

Monitoring via the Courts: Judicial Oversight and Police Violence in India*

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Abstract

Under what conditions do court rulings generate improved human rights outcomes? In this paper, we investigate the extent to which court-ordered accountability institutions can decrease government repression in the form of police violence. We argue that the creation of court-ordered, regional bodies to which citizens can report allegations of police abuse provides “fire-alarm” oversight (McCubbins and Schwartz 1984) by which police officers can be monitored—and potentially held accountable—for abuses of power. To test the implications of our theory, we take advantage of variance in the implementation of *Prakash Singh and Ors. v. Union of India and Ors*, a 2006 judgment by the Supreme Court of India requiring states and districts to establish local Police Complaints Authorities (PCAs). Using a quasi-experimental difference-in-difference design, we show that the implementation of state PCAs is associated with statistically and substantively significant decreases in human rights violations by Indian police officers.

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1 Introduction

In 1996, Prakash Singh, a retired Indian Director General of Police (DGP),¹ filed a Public Interest Litigation (PIL) with the Supreme Court of India to address “the direct violations of the rights of citizens in the form of unauthorized detentions, torture, harassment, fabrication of evidence, malicious prosecutions, etc.” Ten years later, the Supreme Court issued a ruling in *Prakash Singh and Ors vs. Union of India and Ors 2006*, requiring local Indian governments to reform the police force in part through the creation of state and district-level Police Complaints Authorities (PCAs), institutions intended to hear and investigate citizen complaints of misconduct by the police. Pointing out that the central government had failed to implement police reform despite the recommendations of a number of high-powered committees, the Supreme Court decided not to remain silent: “The question, however, is whether this Court should further wait for Governments to take suitable steps for police reforms. The answer has to be in the Negative.” Under what conditions do such court rulings decrease state repression? Can the creation of court-mandated accountability institutions improve human rights?

Although human rights scholars frequently argue that effective domestic courts limit government repression writ large (e.g., Blasi and Cingranelli 1996, Crabtree and Fariss 2015, Cross 1999, Hathaway 2005, Hill and Jones 2014, Keith 2002, Powell and Staton 2009) little attention has been paid to the mechanisms by which judiciaries might influence government violations of human rights.² In this paper, we propose a mechanism by which national courts can limit government violations of human rights: by issuing rulings requiring local governments to create accountability institutions for victims of human rights to report and have investigated allegations of state repression. We argue that the creation of court-ordered, regional bodies to which citizens can report allegations of police abuse provides a mechanism of court-created “fire-alarm” oversight (McCubbins and Schwartz 1984) by which police officer behavior can be

¹The Director General of Police (DGP) is the highest rank in the Indian Police Services.

²In an exception, Conrad (2018) argues that courts can issue rulings that directly influence police officers’ individual and collective assessments of the costs and benefits of particular use-of-force tactics, leading to changes in police behavior.

monitored, thereby decreasing police violations of human rights.

To test the implications of our argument, we take advantage of variance in the creation of Indian state Police Complaints Authorities (PCAs) following the Supreme Court's ruling in *Prakash Singh and Ors. v. Union of India and Ors.* Using a quasi-experimental difference-in-difference research design that exploits cross-sectional and temporal variation in the implementation of state PCAs, we show that PCA implementation is statistically and substantively associated with decreases in human rights violations by Indian police officers for several years following implementation. Although the Supreme Court of India required implementation of state PCAs to be completed by the same date, Indian states varied in the extent to which they complied with the Court's ruling and created the required institutions; as a result, we conduct ensure that our empirical results are robust to myriad robustness checks accounting for potential threats to the parallel trends assumption required for difference-in-difference estimation.

The argument and results in this paper suggest a potential mechanism by which courts can limit government violations of human rights. In addition to issuing rulings that directly police officers' assessment of the costs of benefits of particular tactics (Conrad 2018), courts can mandate the creation of independent "fire-alarm" institutions to which victims can report allegations of rights violations against the police. The ability to mandate the creation of accountability institutions—thereby sidestepping potentially politicized and corrupt police services, as in the case of India—means that domestic courts can be incredibly powerful actors in limiting government abuses of human rights. In addition, although we test the implications of our theory using data on PCA creation and allegations of police violence in India, this paper contributes to a growing discussion in the United States and abroad—both in academia and in the public sphere—about how to best limit police violence. Our research shows that courts have enormous power not only to influence the decision-making of police officers *directly* (e.g., Conrad 2018), but also to mandate the governmental creation of independent institutions that monitor police officer behavior and improve human rights outcomes *indirectly*.

2 Controlling (Corrupt) Police Agents

As “street-level bureaucrats” (Lipsky 1980),³ policing is subject to a principal-agent problem in which principals must determine how to motivate officer compliance with their directives under incomplete information (Brehm and Gates 1999, Miller 1993).⁴ Police officers work in an environment where discretion is key (Wilson 1968, 227), the level of information asymmetry between principals and police agents is high (Goldstein 1960, Wilson 1968), and oversight is costly (Goldstein 1960, Wilson 1968). As is the case in canonical principal-agent models, police principals face problems with choosing the wrong agent—adverse selection—and in keeping the chosen agent honest—moral hazard (Moe 1984).⁵

In the United States, a wealth of research has focused on mitigating adverse selection by better understanding the characteristics of individuals who become police officers,⁶ but there is little evidence to suggest that interventions focusing on the personal characteristics of police officers are successful (e.g., Mummolo 2017, Paluck and Green 2009). In spite of this lack of evidence, few scholars focus on the extent to which the creation of institutions and regulations can minimize moral hazard problems in policing.⁷ There are two exceptions that focus on how institutional rules can mitigate moral hazard in policing. First, Mummolo (2017) argues that police officers are responsive to institutional incentives in the context of a change to protocol

³For a discussion of principal-agent relationships with regard to human rights, generally, see Cohen and Nordås (2015), Conrad and Moore (2010), DeMeritt (2015), Mitchell (2004, 2012).

⁴Miller (1993) defines a principal-agent relationship as one in which “the agent has an informational advantage over the principal and takes actions that impact both players’ payoffs. The principal has the formal authority, but in (principal-agent relationships), the attention is on a particular form of formal authority: the authority (of the principal) to impose incentives on the agent.”

⁵Adverse selection, in which principals choose an agent who is unlikely to act in accordance with their preferences, occurs because principals do not know *ex ante* the “information, beliefs, and values on which the decisions of others are based” Moral hazard, in which agents shirk because they are not monitored completely and at all times by their principals, occurs when agents act upon their own preferences rather than the preferences of the principal (Moe 1984).

⁶For example, gender (Lockwood and Prohaska 2015); ideology (Fielding and Fielding 1991); the extent to which police officers exhibit “authoritarian” and aggressive personalities (Balch 1972, Twersky-Glasner 2005), conservative ideologies (Fielding and Fielding 1991), and racial bias (Eberhardt et al. 2004, Gelman, Fagan and Kiss 2007).

⁷Brehm and Gates (1999, 44) highlight the literature’s long-time adherence to this perspective: “Getting the incentive structure ‘right’ may not be enough. . . In prior principal-agent models, one sees compliance from the subordinates if the supervisor’s punishment poses a credible threat. In (policing), one sees compliance when subordinate predispositions favor the policy.”

in the use of “Stop and Frisk” regulations in New York City. In particular, when the New York Police Department (NYPD) began to require increased justifications of stops, police officers began “limiting stops to instances where the probability of criminal activity appeared relatively high” (Mummolo 2017, 2). Focusing on the role of the judiciary in limiting police violence, Conrad (2018) argues that courts can issue rulings that directly influence police officers’ individual and collective assessments of the costs and benefits of particular tactics. Thus, institutions and regulations can mitigate moral hazard problems in cases where police principals want to constrain their agents (Conrad 2018, Mummolo 2017).⁸

Can police violence be contained when police managers are corrupt and unwilling to control their agents—even in the face of domestic and international calls for reform? In India, police are often described as being corrupt, and public trust in the police is exceedingly low (Jaurgui 2011, 2013).⁹ As a result, the preferences of the police cannot be assumed to be derivations of the median voter via the chain of democratic delegation. In June 1975, Indian President Fakhruddin Ali Ahmed declared a state of emergency under Article 352 of India’s Constitution. The “Emergency” gave Prime Minister Indira Gandhi the power to rule by decree from June 1975 to March 1977 and made Indian police forces a tool of incumbent party (Subramanian 2007). Since then, police forces in India have remained highly politicized. Ruling political parties award and punish police officers through promotion and removal from service (Raghavan 2003, Subramanian 2007), and police response to violence often depends on the needs of the incumbent political party (Subramanian 2007). Police officers are often encouraged to turn a blind eye to crime committed by politically-connected members of the incumbent party and to file trivial charges against enemies of the political elite (Bayley 1983).

Between 2010 and 2015, for example, India’s National Crime Records Bureau (NCRB) reported that 591 people died in police custody. Although the police blame these deaths on suicide, illness, and natural causes, the Asian Centre For Human Rights argues that the majority

⁸Police principals may wish to constrain their agents because of their own preferences or because of preferences that are derivative of the median voter via a chain of delegation to police officers.

⁹Although see Wahl (2014, 2017) for an argument that police officers in India who engage in torture often see themselves as being more principled than one might expect based on descriptions of the police force as a whole.

of deaths in Indian police custody occur not by accident, but as a function of police violence (ACHR 2011). In addition, Human Rights Watch “is not aware of a single case in which a police official was convicted for a custodial death between 2010 and 2015” (Watch 2016). As a result of these concerns, India has faced domestic and international pressure to reform its police forces. In September 2017, for example, the Indian government refused to accept a number of recommendations—several of which are related to greater accountability of Indian police forces—made by the United Nations as part of the Universal Periodic Review (UPR) process (Watch 2017). Similarly, although it is a signatory to the United Nations Convention Against Torture (CAT), India has been hesitant to ratify the Convention, even in the face of international condemnation of allegations of torture in police custody (Watch 2016).

In the following section, we propose a mechanism by which national courts can limit government human rights violations in such an environment: by issuing rulings requiring local governments to create accountability institutions for violators of human rights. We argue that the creation of court-ordered, regional bodies to which citizens can report allegations of police abuse provides a mechanism of court-created “fire-alarm” oversight (McCubbins and Schwartz 1984) by which officers can be monitored and held accountable for abuses of power—even in countries like India where corruption of the police is a well-documented concern and police principals may not prefer the protection of human rights.

3 Indian PCAs as Judicial Fire-Alarm Oversight

To develop our theory about the court-ordered creation of accountability institutions in India, we first make explicit the preferences of four actors: (1) the incumbent party, (2) its coercive agents (i.e., the police), (3) the citizens, and (4) the domestic court.¹⁰ We assume that the preferences of the incumbent party and its police forces are similar and that the preferences of the

¹⁰India has a common law legal system with a Supreme Court, 24 high courts that have authority at the state level, and district courts that have authority over individual districts within states. Orders and judgments passed by the Indian Supreme Court are binding on all high courts and district courts in India.

citizens and the domestic court are similar. More specifically, we first assume that the incumbent party wants to stay in power; in order to do so, the party need only be concerned with the protection and safety of the members of its winning coalition. The incumbent party has at its disposal a coercive apparatus to enforce the state's monopoly on the legitimate exercise of coercion. We assume that the party is willing to use coercive agents—specifically, its police—to maximize its chances of staying in power, repressing individuals outside the winning coalition when necessary. We further assume that there is little agency loss in the delegation of repression from the incumbent party to its police. Although this may be an unjustifiable assumption in many contexts, we think it justified the case of India. As noted above, Indian police response to violence often depends on the needs of the incumbent political party (Subramanian 2007), and ruling political parties often award and punish police officers through promotion and removal from service (Raghavan 2003, Subramanian 2007).

Second, we assume that citizens prefer their individual rights be respected by the government in power. The average member of the incumbent party's winning coalition is willing to withdraw his/her support from the party if the party and/or its agents violate his/her individual rights. We do not think this to be a controversial assumption. Perhaps more controversially, we also assume that the domestic court also prefers to protect individual human rights—even the rights of those outside the incumbent party's winning coalition. In addition to being important in generating our theory, we think this to be a reasonable assumption both generally and specifically in the case of India. Generally, effective domestic courts are well-known to limit government repression writ large (e.g., Blasi and Cingranelli 1996, Crabtree and Fariss 2015, Cross 1999, Hathaway 2005, Keith 2002, Powell and Staton 2009), curbing human rights violations more effectively than many other institutions commonly thought to decrease state repression (Hill and Jones 2014). Specifically, in the case of India, the Supreme Court has a long history of issuing decisions with the stated goal of depoliticizing the police forces and curbing police violence. For example, in a 1997 decision, *Arrest in D.K. Basu vs. State of West Bengal*, the Supreme Court put into place requirements for police detention and interrogation, indicating that violators of

these procedures could be held in contempt of court (Watch 2016).¹¹

An implication of our assumptions regarding the preferences of the aforementioned actors is that citizens whose feel their rights have been abused by Indian police are unlikely to seek recourse via complaints to the incumbent party. Ruling political parties often award and punish police officers through promotion and removal from service (Raghavan 2003, Subramanian 2007), and as a result, Indian police responses to violence are often biased in favor of the needs of the incumbent political party (Subramanian 2007). In addition, false criminal cases can be lodged to deter citizens from alleging complaints against the police, and political leaders use police agencies to intimidate their opponents (Verma 2005). As such, the ruling party can use the police as they see fit. Because citizens whose rights have been abused are generally outside incumbent party's winning coalition, federal/state governments have little incentive to reform police forces in the face of violations. Instead, citizens do better to seek recourse by the domestic institution that shares their preference for the protection of human rights: the court.

3.1 Courts & Fire-Alarm Oversight

Unfortunately, courts are limited in their ability to directly monitor government violations of human rights—even if they issue rulings in favor of citizen complaints—for two reasons. First, monitoring is costly (Miller and Whitford 2002), and courts rarely have the resources to oversee the implementation of all of their rulings. Instead, courts often rely on the executive branch and its agents to implement court orders. In instances where the executive's preferences differ from those of the court—as we argue is the case in India—courts orders are more likely to go unimplemented and unmonitored. Consequently, court orders intended to directly constrain police officers are less effective than they are in instances where the executive is willing to enforce court decisions (e.g., the United States) (Conrad 2018).

Second, the ability of citizens to access the Court is not likely to be equally distributed across the citizenry. The Indian Supreme Court has attempted to democratize access to the Court by

¹¹This ruling reiterates many of the guidelines in the Indian Code of Criminal Procedure (Watch 2016).

permitting individuals to file Public Interest Litigation (PIL)—writs of petition or letters regarding issues related to the public interest—directly with the Chief Justice of the Supreme Court.¹² PIL is different from traditional litigation in that it allows citizens standing as representatives of the general public interest and provides potential remedy not only for past injustices, but also laws, etc. that are anticipated to be applied illegally (Cunningham 1987). Nevertheless, the Court cannot hear/rule upon all PIL petitions. The Supreme Court accepts up to 40% of submitted cases for further hearing, and although the Court has issued 40,000 judgements since 1950, tens of thousands of cases are pending (Dhume 2017).¹³

Although the Court is limited in its ability to engage in traditional monitoring to ensure compliance with its rulings, incentives and sanctions can motivate behavior in a wide variety of contexts where traditional monitoring is difficult (Huber and Shipan 2002, McCubbins, Noll and Weingast 1987), and ex post rules can encourage compliance within the hierarchy and incentivize preferred behavior (Alchian and Demsetz 1972, Miller 2005). In the context of the United States Congress, for example, McCubbins and Schwartz (1984) distinguish between two forms of oversight: (1) police-patrol oversight, in which Congress examines a sample of executive-agency activities, with the aim of detecting and remedying any violations of legislative goals and, by its surveillance, discouraging such violations,” and (2) fire-alarm oversight, in which is Congress establishes a system of rules, procedures, and informal practices that enable individual citizens and organizes interest groups to examine administrative decisions (sometimes in prospect), to charge executive agencies with violating congressional goals, and to seek remedies from agencies, courts, and Congress itself.” Like McCubbins and Schwartz (1984), who suggest that Congress has a “rational preference” for fire-alarm over police-patrol oversight, we argue that the Indian Supreme Court has created institutions of fire-alarm oversight to monitor police officers with regard to the protection of human rights.

¹²PIL offers an important remedy for victims of human rights violations to bring cases before the Court because (1) litigation can be filed by any individual or group that is concerned about the public interest, and (2) the Supreme Court purposely makes the process of filing public interest litigation as easy as possible.

¹³The Indian Supreme Court attempts to use PIL to expand its powers, “often taking operational control of failing government institutions and requiring systematic efforts to mitigate the effects of past injustices” (Neuborne 2003), but the aforementioned concerns with the Court’s (lack of) traditional monitoring ability still hold.

In addition to police-patrol oversight being difficult for the Indian Supreme Court for the reasons we suggest above, the Court additionally prefers fire-alarm oversight for the same three reasons that McCubbins and Schwartz (1984) argue Congress prefers fire-alarm oversight. First, methods of police-patrol oversight are more costly; they inevitably involve the examination of a great many actions that are not contrary to the Court's preferences. In the case of the Indian Supreme Court, it would mean wading through a great many actions in which the incumbent political party actually *complied* with the Court's ruling. Second, police-patrol oversight is necessarily more limited in scope and consequently may miss more violations than fire-alarm oversight mechanisms, as the Court has limited resources that prevent it from examining all executive action. In the case of the Court, it would be difficult for an oversight committee to recognize all of the ways in which the incumbent party has deviated from its decisions. Third, although fire-alarm controls in which private parties bring violations to the Court's attention are just as costly as police-patrol monitoring, the costs are borne by the citizenry rather than Court (McCubbins and Schwartz 1984). This is particularly important for the Indian Supreme Court; allowing citizens to sound the fire alarm about human rights violations is less costly for the Court because citizens incur the costs of determining if a violation has occurred.

In what follows, we describe the Indian Supreme Court's decision in *Prakash Singh and Ors vs. Union of India and Ors 2006*, which mandated the creation of Police Complaints Authorities (PCAs) at the district and the state level to serve as a form of human rights oversight. We argue that the Court created these institutions to serve as a form of fire-alarm oversight of Indian police officers—and that the creation of these institutions has served to decrease police misconduct and violence.

3.2 Indian PCAs as Human Rights Monitors

In 2006, ten years after Prakash Singh filed public interest litigation (PIL) on behalf of police reform, the Indian Supreme Court issued a ruling in *Prakash Singh and Ors vs. Union of India and Ors 2006*. The ruling included seven directives, the most important of which required each state

and district government to create an institution called a Police Complaints Authority (PCA) to hear complaints of violence against police officers brought by citizens.¹⁴ The Court intended the creation of state and district PCAs to provide citizens with easier access to an institution to hear complaints about police violence without requiring them to travel to the state capital (*Initiative 2007*). The Court ruled that PCAs should be structured similarly in every state, although the “volume of complaints” should be used to determine the size of the PCA.

PCA complaints can be made by the victim or a complainant on the victim’s behalf, any person who witnessed police misconduct, the police themselves, or the National or State Human Rights Commission (*Watch 2017*).¹⁵ Importantly for our purposes, neither state nor district PCAs are permitted to independently begin their own investigations into any form of police misconduct; PCAs are only permitted investigate police violence when complaints have been lodged by citizens or citizen groups against the police.¹⁶ Because the Court mandated the creation of PCAs and did not provide them with independent investigatory power, PCAs serve as quintessential fire-alarm oversight institutions; they have no police-patrol powers and can monitor the police and promote protections for human rights only to the extent that citizens come to them with allegations of police misconduct and violence.

The Court initially mandated full implementation of its order with regard to state and district Police Complaints Authorities by the end of 2006. When few states complied with the Court’s directive by creating PCAs, the Court doubled-down, issuing a statement that states had

¹⁴The other directives included mandates for the states to (1) create State Security Commissions (SSCs) to limit unwarranted influence or pressure on the police, enact broad policy guidelines, and evaluate the performance of the state police; (2) ensure that the Director General of Police (DGP) is appointed through a merit-based transparent process and for a minimum tenure of two years, (3) to ensure that police officers are provided minimum tenure of two years; (4) to separate the investigative and law and order functions of the police; (5) to create a Police Establishment Board to decide on transfers, postings, promotions and other service-related matters; (6) and to create a National Security Commission responsible for the selection and placement of Chiefs of Central Police Organizations.

¹⁵The National Human Rights Commission (NHRC), which has no judicial power of its own but can recommend that the prosecution when government officials violate human rights, was established in 1993 (*Watch 2017*).

¹⁶State PCAs are intended primarily to investigate allegations of serious misconduct, “which would include incidents involving death, grievous hurt or rape in police custody,” against officers of the rank of Superintendent of Police (head the police force of a district) and above. District PCAs are permitted to investigate both serious and less serious misconduct, which includes “allegations of extortion, land/house grabbing or any incident involving serious abuse of authority” against police officers of and up to the rank of Deputy Superintendent of Police.

three months from January 2007 to comply in full with the Court’s ruling related to the creation of PCAs.¹⁷ The majority of Indian states loosely complied with the extension, issuing Police Acts or government orders to create PCAs before the March 31, 2007 deadline. Although many PCAs were de jure in existence at that point, however, few complied de facto with the spirit of the Court’s ruling, instead creating institutions “dominated by bureaucrats and the police, serving and retired, with little representation from the community and civil society” (Initiative 2007).

In May 2008, the Supreme Court created a temporary three-member monitoring committee to oversee state compliance with the Court’s order and report back to the Court (Initiative 2007). The monitoring committee’s final report in 2010 was not optimistic about the state of implementation of PCAs nationwide: “Practically no State has fully complied with those Directives so far, in letter and spirit, despite the lapse of almost four years since the date of the original judgment. In the States, where new police legislations have not been enacted, the directions are purported to have been complied with by issuing executive orders but the contents of such executive orders clearly reflect dilution, in varying degrees, of the spirit, if not the letter, of the Court directives” (Initiative 2007). As a result of the committee’s report, the Supreme Court responded by admonishing four states—Maharashtra, West Bengal, Uttar Pradesh, and Karnataka—for non-compliance with the Court’s order and the committee’s oversight. Nevertheless, compliance with the directive to create independent PCAs continued to be limited. In 2012, the Commonwealth Human Rights Initiative (CHRI) reported that only six states had operational police complaints authorities; in 2016, the CHRI reported that “no state... complied fully with the (Court’s) directives” (Initiative 2007).

Despite the fact that Indian states have been hesitant to fully implement the Supreme Court’s order, we expect the creation of court-ordered fire-alarm oversight institutions to decrease police violence and improve police respect for citizen rights. How can the creation of institutions with no enforcement power decrease police violence? Following literature on the effect of courts on human rights (e.g. Ritter and Conrad 2016), we argue that PCAs impose costs on

¹⁷The Court granted a three-month extension to comply with four of its directives (including the implementation of PCAs), requiring that others be implemented immediately (Initiative 2007).

accused violators of human rights even when the probability of enforcement is low. In the context of courts, experiencing litigation creates costs for the accused that they would prefer to avoid. The accused must spend time and resources responding to accusations. Importantly, these costs exist even if the government is not found in violation of the law (Powell and Staton 2009) and especially if the barriers to litigation are low (Lupu 2013).

Indian police officers face similar costs when they are accused of violence and investigated by a Police Complaints Authority—even one that lacks enforcement power. For example, according to our operationalization (discussed in additional detail below, the PCA in Haryana state has little enforcement power, but has many of the powers of a civil court including the right to summon and enforce the attendance of witnesses and examine them under oath; the right to discovery and the production of evidence; the right to requisition public records; and the right to issue authorities for the examination of witnesses or documents. As such, investigation by state PCA creates costs for police officers that are similar to those that they would experience if they were tried in a court of law. As a result, we expect police officers to be less likely to engage in violence when there exists a PCA where victims can lodge complaints.

Hypothesis 1. *PCA creation decreases police violence.*

4 Operationalization & Research Design

To estimate the effect of state Police Complaints Authority (PCA) creation on police violence, we use a quasi-experimental difference-in-difference design that takes advantage of variance in the implementation of *Prakash Singh and Ors. v. Union of India and Ors*, a 2006 judgment by the Supreme Court of India requiring states and districts to establish PCAs. Our sample covers 29 Indian states and seven union territories from 2001 to 2015; the unit of observation is the state-year. In what follows, we first describe the operationalization of our main dependent and independent variables. We then discuss in detail the identification strategy that we use to test the aforementioned hypothesis.

4.1 Dependent Variable: Police Violence

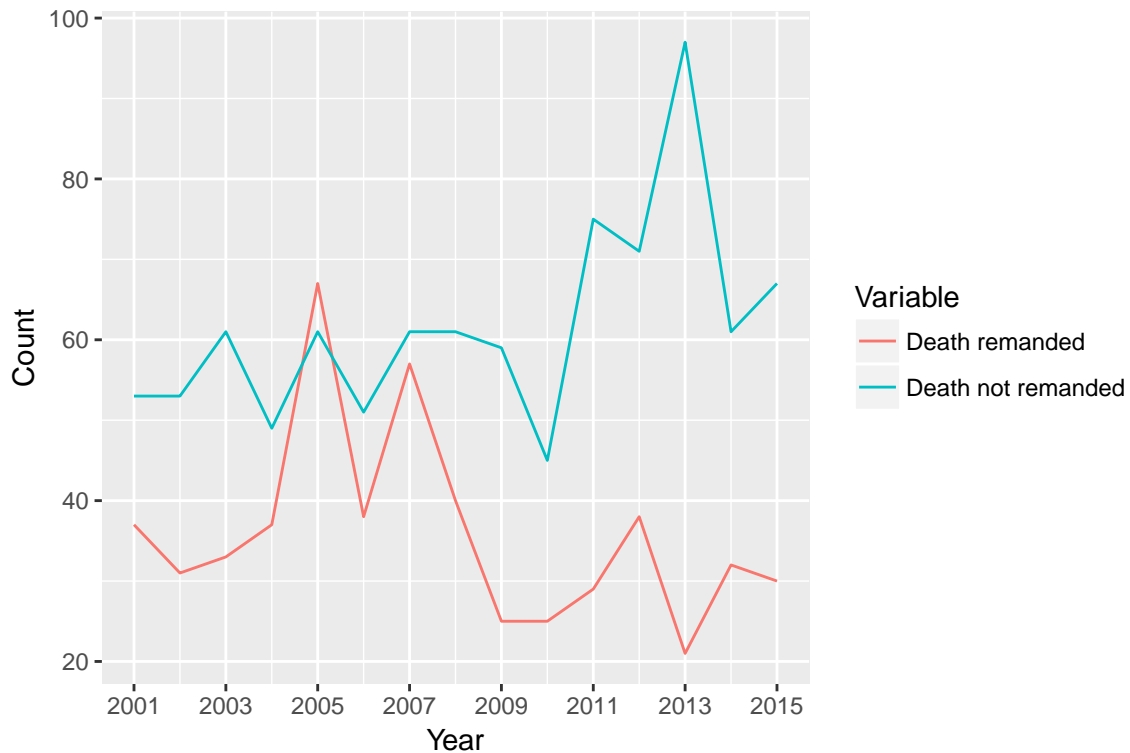
We operationalize our main dependent variable, Police Violence, using an annual count of the number individuals who died while in police custody in each state or union territory. These data come from the annual Crime in India Report published by the National Crime Record Bureau (NCRB) and are available for 29 Indian states and seven union territories from 2001 to 2015.¹⁸ As part of the incumbent government, the NCRB argues that most reported deaths are due to accident, suicide, and illness. As an illustrative example, in its 2015 Crime in India Report, NCRB (2015) reports, “A total of 34 out of 97 deaths in police custody were due to suicides committed by detained persons followed by 12 deaths during hospitalization, 11 deaths due to illness, 9 natural deaths, 6 deaths each due to injuries sustained during the police custody in allied assault by police & injuries sustained prior to police custody, 5 deaths while escaping from police custody, 3 deaths due to assault by other criminals and 1 death each due to mob attacks & road accidents/journey connected to investigation.”

Importantly for our purposes, however, myriad human rights organizations argue that death in Indian police custody occurs primarily as a result of police torture. In a paper published by the Indian Bureau of Police Research and Development (BPRD), Dahiya (2016) similarly argues that the majority of police custodial death occurs as a result of violence: “The police in India is often blamed for committing unlawful killings in police custody. Such deaths are many a times the result of third degree treatment during custodial torture and police deny all responsibilities stating that there were other reasons behind the deaths.” Regional and international non-governmental organizations (NGOs) agree with the BPRD’s assessment. In a 2011 report, the Asian Center for Human Rights (ACHR) alleged that a large number of police custodial death cases were caused by police torture with headlines including, “Individual cases of custodial deaths through torture,” “Custodial death through torture: alleged suicide,” and “Custodial death through torture: alleged medical complications” (ACHR 2011). Human Rights Watch

¹⁸NCRB reports are available at <http://ncrb.gov.in/>. Because death counts are reported annually to NCRB by state governments and state police agencies, NCRB reports likely undercount actual police custodial deaths. All Indian states and union territories reported police custodial death data to NCRB except for Daman & Diu in 2001.

echoed ACHR’s concerns in 2016, claiming that in many of the cases described in the aforementioned NCRB report, “family members allege that the deaths were the result of torture” (Watch 2016). As such, we assume for measurement purposes that police custodial deaths as reported by the NCRB are correlated with police violence. If we fail to find empirical support for our hypothesis, it may be because this is an untenable assumption; we do not expect the creation of a PCA to decrease the number of deaths in police custody due to natural causes.

Figure 1: Count of Deaths in Police Custody by Year



The NCRB reports two types of police custodial deaths: (1) deaths remanded to police custody, and (2) deaths *not* remanded to police custody. The former refers to the death of individuals sent back to police custody by an Indian court for the purpose of furthering an investigation; the latter refers to the death of individuals taken into custody by police officers prior to a court appearance (?). This is an important distinction. When an individual is remanded to police custody by an Indian court, we expect the court to pay heightened attention to the physical security of that individual. As such, the police are likely to be more constrained in their use

of violence against individuals remanded to police custody by a court. Conversely, when individuals are not remanded to police custody by a court, police are likely to feel less constrained in their abuse of those persons. Figure 1 shows changes in police custodial death as reported by NCRB over time. As expected, the count of custodial deaths not remanded to police by the court is larger than the count of custodial deaths remanded to police custody following legal action. Because police violence is more prevalent in cases where individuals are taken into initial police custody than when they are remanded to police by an Indian court, we use a count of UNREMANDED POLICE CUSTODIAL DEATHS as our main measure of Police Violence.¹⁹

4.2 Main Independent Variable: PCA Creation

We operationalize our main independent variable, PCA Creation, as the de jure existence of a state-level Police Complaints Authority.²⁰ Using Commonwealth Human Rights Initiative (CHRI) reports about the implementation of the Indian Supreme Court order,²¹ we collected information on de jure PCA creation across Indian states and union territories from 2006 to 2015. The final variable used in our analyses, STATE PCA CREATION, is a binary variable coded “1” in the first year in which a state or union government issues a government order or passes a police act that explicitly mentions the establishment of state-level PCA and every year thereafter.²² We lag the variable one period in our empirical models. Figure 2 provides information about the notable temporal and cross-sectional variance in the de jure creation of state-level

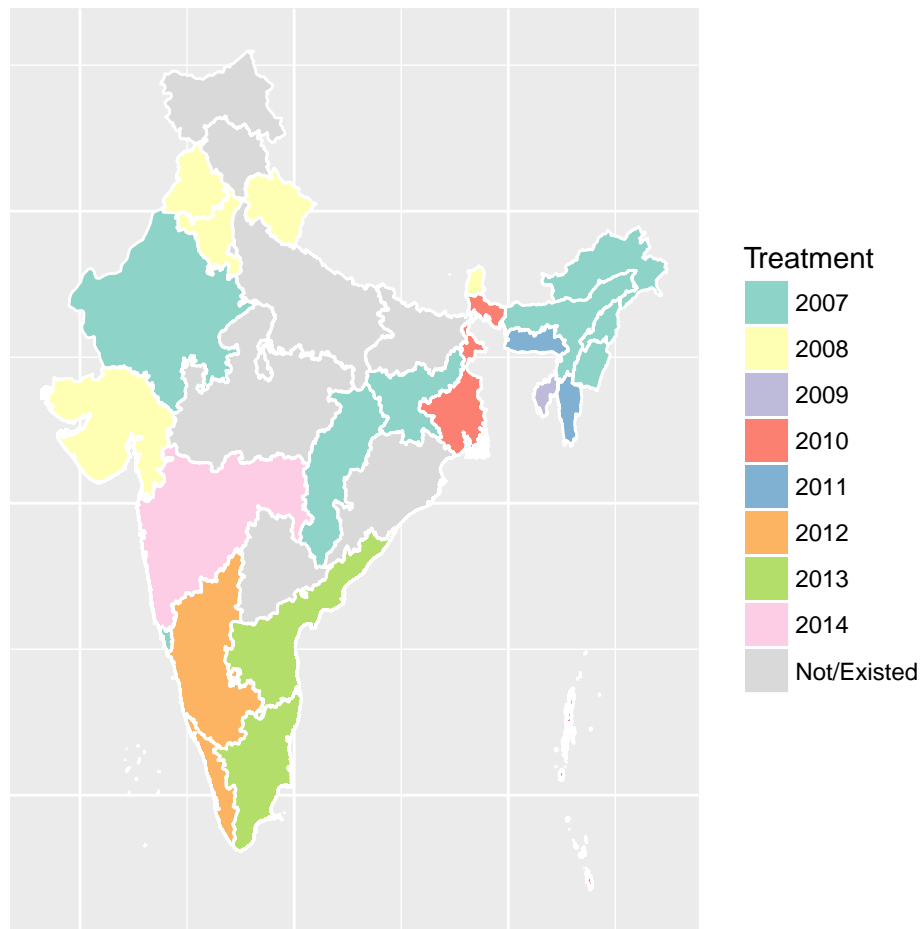
¹⁹The variable ranges from 0 deaths to 34 deaths (Maharashtra in 2013).

²⁰In its ruling, the Indian Supreme Court also required states to establish district-level PCAs, calling for district-level PCAs to “... inquire into allegations of extortion, land/house grabbing or any incident involving serious abuse of authority.” Theoretically, we also expect the creation of district-level PCAs to decrease police violence. We limit our empirical analysis of the effect of PCAs on police violence for several reasons. First (and most practically), we only have data for PCA implementation and police violence at the level of the Indian state. Second, state PCAs are more powerful than district PCAs since state PCAs. State-level PCAs are permitted to investigate complaints against officers of the rank of Superintendent of Police and above; district-level PCAs are only permitted to investigate complaints against police officers of and up to the rank of Deputy Superintendent of Police. As a result, we expect individuals claiming serious abuse by high-level police officials to bring allegations to state-level PCAs rather than district-level PCAs.

²¹CHRI reports are available at <http://www.humanrightsinitiative.org/>.

²²Orissa (Odisha) and Delhi had PCA-like state institutions prior to 2006. We code the creation of a PCA in Orissa (Odisha) and Delhi as “1” following a formal announcement that that institution will serve as the state PCA.

Figure 2: State PCA Implementation Map



We measure STATE PCA CREATION as the de jure creation of a state Police Complaints Authority. Alternatively, we could choose to measure PCA creation using some other operationalization: the de facto implementation of such an institution, whether the institution is independent from the police, or whether the institution issues binding recommendations. We choose to measure STATE PCA CREATION as the de jure creation of such an institution for two reasons. First, the de jure creation of a PCA represents the first time that a state government acknowledges the creation of such a fire-alarm institution, and it is easier to code valid and reliable data on such a concept. Second, and more importantly for our purposes, the de jure creation of a

²³In our Supplemental Appendix, we provide information on PCA creation by state name.

Police Complaints Authority is the minimum level of PCA implementation in which a state can engage. The creation of a de facto institution or an institution with more “teeth” would likely better constrain human rights violations than an institution that exists in name only. As such, the decision to operationalize our main independent variable as a de jure institution is likely to result in a conservative estimate of the effect of PCA Creation on Police Violence.

4.3 Identification Strategy: A Generalized Difference-in-Difference Approach

To test the implications of our argument, we take advantage of variance in the creation of Indian state PCAs following the Supreme Court’s ruling in *Prakash Singh and Ors. v. Union of India and Ors.* We use a quasi-experimental difference-in-difference research design that exploits cross-sectional and temporal variation in our treatment variable, STATE PCA CREATION. Because our dependent variable is a count of deaths not remanded in police custody, we use Poisson maximum likelihood regression model to estimate our difference-in-difference model:

$$E(\text{Police Violence}_{it}) = \exp(\beta_1 \text{State PCA}_{i,t-1} + \delta X' + \gamma_i + \eta_t).$$

The difference-in-difference design allows us to compare changes in deaths in police custody in states that created PCAs before and after PCA creation to changes in deaths in police custody in states that did not create PCAs. $\delta X'$ is a vector of covariates measured at the state level. The model includes, γ_i , state/union territory fixed effects that capture the influence of unobserved time-invariant omitted variables. η_t represents year fixed effects that absorb the effect of common time shocks and trends to all states and union territories. To account for the serial correlation, standard errors are clustered at the level of the state/union territory.

In order to strictly satisfy the parallel trends assumption required for causal inference via a difference-in-difference design, the treatment—here, PCA CREATION—must be randomly assigned. Put differently, the parallel trends assumption requires that treatment group—which includes Indian states that created PCAs—and the control group—which includes Indian states

that did not—exhibit similar trends in police violence prior to the implementation of the treatment. Although the Indian Supreme Court initially ordered that PCA creation be completed by December 2006, all Indian states delayed the PCA creation to differing degrees. As a result, we cannot argue that our PCA treatment was subject to true random assignment. Instead, we consider why states would delay PCA implementation in the face of the Supreme Court’s directive, arguing that the delay of implementation of PCA is driven by two factors that might simultaneously influence police violence—STATE CAPACITY and STATE DESIRE—and including measures to control for those covariates in our empirical analyses.

With regard to STATE CAPACITY, it is possible that some state governments wished to follow the Court’s directive, but lacked the political and/or logistical capacity to create a Police Complaints Authority within the time-frame specified by the Court.²⁴ Because the creation of a new institutions requires state resources, state governments are less likely to comply with the Court’s order when they lack the logistical and administrative capacity to do so. In order to measure STATE CAPACITY, we include in our empirical models a measure of state gross production (GDP) at 2004-2005 prices. We rescale the measure by dividing by 1,000,000. These data come from reports published by the Planning Commission Government of India and Ministry of Statistics & Programme Implementation (MOSPI 2015, PCG 2014) and are reported for each state-year in our sample with the exception of three union territories: D & N Haveli, Daman & Diu, and Lakshadweep.²⁵

Second, some state governments that have the capacity to create PCAs might lack the desire to do so at the Court’s behest because they expect PCAs to constrain their ability to use police violence. As discussed above, the police force is highly politicized in India. Political leaders misuse police agencies to settle personal issues and intimidate or harass their political opponents (Bayley 1983; Verma 2005). Ruling political parties are able to award or punish police officers by promoting them or removing them from their position (Subramanian 2007; Ragha-

²⁴Studying the effect of poverty reduction programs on violence in India, Dasgupta, Gawande and Kapur (2017) argues that state capacity is crucial to the implementation of new institutions.

²⁵Data for 2014 are not available for some states, although that missingness appears to be at random and is handled via multiple imputation as described below. We imputed missing values for all states and union territories.

van 2003). States with more politicized police are more likely to delay the implementation of PCAs. Because Indian political parties can punish police officers by transferring them to new departments, we measure STATE DESIRE using the proportion of police superintendents and deputy inspector generals of police who had less than two year tenure and transferred out per state-year from 2001 to 2015 as reported by the Bureau of Police Research and Development (BPRD).²⁶ We also use religion as a supplementary measure of STATE DESIRE. In states that have diversity of religion, political competition is more intensive compared to states that are predominately Hindu. More intensive political competition leads to lack of desire to implement PCAs. Religion is coded 1 if Hindu is the most populous religion and as 0 otherwise using data from the 2001 and 2011 census.²⁷

5 Empirical Results

Table 1 provides our main empirical results, which provides significant support for our hypothesis that the PCA creation decreases police violence. Column (1) shows coefficient estimates of the effect of PCA CREATION on UNREMANDED POLICE CUSTODIAL DEATHS without control variables. Because we use a Poisson maximum likelihood regression model, the coefficient on PCA CREATION shown in Table 1 provides the log of the ratio of the expected count, comparing custodial death counts when PCA CREATION takes the value of 1 to death counts when PCA CREATION takes the value of 0. Thus, the creation of a Police Complaints Authority leads to -0.524 log of the ratio of expected counts—a 40% reduction in unremanded deaths in police custody. Column (2) shows the results of a model that includes the control variables described above. Because measures of STATE CAPACITY and STATE DESIRE have some missingness, we use

²⁶The proportion is calculated as the number of transfers divided by the number of police district. The number of transfers in year 2001 to 2003 are reported in an independent study conducted by BPRD. The number of transfers in year 2004 to 2015 are reported by BPRD. We use the number of police district in 2004 as the denominator for every year because of data availability and time invariant nature of the variable.

²⁷Because we only have data for 2001 and 2011, years between 2001 and 2011 are coded the same as 2001; any year after 2011 is coded the same as 2011. Our Supplemental Appendix provides descriptive statistics for all of the measures used in our analyses.

multiple imputation to “fill in” missing values.²⁸ The effect of PCA creation on police violence is substantively unchanged after controlling for STATE CAPACITY, STATE DESIRE, and RELIGION, leading to a 37% reduction in deaths. Interestingly, neither STATE CAPACITY nor STATE DESIRE has a statistically significant effect on police violence. Because both measures are largely time-invariant, we expect that the lack of statistical significance may be because their effects have been absorbed by the inclusion of fixed effects.

To interpret our substantive results differently, we use our data and empirical model to predict point estimates of the number of unremanded custodial police deaths in two hypothetical scenarios: (1) a scenario in which all Indian states created Police Complaints Authorities in 2007, and (2) a scenario in which no Indian states implemented PCAs at all. Comparing the number of unremanded custodial police deaths in these two scenarios to number of deaths that occurred in our data provides us with some information on the (hypothetical) effect of full PCA implementation. In the first scenario, we calculate 776 total unremanded deaths in police custody. Compared to the actual number of deaths in police custody in our data (925), this simple calculation suggests that India would have experienced 149 less reported deaths in police custody had all Indian states implemented PCAs in 2007 at the behest of the Court. Under our second hypothetical scenario, total deaths in police custody would total 1042 deaths. Compared to the 925 deaths in our data, we expect that there would be 117 more deaths in police custody if no Indian states had ever implemented a PCA.

²⁸Imputation is limited to our control variables. We describe the process of multiple imputation in additional detail in our Supplemental Appendix.

Table 1: The Effect of PCA Creation on Police Violence

	(1)	(2)
PCA Creation, $t-1$	-0.524*** (0.189)	-0.468** (0.196)
State Capacity		0.196 (0.173)
State Desire		-0.040 (0.039)
Religion		-0.699*** (0.201)
State/UT FE	Y	Y
Year FE	Y	Y
	State/UT = 36 N = 526	State/UT = 36 N = 526

Note: p-values are two-tailed. *p<0.1; **p<0.05; ***p<0.01. Robust standard errors are clustered by state/union territory.

5.1 Placebo Tests

Because we acknowledge that Indian PCA creation was not subject to true random assignment for the reasons discussed above, it is important to further investigate the extent to which our data meet the parallel trends assumption on which difference-in-difference estimation depends. In order to do so, we added to our previous models in Table 1 four hypothetical leads of PCA CREATION—hypothetical implementation of PCA CREATION in each of the four years prior to year in which the actual creation of a PCA occurred for a given state or union territory. Plotting the coefficient on PCA CREATION for each of these leads allows us to see whether the treatment group and control group have similar trends before the creation of a PCA; if they do, the hypothetical creation of a state PCA prior to the actual implementation will have no effect

on police violence. In addition, we also included four lags of STATE PCA in our models to test whether the creation of a PCA has a lasting depressive effect on police violence.

Figure 3 shows a plot of the coefficients on PCA CREATION(at time, $t = 0$) and the associated leads and lags.²⁹ Black dots represent point estimates; bars show 95% confidence intervals, and bold lines depict 90% confidence intervals. Importantly, the effect of PCA CREATION fails to reach traditional levels of statistical significance in years that prior to or in the actual year in which an Indian state created a given PCA. The magnitude of the hypothetical effects prior to actual implementation is also substantively very close to zero. This suggests that the police violence trends in the treatment group and the control group were not statistically different from one another prior to the creation of a state PCA.

One to two years after the creation of a Police Complaints Authority (at time, $t = 0$), state PCAs start to reduce police violence. The point estimate falls dramatically after the creation of a PCA, and the predicted effects (at time, $t = 1$, $t = 2$) are statistically significant at 0.05. Three years after the implementation of Police Complaints Authority, the effect of institutional creation at time, t , remains negative, although it is not quite significant at 0.10. We believe that we lost traditional level of statistical significance because of a loss of observations. Because the temporal domain of our police data ends in 2015, we are not able to observe police violence for three years after PCA CREATION for states that created PCAs on or after 2013.³⁰ In full, we take Figure 3 to be supportive of our meeting the parallel trends assumption and in providing substantive support for our main hypothesis that the creation of PCAs decreases police violence.

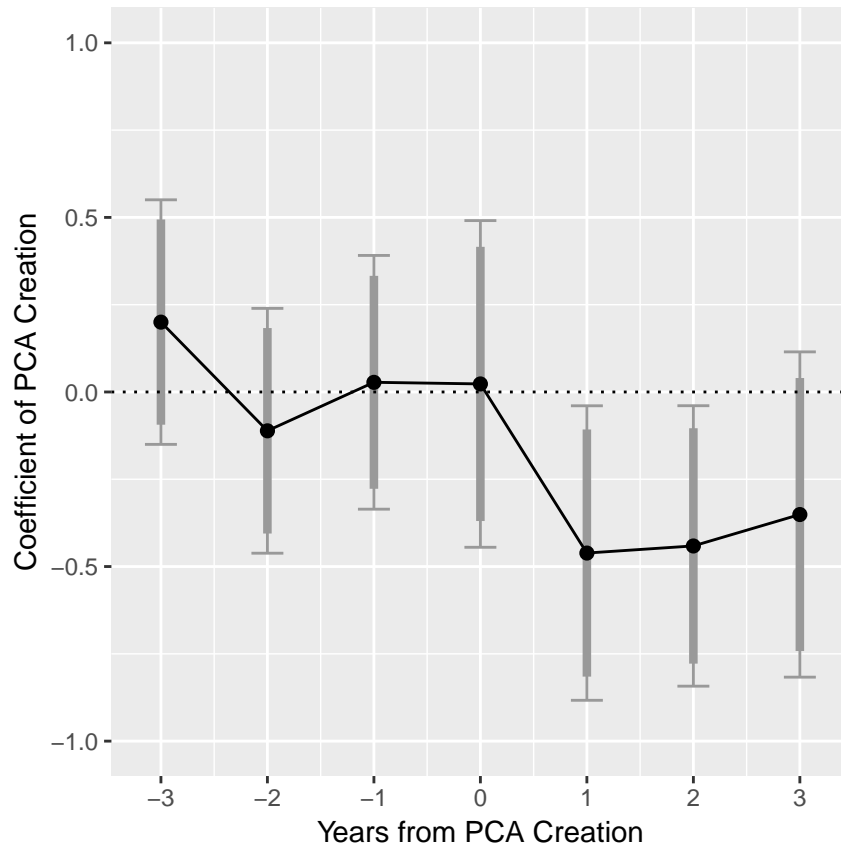
5.2 An Additional Test: Binding PCA Recommendations

Our main hypothesis is that the creation of a Police Complaints Authority decreases police violence. Prior to this point, we have assumed that all PCAs are the same, and as such, we op-

²⁹A full table of results is provided in our Supplementary Appendix. These results are generated using unimputed data, although they are substantively similar when we conduct placebo tests using the results with imputed data. Our Supplementary Appendix includes a figure depicting the results when we conduct placebo tests using imputed data.

³⁰These states are Andhra Pradesh, Tamil Nadu, and Maharashtra.

Figure 3: Changes in Police Custodial Death Before and After PCA Creation



erationalized the creation of a PCA as a binary variable indicating whether a state created an institution in a given year or not. In this section, we conduct an empirical test of an additional implication of our theory and investigate the effect of the creation of a PCA with enforcement power on reducing police violence. There is a variance in the enforcement power of state PCAs: some PCAs have the power of binding recommendation, and some do not. We expect state PCAs that can make binding recommendations to have a greater effect on reducing police violence as compared to state PCAs with no such qualities.

To test our expectation, we recode our main independent operationalization of our independent variable into three nominal categories: BINDING PCA CREATION, REGULAR PCA CREATION, and NO PCA CREATION. PCAs are coded as binding if the state act or government order that creates the PCA gives the institution the power to make binding recommendations. PCAs are coded as regular if the state act or government order that creates the PCA does not explic-

itly mention the power to issue binding recommendations. We include each of these variables in our empirical mode. The reference group is NO PCA CREATION.³¹ As above, we use reports published by CHRI to recode our main independent variable as above. Our empirical tests echo those presented in Table 1 with the exception of the recoded main independent variable.

Table 2 shows the results of this additional test. As expected, the results show that the creation of a binding PCA leads to greater reduction in unremanded police custodial deaths as compared to the creation of a PCA without such powers. In Column (1) (no controls), the creation of a binding PCA leads to -0.883 log of the ratio of expected counts—a 58% reduction in deaths as compared to states with no PCA. The implementation of regular PCA leads to -0.482 log of the ratio of expected counts—a 38% reduction in deaths, as compared to states with no PCA. Note, however, that even when we include BINDING PCA CREATION, REGULAR PCA CREATION still has a statistically and substantively significant effect on the reduction of unremanded deaths in police custody in India. It is not the case that only binding PCA constrain police violence. In sum, when we consider variance in the ability of PCAs to make binding recommendations, we find that although PCAs with more enforcement power are more effective in reducing police violence, even “toothless” PCAs help to limit the number of deaths that occur in Indian police custody.

6 Conclusion

The conventional view of police violence is that the root cause of excessive use-of-force rests in the personalities of the individuals who choose to become police officers (e.g., Balch 1972, Eberhardt et al. 2004, Fielding and Fielding 1991,?, Gelman, Fagan and Kiss 2007, Lockwood and Prohaska 2015, Twersky-Glasner 2005). But this answer offers little guidance for reform; personalities cannot be intentionally altered en masse. Drawing on principal-agent theory and investigating the role of courts in changing police behavior, we show that police officers re-

³¹Note that these measures still represent de jure—not de facto—powers delegated to PCAs.

Table 2: The Effect of Binding PCA Creation on Police Violence

	(1)
Regular PCA Creation, $t-1$	-0.482** (0.211)
Binding PCA Creation, $t-1$	-0.883*** (0.170)
State/UT FE	Y
Year FE	Y
	State/UT = 36 N = 526

Note: p-values are two-tailed. *p<0.1; **p<0.05; ***p<0.01. Robust standard errors are clustered by state/union territory.

spond to court national-level directives. In addition to issuing rulings that directly police officers' assessment of the costs of benefits of particular tactics (Conrad 2018), courts can mandate the creation of independent "fire-alarm" institutions to which victims can report allegations of rights violations against the police.

This is important for two reasons. First, changes in law are easier to implement than changes to officer personalities. With a better understanding of how those mechanisms work together to produce appropriate, and alternatively, inappropriate uses of force, we can rearrange police incentives and reorient police training to guide officers' behavior in a direction that is better for citizens and officers alike. Second, the ability to mandate the creation of accountability institutions—thereby sidestepping potentially politicized and corrupt police services, as in the case of India—means that domestic courts can be incredibly powerful actors in limiting government abuses of human rights. Courts have enormous power not only to influence the decision-making of police officers *directly*, but also to mandate the creation of independent institutions that monitor police officer behavior and improve human rights outcomes *indirectly*.

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A Appendix

Table A1: Creation of State PCA

Year	States and UTs
2007	Arunachal Pradesh, Assam, Chhattisgarh, Goa, Jharkhand, Manipur, Nagaland, Rajasthan
2008	Gujarat, Haryana, Punjab, Sikkim, Uttarakhand
2009	Tripura
2010	West Bengal, A & N Islands, Chandigarh, D & N Haveli, Daman & Diu, Lakshadweep, Puducherry
2011	Meghalaya, Mizoram
2012	Karnataka, Kerala
2013	Andhra Pradesh, Tamil Nadu
2014	Maharashtra
Not yet	Bihar, Himachal Pradesh, Jammu and Kashmir, Madhya Pradesh, Uttar Pradesh
Existed	Orissa (Odisha), Dehli

Table A2: Descriptive Statistics

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Median	Pctl(75)	Max
Death remanded	526	1.027	2.943	0	0	0	1	42
Death not remanded	526	1.759	3.902	0	0	0	1	34
State PCA	527	0.381	0.486	0	0	0	1	1
District PCA	527	0.184	0.388	0	0	0	0	1
SC order	527	0.664	0.473	0	0	1	1	1
Committee	527	0.531	0.499	0	0	1	1	1
GDP	430	0.164	0.222	0.001	0.013	0.081	0.226	1.476
Religion	525	0.905	0.294	0	1	1	1	1
Head transfered	475	0.817	1.912	0.000	0.000	0.417	0.772	25.500

Table A3: The Effect of PCA Creation on Police Violence: OLS and Poisson Results

	OLS	Poisson	Imputed OLS	Imputed Poisson
PCA Creation, <i>t-1</i>	-1.388 (0.845)	-0.524*** (0.189)	-1.162* (0.652)	-0.468** (0.196)
GDP			1.689 (1.108)	0.196 (0.173)
Religion			-0.099 (0.212)	-0.699*** (0.201)
Head transfered			-0.061 (0.067)	-0.040 (0.039)
State/UT FE	Y	Y	Y	Y
Year FE	Y	Y	Y	Y
	State/UT = 36 N = 526	State/UT = 36 N = 526	State/UT = 36 N = 526	State/UT = 36 N = 526

* *Note:* P-values are two-tailed. Robust standard errors are clustered by state/UT. *p<0.1; **p<0.05; ***p<0.01.

Table A4: The Effect of PCA Creation on Police Violence: Placebo Test Results

	OLS	Poisson	Imputed OLS	Imputed Poisson
t-3	0.711 (0.906)	0.200 (0.179)	0.533 (0.769)	0.132 (0.152)
t-2	0.106 (0.526)	-0.111 (0.179)	-0.077 (0.442)	-0.154 (0.186)
t-1	0.647 (0.929)	0.028 (0.185)	0.490 (0.801)	-0.070 (0.166)
t	0.342 (0.670)	0.023 (0.238)	0.091 (0.643)	-0.117 (0.321)
t+1	-0.664 (0.465)	-0.461** (0.215)	-0.716 (0.217)	-0.410** (0.208)
t+2	-0.484 (0.369)	-0.441** (0.205)	-0.683* (0.380)	-0.486** (0.201)
t+3	-0.339 (0.358)	-0.351 (0.238)	-0.366 (0.385)	-0.356 (0.237)
GDP			1.944 (1.199)	0.388 (0.252)
Religion			-0.123 (0.269)	-0.431** (0.201)
Head transfered			-0.069 (0.071)	-0.043 (0.036)

* *Note:* State FE and Year FE are included in all models. P-values are two-tailed. Robust standard errors are clustered by state/UT. *p<0.1; **p<0.05; ***p<0.01.

Figure A1: Changes in Police Custodial Death Before and After PCA Creation

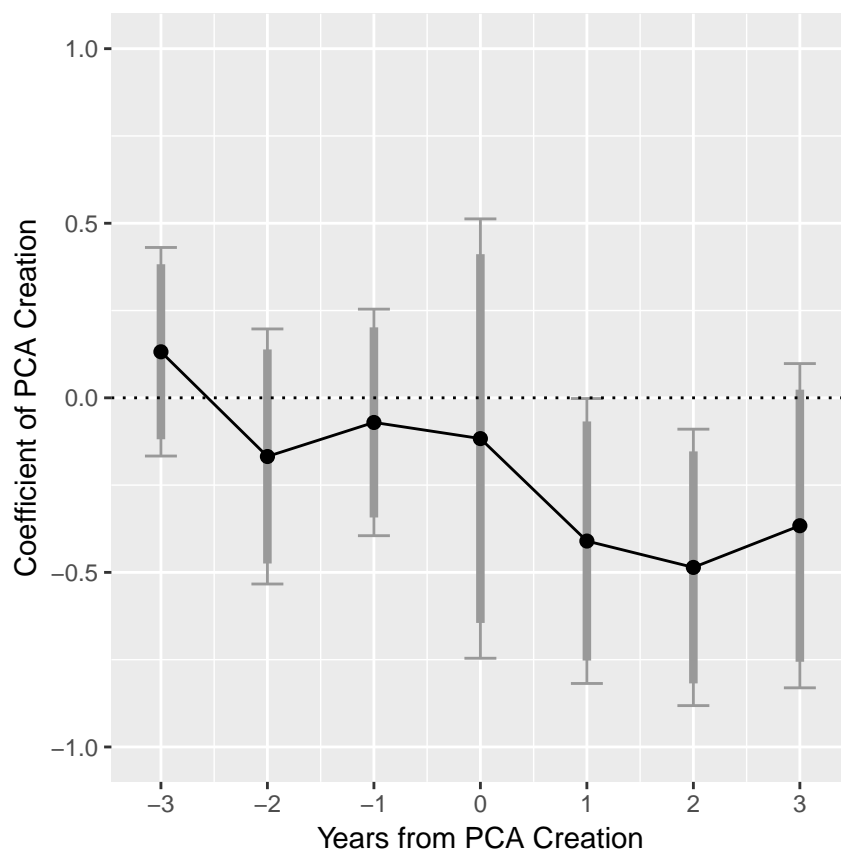


Table A5: The quality of PCA results

	(1)	(2)	(3)
l.state_pca	-0.482** (0.211)	-0.522** (0.210)	-0.499** (0.214)
Binding	-0.401* (0.212)		-1.036*** (0.266)
Independent		-0.019 (0.296)	0.742*** (0.167)
Binding*Independent			0.069 (0.293)
State/UT FE	Y	Y	Y
Year FE	Y	Y	Y
	State/UT = 36 N = 526	State/UT = 36 N = 526	State/UT = 36 N = 526

* Note: P-values are two-tailed. Robust standard errors are clustered by state/UT. *p<0.1; **p<0.05; ***p<0.01.