysis is shown in Table 6. The posterior of interest is that of the treatment interacted with perceptions of local state capacity, or  $\lambda$ . Because the treatment is designed to affect perceptions of local state capacity, it should not alter individuals’ evaluations of compliance.

The slope is estimated to be 0.12, which implies a marginal positive effect. As respondents’ perceptions of Local State Capacity increases, the Treatment improves the respondents’ evaluation of the federal government’s pandemic response. While 0 is within the 95% credible interval, the exact percent of posterior draws that are positive is 0.92. This suggests that after seeing the data, we believe the relationship between the interaction and the outcome to be positive with a confidence of about 92%. This is a moderately large

	<i>Dependent Variables</i>			
	National Govt	Hand Washing	Physical Distancing	Employer Compliance
(Intercept)	2.54*	4.81*	4.35*	7.54*
	[1.56; 3.51]	[3.62; 5.98]	[2.69; 6.06]	[6.07; 9.03]
Positive Treatment	-0.77	-0.18	-0.40	-0.95
	[-1.86; 0.31]	[-1.50; 1.14]	[-2.27; 1.48]	[-2.62; 0.73]
Local State Capacity	0.14*	0.08	0.16	-0.11
	[0.01; 0.27]	[-0.08; 0.24]	[-0.07; 0.39]	[-0.31; 0.10]
Interaction ( $\lambda$ )	0.12	0.04	0.10	0.16
	[-0.05; 0.30]	[-0.17; 0.25]	[-0.20; 0.40]	[-0.12; 0.42]
sigma	1.17*	1.43*	2.02*	1.79*
	[1.10; 1.25]	[1.34; 1.52]	[1.90; 2.15]	[1.69; 1.91]

\* Null hypothesis value outside 95% credible interval.

Table 6: Posterior Summary

increase in evaluations of satisfaction with the national government given a rather modest treatment.

To visualize what our model implies, in Figure 5 we plot the estimated slope of the treatment on satisfaction with the national government’s management of coronavirus *across* levels of local government capacity. The figure shows that the effect of the treatment on evaluations of the federal government is *conditional* on prior evaluations of local state capacity. The positive treatment tends to improve satisfaction with the federal government among those expressing high levels of local state capacity, relative to the negative treatment. By contrast, the positive treatment tends to *depress* satisfaction with the federal government at low levels of local state capacity, relative to the negative treatment. At the lower end, this results in a 0.5-point reduction in satisfaction compared to those receiving the negative treatment.

Figure 5 provides strong causal evidence of the relationship between evaluations of local state capacity and the federal government. Its insights are grounded in the observation that prior evaluations of local state capacity anchor respondents’ beliefs about the federal government. When updated on local state capacity, respondents change their views of

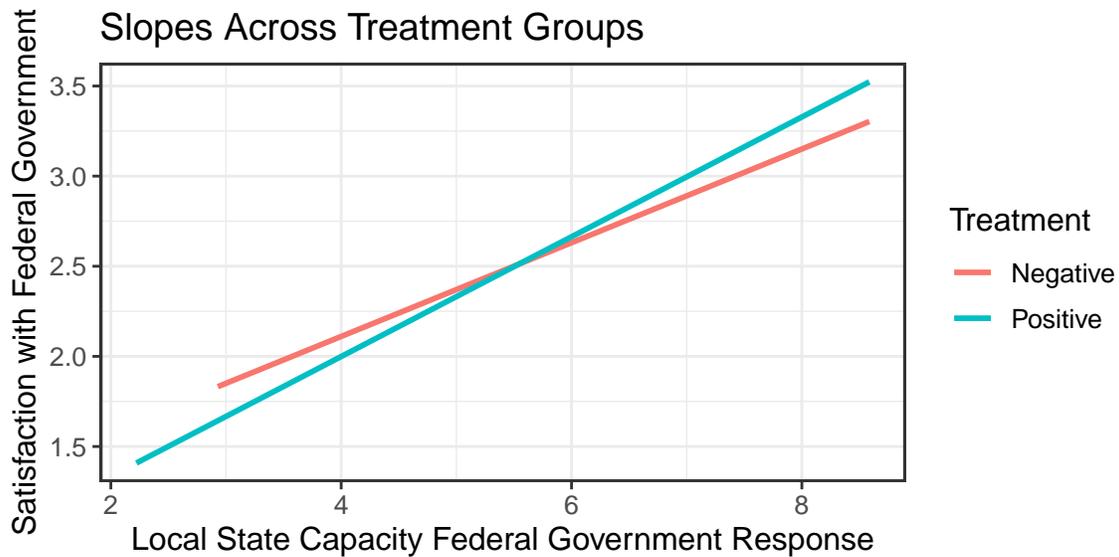


Figure 5: Predicted Evaluations of National Government, Survey Analysis

the federal government *conditional* on their prior beliefs. Specifically, those who express high levels of local state capacity improve their views of the federal government. This is consistent with our expectation that confidence in the government is bolstered by higher local state capacity. On the other hand, for those who express low levels of local state capacity the positive treatment depresses their views of the federal government. The reason why is theoretically unclear. The positive treatment may improve their views of local state capacity to the detriment of the national level. There is evidence that baseline expectations of government effectiveness and state capacity can confound any expected shift in evaluations based on a policy intervention, particularly at the lowest and highest levels of state capacity (Brinkerhoff, Wetterberg, and Wibbels 2018). Perhaps respondents who perceive lower levels of local state capacity interpret the positive story of effective government as a contrast to their personal experience. In other words, one’s already negative evaluation of local state capacity and government may in fact be worsened if reminded that “good government” is within reach in the state where they live.

Finally, we note that the treatment has no effects on the compliance measures, with none excluding zero from the credible interval. Indeed, for the rest of the dependent

variables the percent of posterior draws that have the same sign as the median of the posterior distribution is never greater than 90%. This is exactly what we would have expected if our treatment worked as intended.

## 7 Conclusion

In this paper, we explore the relationship between state capacity as experienced by citizens in their everyday interactions with local government and their evaluations and compliance with the national government in times of crisis. More specifically, using an original survey deployed in two Mexican states, we find a positive association between perceptions of local state capacity and evaluations of the national government's management of the COVID-19 pandemic and compliance with the national government. This relationship holds across our cross-sectional and experimental designs.

Our findings contribute to an emerging literature on the factors driving government actions, societal behavior, and health outcomes in times of crisis (i.e. a pandemic.) Governance relies on the delicate balance between governmental decisions, the state capacities available to governments to carry out those decisions, and public confidence in, and compliance with, new policies (Braithwaite and Levi 2003). Official public health measures in response to COVID-19, such as stay-at-home orders, social distancing, masking, and limiting economic activity requires extraordinarily high levels of voluntary compliance, even if the threat of the virus and its costs are not shared equally. Our study is, to our knowledge, the first to link perceptions of local state capacity and government responses to emergencies in developing democracies, highlighting the enduring importance of local political institutions in times of crisis.

Our conclusions also speak to policy strategies for public sector reform in the Global South. First, we show that the implications of scholarship on trust in government and subnational state capacity can be generalized to more challenging policy scenarios such as the COVID-19 global pandemic (Cingolani 2019; Levi and Sacks 2009; Luna and Soifer

2017). The influence of state capacity on government effectiveness and political behavior transcends developmental contexts. Uneven or underdeveloped state capacity in rich and poor democracies alike produce tragic outcomes for citizens in times of crisis (Bosancianu et al. 2020; Capano 2020).

Second, among policy practitioners working on public sector reform in the Global South there is much discussion dedicated to improving bureaucratic quality via meritocratic promotion as a means to bolster state capacity and confidence in government. Building on the broader literature on trust and state capacity, our findings suggest that the "top-down" emphasis on bureaucratic reform overlooks the subjective nature of trust in government.<sup>9</sup> Rather, the everyday experiences that citizens have with the basic responsibilities of the state, such as infrastructure or the responsiveness of street-level bureaucrats (i.e. police) and the fair distribution of public goods and services, has a significant role in generating the sort of institutional and social trust that governments need to mount a successful policy response to a major crisis. This suggests that significant investments in local infrastructure and equitable services can pay dividends not just for trust and legitimacy but also generating levels of compliance that have positive downstream effects for building on existing state capacity (i.e. greater tax compliance). In short, the quotidian nature of the state matters for good *national* governance, crisis or not.

Future research should pay close attention to the notion that perceptions of local state capacity are relatively steady and difficult to update. As our analysis suggests, new information, such as reporting on the competence of local public servants, may shift evaluations of the government for better or worse. But any such shift appears conditional on pre-existing perceptions of local state capacity. In localities or regions where state capacity is weak, citizens are likely to view the state as insufficiently responsive or trustworthy, regardless of the actual attempts by the government to improve service delivery. As a consequence, a vicious cycle may arise in which efforts to improve the quality and provision

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<sup>9</sup>See, for example, the laudable efforts of the World Bank "Bureaucracy Lab" initiative at <https://www.worldbank.org/en/research/dime/brief/Bureaucracy-Lab>.

of services are viewed with distrust, even as citizens demand reforms to improve the services provided by the national government. In times of crisis, this cycle may ultimately prove catastrophic.

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