How Repression Affects Public Perception of Police: Evidence from Uganda

Travis Curtice[*]

November 24, 2019

Abstract

What are the effects of state repression on public perceptions of police? And to what extent are these effects uniform or conditional on individuals' loyalty to political authorities? I argue that repression by the police negatively affects how people evaluate the police, especially among those who do not support the ruling party. People who oppose the regime are more likely to fear the police following a repressive event relative to regime supporters. To test this argument, I leverage a unique research design opportunity that emerges from the social media tax protest led by Robert Kyagulanyi Ssentamu (also known as Bobi Wine) and subsequent selective repression by the Uganda Police Force while a nationally representative survey on police and security was being administered in Uganda. I demonstrate selective repression of protesters decreased support for the police. As theorized, these effects are largely driven by political loyalty; repression has a stronger effect on how members of the opposition evaluate the police relative to incumbent supporters.

Keywords: Law and order, police, protests, collective action, repression, Uganda

Replication files, supplementary material and online appendix will be available on the author's website.

1 Introduction

What are the effects of state repression on public perceptions of the institution that perpetrates it?[1] Does state repression by the police at the national-level affect individual-level support for the police? Considering how repression affects people's support for the police is crucial to understanding the provision of law and order and patterns of conflict, especially when security institutions depend on cooperation from individuals. If state repression decreases support for police, it has implications for the ability of police to provide law and order and deter crime. People who fear repression, for example, are likely to avoid interacting with security forces who employ it. Individuals refusing to voluntarily provide information, or even report crimes, makes routine acts of policing more difficult. However, existing studies focus on the effects of repression on political participation (Davenport et al. 2019, Ritter and Conrad 2016).[2]

The political effects of repression are debated. On one hand, state repression is meant to punish political disloyalty, deter acts of dissent and induce obedience (García-Ponce and Pasquale 2015, Lichbach 1987, Lyall 2009, Ritter and Conrad 2016, Young 2019, Zhukov and Talibova 2018). On the other, state repression can incite political opposition, mobilizing future collective action (Balcells 2012, Curtice and Berhlendorf 2018, Finkel 2015, Gurr 2015). The effectiveness of repression likely depends on governments' repressive tactics: targeting clandestine activities might decrease dissent but using it against overt, collective challenges might escalate dissent (Sullivan 2016). But we know less about the relationship between repression and public perception of the institution tasked with perpetrating it.

In many unconsolidated democracies and autocracies, security institutions like the police and military have two roles: first, they are responsible for providing security and law and

---

[1]Repression is defined as "physical sanctions against an individual or organization, within the territorial jurisdiction of the state, for the purpose of imposing a cost on the target as well as deterring specific activities and/or beliefs perceived to be challenging to government personnel, practices or institutions" (Davenport 2007, 2).

[2]More generally, exposure to violence and repression has both short-term and long-term effects on individuals' relationship to the state (Blattman 2009, Bratton and Masunungure 2007, Rozenas and Zhukov 2019, Zhukov and Talibova 2018).

order; and second, they repress dissent to maintain the political status quo. Internal security institutions used by political authorities to repress dissent and enforce the political status quo are also responsible for deterring crime, enforcing law and order and providing security more broadly.[3] The primary institution responsible for providing law and order is the police; however, relative to the military, they rely more heavily on people's willingness to cooperate with them to be effective. People's willingness to cooperate with police depends on public perceptions of the police as legitimate authorities. When political authorities rely on the police to repress dissent, it has implications beyond deterring dissent. As a tool used by political authorities to inflict fear and reduce dissent (Young 2019), repression likely increases people's fear of the police, decreasing support.

However, the theoretical and empirical relationship between repression and its effects on public perception of police remains an open question. We might expect repression by police to have a uniform negative effect on the public's perceptions of the police as legitimate authorities. Alternatively, we might expect that people view acts of repression through motivated reasoning, depending on whether they support the regime. People who support the regime might view repression as legitimate while people who oppose the regime see it as illegitimate. Then, we might expect repression to have a positive effect on perception of incumbent supporters and a negative effect on opposition supporters.

I argue that repression by the police negatively affects public perception of the police. When political authorities rely on the police to repress dissent, people are less likely to view the police as legitimate authorities because they fear interacting with them. The extent to which people fear being repressed varies by whether they support or oppose the regime. People are more likely to fear the police in general; however, support for the ruling party should condition its effect. Incumbent supporters are less concerned about experiencing repression and consequently less likely to fear repression. However, opposition supporters

---

[3]These security institutions include both formal institutions like the police and military forces and informal institutions such as elite police squads and pro-government militias. (Blaydes 2018, DeMeritt 2015, Greitens 2016, Mitchell, Carey and Butler 2014).

are more likely to fear experiencing repression. The effects of repression on public perception should be strongest among those who are more likely to fear being repressed (i.e., those opposed to the ruling party).

To test these claims, I empirically examine the effect of repression by the police on public perceptions of police in Uganda. I estimate the effect of selective repression by leveraging a unique research design opportunity that emerges from the social media tax protest led by Robert Kyagulanyi Ssentamu (also known as Bobi Wine) and his subsequent arrest by the Uganda Police Force while a nationally representative survey on police and security was being administered in Uganda. I find selective repression of these protesters by police negatively affected public perceptions of the police, even those who did not directly experience the repression. Following the repression of Bobi Wine and the Social Media Tax protests, people viewed the police as less legitimate authorities. Additionally, these effects are largely driven by political loyalty and perceptions of normative alignment with the police: people who identify as incumbent supporters were more likely to tolerate repression than individuals who identify with the opposition.[4]

This paper makes several significant contributions to research on political violence (Kalyvas 2006, Lyall 2009), repression (Davenport et al. 2019, Ritter and Conrad 2016), and policing (Blair, Karim and Morse 2019). First, these results demonstrate that the negative consequences of repression move beyond political behavior (Balcells 2012, Bautista 2015), rather repression by police undermines people's trust in the state institutions responsible for providing security. The effects of repression on civilian-police interactions matter because police rely on individuals to be effective; higher trust trust leads to more cooperation (i.e., better information being provided to the police), which leads to more effective security operations. Second, selective repression targeted at opposition political elites and protestors has individual-level effects even among those who were not engaged in political dissent. Selective

---

[4]In the study, respondents were asked which party they support during a baseline survey that occurred pre-treatment. So the protests and arrests could not affect how people responded to the party support question.

violence might be an effective tool to induce political loyalty (Blaydes 2018, Kalyvas 2006), but it still adversely affects the way people view the police. Third, these results suggest that political authorities face a tradeoff: they can rely on the police to repress dissent but doing so undermines people's trust in the police – even those who support the regime – and subsequently their co-production of law and order and security.

2 Repression and Police Legitimacy

In many contexts, political authorities use members of the security apparatus to repress dissent. Several governments employ their police force to suppress and control opposition areas. The Chinese government relies on their police and non-state security institutions to repress Uighur culture and traditions (Ong 2015). Authoritarian governments in Burundi, Ethiopia, Rwanda, Tanzania, and Zimbabwe have used their police to restrict public spaces associated with political dissent, intimidating opposition supporters during elections, arresting and even torturing political opposition leaders. Since 2013, police in Egypt have imprisoned thousands of Islamist opponents, as well as numerous liberal activists and journalists. In non-democracies where political authorities are not committed to the democratic transfer of power, people view actions taken by police through a broader political lens of the state. Acts of repression by members of the security apparatus should affect *both* people's perceptions of those who ordered the repression *and* the institution responsible for implementing it.

However, most theoretical and empirical studies of repression focus on its political effects (i.e., how people view political authorities) rather than its effect on perception of those who implemented it. Existing studies have examined the relationship between repression and dissent (Davenport et al. 2019).[5] Many focus on the political effects of repression and exposure to violence (Blattman 2009, Bratton and Masunungure 2006, Gonzalez and Miguel 2015, Rozenas and Zhukov 2019, Zhukov and Talibova 2018). An important theoretical

---

[5]See for example, Carey (2006), Davenport (2007), Gurr (2015), Henderson (1991), Lichbach (1987), Moore (2000), and Nordås and Davenport (2013).

and empirical limitation of existing studies of the effects of state repression on political participation is the assumption that political authorities and the security apparatus act as a unitary actor, considering whether indiscriminate or mass repression affect political behavior of civilians. Consequently, we know less about how perceptions of the police might be affected by political authorities decisions to employ various security institutions to repress dissent. This paper examines the second dynamic: how repression by the police affects public perception of the police.

Exploring the relationship between the political authorities, the security apparatus, and the civilians to answer the question of "how individuals relate to the security apparatus" is foundational to theories of government and state development. The main purpose of government is to provide public goods. Of the many goods the state provides, such as healthcare and education, the provision of security may be one of the most important because without law and order society remains in relative anarchy (Hobbes 1946, Weber 1946, Wilson 1978). A Weberian definition considers the state the institution that "(successfully) claims the monopoly of the legitimate use of physical force within a given territory" (Weber 1946, 78). Even in non-democracies, regimes see their ability to provide law and order as a cornerstone of legitimacy and economic development.

However, the co-production of domestic security depends on a set of three actors. The first set of actors are political authorities who are in charge of the government. These actors are tasked with legislating and executing laws to run the government and ensure development. As a function of their authority, they delegate the use of force to agents who are tasked with upholding and enforcing the laws (Blaydes 2018, Greitens 2016, Hassan 2017, Svolik 2012). The second set of actors are the security apparatus who are tasked with the capacity and directives to enforce the law. In the modern state, the police are the central actor responsible for providing law and order (Blair, Karim and Morse 2018, Tyler 2006). The third set of actors are the civilians who live within the given territory of the state. They must decide whether to comply and cooperate with the security agents they interact with on a day-to-day

basis.

Daily encounters between citizens and members of the police force are key to state development (Mazerolle et al. 2013, Wilson 1978). For many citizens, encounters with the police are the most likely interactions that people have with agents of the state (Lerman and Weaver 2014). As a consequence, the police and political authorities *both* rely on cooperation with the community to effectively accomplish their objectives (Skogan and Frydl 2004, Tyler 2006, Tyler and Fagan 2008). This cooperation involves citizens organizing neighborhood watches, taking note of suspicious activity, and reporting crimes. To prevent and solve crimes, the police critically rely on information supplied by community members, and they can receive this information only if citizens are willing to interact with them and provide it.

Governments, even non-democracies, require consent from citizens, but this support depends on the perceived fairness of the government's conduct. As Levi (1997, 16) argues "when citizens believe government actors promote immoral policies, have ignored their interests, or have actually betrayed them, citizens are unlikely to feel obligated to comply." Additionally, we know from an extensive body of work in criminology that people cooperate more with police when they trust them (Nagin and Telep 2017, Tyler and Fagan 2008). Legitimacy is a function of whether or not individuals trust the police.[6] The legitimacy argument from sociology and criminology perspectives suggests that the "police can gain leverage for the co-production of security by inculcating the popular perception that their actions and decisions are legitimate" (Tyler and Fagan 2008, 235). The legitimacy-based framework linking legitimacy, compliance and cooperation generalizes across several policing contexts.[7] People who view the police as legitimate should be more likely to do what they

---

[6]I define legitimacy as "a feeling of obligation to obey the law and to defer to the decisions made by legal authorities" (Tyler and Fagan 2008, 235) Certainly, legitimacy must be seen as a multi-dimensional concept. Beetham (1991), for example, identifies three constituents of legitimacy: 1) conformity to established rules, 2) which can be justified by reference to beliefs shared by dominant and subordinate groups; with 3) evidence of consent by the subordinate group. Alternatively, Tyler (2006) defines it as the "acceptance by people of the need to bring their behaviour into line with the dictates of an external authority." Accepting the legitimacy of authority is the belief that authorities should be obeyed and individuals should defer to that authority.

[7]See for example, studies on the United Kingdom (Jackson et al. 2012, Tankebe 2013), Ghana (Tankebe 2009), Hong Kong (Cheng 2015), Israel (Jonathan-Zamir and Harpaz 2014).

say, obeying them by showing deference even if they do not agree.

Political authorities resorting to violence to repress dissent may be perceived as inherently illegitimate to citizens, even those who support the regime (Lupu and Wallace 2019, Weart 1998). Coercion against protestors can make people doubt their own loyalty to the ruling regime and question whether the security forces serve the interests of the citizens or the regimes, including their ability and willingness to protect them (Lupu and Wallace 2019). This is especially the case with escalating violence that becomes more indiscriminate. During indiscriminate repression citizens "can no longer assure themselves of immunity from repression by simply remaining politically inert" (Mason and Krane 1989, 176). However, even selective state repression involves observable violations of individuals' physical integrity rights. If people see human rights violations by the police as a violation of procedural fairness, we should observe police abuse negatively shaping whether people believe the police treat individuals with dignity and respect and their expectations about whether the police make fair and impartial decisions.

One explanation for why people do not cooperate with police is because they fear the outcome of their interactions. When police act in ways that people believe are procedurally unfair, people will be more likely to fear encountering them. Similarly, when police act in ways that undermine their relationship to the communities they are policing, community members are more likely to believe that the police will engage in excessive force. In general, populations who mistrust and fear the police are likely to minimize their interactions with police.

Coercive violence by the state often generates fear, which shapes people's willingness to engage in dissent (Young 2019). However, one important dimension not explored in the criminology literature is the way that political authorities rely on the police to repress dissent and the effect this might have on people's perception of the police. Fear of experiencing abuse likely determines whether people view the police as legitimate authorities. Fear and mistrust of the police should decrease people's willingness to interact with police, undermining the

police's ability to gather information, investigate crimes, and deter crimes. To the extent that political authorities relying on police to repress dissent might influence people's perception of the legitimacy of police – determining who cooperates with police in the provision of law and order – the effects of state repression on public perception of police is of significant importance to our theories of governance and development.

3 Theoretical Expectations

I expect state repression by the police to negatively affect public perception of the police, decreasing support for the police. Police abuse, even selected targeting of individuals by members of the police force, should negatively affect how people view the police. Consequently, even though selective violence might be an effective tactic to induce political loyalty as a form of police coercion perpetrated by official members of the security apparatus, it should negatively affect the public perceptions of the institution responsible for implementing repression.

While negative interactions associated with directly experiencing police abuse should decrease whether people view the police as legitimate authorities, there are several reasons why we might even observe selective repression of dissent adversely affecting how people view the police. First, if people believe the role of police is to provide law and order and protect the community, then observing coercion used on political opponents of the regime rather than suspected criminals should make the police more illegitimate in the eyes of the citizens. Individuals might see such abuse as a violation of procedural fairness and due diligence under the law to protect people. More generally, people are more likely to believe that police who repress dissent are less likely to focus on the provision of law and order. When people identify the police as repressive agents of the political authorities rather than local agents protecting the community, the population in general is more likely to fear the police.

Second, suppressing dissent often includes the use of excessive force to increase fear *both* punishing protesters and deterring future dissent (Young 2019). As a strategy, repression is a tool meant to increase fear (Ritter and Conrad 2016, Young 2019). People view the police as repressive agents after observing them engage in repression. Even if people remain unwilling to join the opposition in collective action against the state, they likely fear repression and view it as illegitimate. The more people fear and mistrust the police, the more likely they are to see the police as illegitimate authorities.

Hypothesis 1. *(Police Repression): State repression by the police decreases support for the police.*

3.1 Political Loyalty and Fear

I expect these effects operate through a fear mechanism. People are more likely to see the police as legitimate when the police behave in ways that are considered procedurally fair or when the police are normatively aligned with the community (Mazerolle et al. 2013).[8] Violations to procedural fairness or normative alignment undermine police legitimacy (Skogan and Frydl 2004, Tyler 2003, 2004).[9] Perceptions of procedural fairness and normative alignment depend on whether people fear or trust the police. The more people fear the police, the less likely they are to see them as legitimate authorities. When political authorities delegate repression to the police, the police use coercive force to deter or punish political challengers. The use of fear to control dissent is a go-to strategy for political authorities in non-democracies. However, fear is likely to undermine public trust in the institutions responsible for providing law and order.

People who experience police abuse or state repression directly are likely to have a

---

[8]Procedural justice relates to judgments about the manner in which authority is exercised, including quality of decision-making such as neutrality and applying rules consistently in addition to judgments about the quality of interpersonal treatment: respect, politeness, and consideration of one's views. Normative alignment reflects that the police share values with members of the community.

[9]Lerman and Weaver (2014) find that a high degree of stops involving the use of force, especially when they do not result in an arrest, have a chilling effect on neighborhood-level outreach to local government.

stronger reaction to its effects than those who experience it indirectly (Curtice and Berhlendorf 2018). Additionally, we know the effects of repression can persist in the long run, even shaping the attitudes and behavior of people who did not witness it directly (Rozenas and Zhukov 2019, 4). Others argue that "the broader population's tolerance of government crackdowns may depend on whether the resistance campaign is nonviolent or violent, as repressing nonviolent campaigns may backfire" (Chenoweth and Stephan 2011, 68). Evidence from survey experiments in Argentina, India, Israel, and Uganda shows that people are less likely to support the government if the government uses excessive force (Curtice and Berhlendorf 2018, Lupu and Wallace 2019).[10] However, even in democracies people are considerably more supportive of government abuse – specifically the use of torture – if it is directed at individuals who they perceive as threatening (Conrad et al. 2018).[11]

Yet selective repression is likely to have heterogeneous effects on individuals' perceptions of the police depending on whether they support or oppose the political authorities. In expectation, repression negatively affects how people view the police through the fear mechanism, even across the whole range of regime supporters. However, there are two potential explanations for how loyalty to political authorities might affect people's response to repression by police.[12]

Based on the theoretical framework above, we might expect that political loyalty to the regime moderates the effect of repression on perceptions of the police based on whether or not people believe they are likely to experience repression. People who support the political authorities by attending pro-regime rallies, campaigning for candidates, and joining the

---

[10]Lupu and Wallace (2019) find the negative effect of government violence is significant only in Argentina and not Israel or India. They argue one possible explanation for this is that the "most notorious human rights abuses in Argentine history have targeted broad sectors of society" whereas abuses in Israel are mostly targeted." Curtice and Berhlendorf (2018) find that excessive violence by police results in political backlash.

[11]Two contextual factors might drive people's willingness to support torture: first, a clear perception of the other as a "threat;" and second, an effective rule of law constraining government abuse against the majority of civilians.

[12]Individuals' support for the police depends on whether people view the police as upholding procedural fairness or being normatively aligned with the community. People might be more or less likely to tolerate what they view as inappropriate police action depending on their relationship to the political authorities and the target of selective repression.

ruling party should be less likely to fear repression. Alternatively, people who are engaged in collective action opposing the political status quo are more likely to fear experiencing future repression. Consequently, we would expect that people who identify as regime supporters should be less likely to fear repression relative to non-supporters.[13]

Hypothesis 2. *(Police Repression Conditional on Partisanship): The extent to which repression by police decreases public support for the police is larger when the respondent supports the opposition.*

3.2 Political Loyalty and Motivated Reasoning

An alternative perspective based on motivated reasoning would predict that people interpret repressive action based on their support for or opposition to the political authorities who ordered the repression. Following the logic of motivated reasoning, we would expect that people would interpret actions taken by the police as legitimate or not depending on whether they achieve or challenge their political preferences. Beliefs about whether or not repressive action taken by the police is legitimate depends on a partisan lens. Individuals supporting the incumbent (i.e., the ruling political authorities) might view political opponents engaging in collective action as social deviants disturbing social order. We might expect people who are loyal to the political authorities to support state repression by the police, as those actions might be perceived as necessary to maintain the political status quo. From this perspective, police using force to deter dissent should increase support for the police.

Alternatively, people who do not politically identify with the political authorities should be less likely to justify repression, seeing any act of repression by the police as a clear violation

---

[13]The fear mechanism is reflected by the confessional poem by Martin Niemöller regarding citizens' silence in the face of Nazi repression: "First they came for the Communists And I did not speak out Because I was not a Communist Then they came for the Socialists And I did not speak out Because I was not a Socialist Then they came for the trade unionists And I did not speak out Because I was not a trade unionist Then they came for the Jews And I did not speak out Because I was not a Jew Then they came for me And there was no one left To speak out for me." Implicit is the idea that repression often starts with the other, followed by silence and denial, but the result is that it eventually affects all. The more the repression targets members of an in-group the more likely members of that group are to see the action as illegitimate; however, that does not mean that others will not eventually be touched by state violence, including former supporters.

of the role of police in society. Individuals who do not identify as loyal to the incumbent regime are relatively more likely to support challenges to the status quo, seeing repression as unjustifiable. People who oppose the regime are more likely to see political violence by the police, even selective repression, as a signal that the police are aligned with the political authorities rather than the community they are meant to be protecting. Even if they do not directly fear repression, opposition supporters are likely to see repression by the police as illegitimate.

Hypothesis 3. *(Motivated Reasoning: Conditional Effect of Incumbent Support): Repression by the police increases support for the police among incumbent supporters.*

Hypothesis 4. *(Motivated Reasoning: Conditional Effect of Opposition Support): Repression by the police decreases support for the police among incumbent supporters.*

4   Context: The Social Media Tax Protests and Selective Repression

I test my theory of selective repression on perceptions of police legitimacy with evidence from the Social Media Tax Protests in Uganda on July 11, 2018. To understand the selective repression of the Social Media Tax Protests in Uganda, it is necessary to understand the broader political context. Yoweri Museveni has maintained control of Uganda since 1986 alongside his incumbent party, the National Resistance Movement.[14] Although Museveni won the last three elections with an average vote-share of 60.27%, elections in Uganda were generally panned by international and domestic observers as lacking electoral credibility. Human rights are severely restricted and in many cases violated.[15]

Politics as usual shifted in Uganda in 2017 when Robert Kyagulanyi Ssentamu, also known as Bobi Wine and the Ghetto President, announced his plans to compete in the

---

[14]Multiparty elections were first held in 2006 after 92% of voters approved the introduction of a multiparty system by referendum in July 2005. Only 42% of the electorate voted in the 2005 referendum but those who did vote wanted a marked departure from the 2000 referendum where 90.7% voters wanted a "Movement" not a "Multiparty" political system.

[15]Political freedoms including electoral democracy, access to information and justice, and human rights protections remain limited and frequently violated by the regime.

upcoming by-election for Kyaddondo East Constituency. Well-known throughout Uganda as a famous musician, performer, and actor, Bobi Wine's decision to campaign for parliament was not a surprise. His music became increasingly political following the controversial 2016 presidential election. Wine used his music and social media platform as a venue to call for political reform. However, as a political neophyte, his campaign was met with broad dismissal by much of the political establishment in Kampala and few took his candidacy seriously. The Kyaddondo East Constituency had two well-established candidates competing for it (Sitenda Sebalu of the incumbent ruling National Resistance Movement party and Apollo Kantinti of the dominant opposition Forum for Democratic Change party) in addition to two additional independent candidates. Wine's electoral campaign strategy included combining a rigorous door-to-door walking campaign and substantial social media presence relative to many of the established candidates. Wine leveraged his social media presence and door-to-door walking campaign to a landslide victory.[16] Wine's rise to political office threatened the 33-year-old government led by President Yoweri Museveni and the National Resistance Movement. His social media presence, ability to energize crowds, and commitment to political reform contrasted starkly with the incumbent administration.

In March 2018, in part in response to Wine's electoral success, the president of Uganda gave a directive that all social media platforms would be taxed. Broadly seen as a mechanism used by political authorities to repress political freedom, the new Over-The-Top Tax was designed to to raise resources "to cope with the consequences" of social media users' "opinions, prejudices, [and] insults.[17] For many in Uganda, WhatsApp, Twitter, and Facebook among other social media platforms were a major source of news and political information. The heightened exposure to information had reportedly led Ugandans to become more critical about political conditions in the country.[18] The Over-The-Top tax on WhatsApp, Twitter,

---

[16]Bobi Wine won 25,659 votes with Ssebalu and Kantinti receiving only 4,566 votes 1,832 votes, respectively. The two other independent candidates together received only 952 votes.

[17]https://cipesa.org/2018/07/uganda-blocks-access-to-social-media-vpns-and-dating-sites-as-new-tax-takes-effect/

[18]https://www.theguardian.com/global-development/2019/feb/27/millions-of-ugandans-quit-internet-after-introduction-of-social-media-tax-free-speech

and Facebook, among other sites, required users to pay a daily fee of 200 Ugandan Shillings (USD 0.05). This was not the first time political authorities attempted to control the flow of information via social media platforms. In 2016, the president ordered all social media sites to be shut down during the elections to control the flow of information. As a mechanism of social control, the Social Media Tax was implemented on July 1, 2018.[19]

On July 11, 2018 a group of political activists organized by Bobi Wine gathered in Kampala to protest the Social Media Tax. Political authorities directed the Uganda Police Force to use force to break up the protest. The police used tear gas and live bullets to break up the protest. At least three protestors were arrested and remanded to Luzira Prison. Following the clash with the police, the Directorate of Public Prosecutions issued charges of assault and theft against several protesters including Bobi Wine, his bodyguard (Eddy Ssebufu), and two journalists (Raymond Mujuni and Joel Ssenyonyi).[20] Wine was detained and interrogated for more than 8 hours at the Central Police Station in Kampala. The coercive force used against the protestors was selective repression meant to deter collective action against the new social media tax. The security apparatus responsible for implementing it was the national police force. The police justified their actions by saying that Wine and the protestors had not gained permission to publicly assemble and charging protesters with assaulting members of the police and theft of police property including handcuffs. The selective state repression by the police of the Social Media Tax Protest is the type of violence that is likely to undermine public perceptions of police legitimacy depending on individuals' political loyalty. In the next section, I explain the research design and data I employ to test my theory by leveraging this incident of selective repression.

---

[19]At USD 0.05 per day, each user must pay approximately USD 1.50 per month in fees to access the social media services, a rate that is prohibitive since the average revenue per user of telecom services at the time in Uganda was an estimated USD 2.5 per month.

[20]At least three other protestors were taken in to custody over the same charges, including David Lule, Julius Katongole and Nyanzi Ssentamu.

5   Research Design

This study uses an unexpected event during surveys design approach to causal inference to estimate the effect of selective repression of the social media tax protests on individuals' perceptions of police legitimacy (Muñoz, Falcó-Gimeno and Hernández 2019). Next, I summarize my identification strategy, data, measures, and model specifications.

5.1   Identification strategy and data

I employ a unique research design opportunity that comes from the unexpected police clashes with the social media tax protesters while a nationally representative survey on security and policing was being administered across Uganda. I consider participants surveyed before the selective repression of the protesters on July 11 as assigned to the control group and respondents interviewed on or after July 11 as assigned to the treatment group. The timing of when respondents would be interviewed was determined at random without any knowledge of the social media tax protests occurring. Importantly, the timing of the selective repressive event did not influence the administration of the survey.

To identify valid causal estimates by comparing respondents surveyed before and after the event requires two key assumptions. First, I assume excludability: any difference between respondents surveyed before or after the event is the only because of the event. Specifically, the timing of the survey t affects the outcome variable DV only through T. Second, I assume temporal ignorability. This second assumptions means that for any i, the potential outcome must be independent from the timing of the survey interview. In short, assignment to either the control or treatment should be independent from the potential outcome of DV_i (Muñoz, Falcó-Gimeno and Hernández 2019). This requires the selection of the timing of the interview to be as-if or as good as random.[21]

In expectation, we should not observe systematic differences in how people view the police

---

[21]After presenting the results, I test the excludability and temporal ignorability assumptions, showing that pre-existing time trends do not explain the main findings and falsification tests show that there are limits in expanding the analyses to non-police related measures.

based on how the data generating process unfolded. Covariate balance analyses (see Table 10 in the online appendix), which shows that there were not systematic differences between respondents interviewed before the selective repression of protesters and those interviewed after. Consequently, I can estimate the effect of selective repression on public perceptions of police by exploring the the variation between those in the control and treatment groups: those interviewed before the event compared to those interviewed following it.

Data collection was conducted between 29 June and 20 July 2018, in 194 parishes located in 180 sub-counties within 127 counties, 100 districts and all 4 regions in Uganda. Table 1 shows the geographical distribution of the sample. The survey was embedded in a round of Twaweza's Sauti za Wananchi project with assistance from Ipsos.[22] Twaweza is a highly respected research firm working throughout east Africa. Sauti za Wananchi is Africa's first nationally representative mobile phone survey.

Table 1: Overview of Multistage Sampling

	Districts		Counties		Sub-Counties		Parishes		Individuals	
	total	sample	total	sample	total	sample	total	sample	total	sample
Sample by Region	112	100	181	127	1,368	180	6,547	194	34,844,095	1,920
Central	24	16	36	23	258	36	1,324	43	9,579,119	434
Eastern	32	29	50	35	412	51	2,056	51	9,094,960	492
Northern	30	29	45	34	311	46	1,545	47	7,230,661	460
Western	26	26	50	35	387	47	1,622	53	8,939,355	534

Notes: Data on administrative units from the 2016 Uganda Electoral Commission Zoning.

Twaweza's research team employed a multi-stage stratified sampling approach to achieve a representative sample of the total population of Ugandans who are 18 years and older. The sample frame is based on the 2014 Uganda Population and Housing Census.[23] Given the sensitive nature of the study, questions were designed in close collaboration with the research

---

[22]Data were collected by experienced call center agents using Computer Aided Telephonic Interviews (CATI). Interviews were conducted in the respondents' preferred language, which was identified during baseline interviews.

[23]The baseline sample was selected to be a representative cross-section of all adult citizens in Uganda. Twaweza's objective was to give "every adult citizen an equal and known chance of selection for interview." This goal was achieved by" "(a) strictly applying random selection at every stage of sampling and (b) applying sampling with probability proportionate to population size at the Enumeration Area (EA) sampling stage." Twaweza explains the multi-stage sampling design of Sauti za Wananchi in Twaweza's technical paper. The baseline data were collected in person; however, the round on security and policing was done by phone.

team in Uganda, which contributed to a low refusal rate of 4% (1,920 of 2,000 respondents participated).

5.2 Measurement

First, I employ two measures of police support as my main dependent variables. Respondents were asked whether they agreed with two statements regarding the police: 1) "The police in your community are legitimate authorities and you should do what they tell you to do." 2) "You should do what the police tell you even if you do not understand or agree with the reasons." These two measures refer to the legitimacy of police and whether people feel obligated to cooperate with them.[24] The first captures whether respondents perceive the police as legitimate and their obligation to cooperate with them. The second measure focuses on whether individuals feel obligated to comply with police, regardless of whether they agree with the directive. Responses to these direct questions were measured with a five-point ordinal scale from "strongly agree," "agree," "neither", "disagree," to "strongly disagree."

Incumbent support is a binary indicator coded as 1 if the respondent stated that the National Resistance Movement is the political party they feel closest to and 0 otherwise. Additionally, I consider an alternative measure: "If the election were held today, which political party will you support or vote for." Similarly, if respondents said they would vote for the NRM, I coded this second measure as Incumbent vote and 0 otherwise. This second set of analyses using Incumbent vote are reported in the online appendix.[25] Control variables include participants' self-reported age, gender, education level, and income status. Additionally, I control for whether the respondent lives in an urban or rural setting. Since exposure to crime, number of police officers deployed, and other potential confounders like prior state

---

[24]These measures of policy legitimacy (peoples people's duty to obey) were developed in the criminology literature by Knight and Schwartzberg (2019), Trinkner, Jackson and Tyler (2017).

[25]One threat to inference would be if repression affected people's willingness to identify with the opposition. However, respondents identified which political party they supported prior to the survey round on policing and security. This information comes from baseline data collected prior to the social media tax protests.

repression could affect people's perception of police, I control for parish level fixed effects.[26]

5.3 Model

I use the following OLS specifications to test hypothesis 1:

$$DV_{i,p} = \alpha_p + \beta_1 T_{i,p} + \beta_2 X_{i,p} + \phi Z_{i,p} + \epsilon \tag{1}$$

The respondent is referenced with the subscript i within the parish p. The $DV_{i,p}$ captures the individual response to the respective police legitimacy survey question. The treatment variable, $T_{i,p}$, is a binary indicator for whether the respondent was interviewed before the arrest ($T_{i,p} = 0$) or on or after the date of the arrest ($T_{i,p} = 1$). The treatment coefficient β_1 is the total effect of the repressive incident. The binary variable $X_{i,p}$ indicates whether the respondent supports the National Resistance Movement (the ruling incumbent party). If the respondent supports the incumbent political party, then $X_{i,p} = 1$ and 0 otherwise. $Z_{i,p}$ is a vector of individual-level control variables, including respondent's self-reported age, gender, education level, economic status, and whether they live in an urban or rural environment. Finally, α_p captures parish-level fixed effects. In the main specification, robust standard errors are clustered at the level of treatment assignment, which is the respondent.[27]

Similarly, I employ the following OLS specifications to examine the conditional effects of partisanship on repression by the police. To investigate heterogeneity in the treatment effect across political support for the regime in the other hypotheses, I interact $T_{i,p}$ with $X_{i,p}$.

$$DV_{i,p} = \alpha_p + \beta_1 T_{i,p} + \beta_2 X_{i,p} + \beta_3 T_{i,p} * X_{i,p} + \phi Z_{i,p} + \epsilon \tag{2}$$

The difference between the equations is the addition of the interaction between $T_{i,p}$ and $X_{i,p}$. Here, the treatment coefficient β_1 is the total effect of the repressive incident for non-incumbent supporters. The interaction term coefficient β_3 estimates the heterogeneous

---

[26]The results are generally robust to employing district level fixed effects rather than the more micro-level regions. See Table 7 in the online appendix.

[27]I employ OLS models for parsimonious interpretation but results from ordered logit models are reported in the online appendix (see Table 6).

effects by political loyalty, specifically the change in effect from non-incumbent supporter to incumbent supporter.

6 Results

Table 2 shows the effects of the social media protest and arrests on whether people view the police as legitimate authorities (Model 1 and Model 3) and whether people think they should obey the police (Model 2 and Model 4). I hypothesized that repression by the police should decrease support for the police, negatively affecting public perceptions of police. A second observable implication of my argument is that the magnitude of the effect should be stronger among those who oppose the regime – those who have more to fear from the dual role of police in society (i.e., engaging in repression on behalf political authorities).

As theorized, police employing state repression, even selective repression against protestors, negatively affects public support for the police. Model 1 and Model 3 show the unconditional effects of selective repression of the Social Media Tax Protests on support for the police. Results from Model 1 show that people interviewed on or after the July 11 had lower perceptions of the police as legitimate authorities ($\beta_1 = -0.2498$). We observe a similar pattern with the second measure of support (do people feel obligated to comply with police). Results again provide evidence that repression decreases support for the police. Assignment to treatment lowered perceptions of respondents' obligation to comply and defer to the police ($\beta_1 = -0.4720$).

From a motivated reasoning perspective based on supporting or opposing the regime, it is surprising that these results hold across all levels of regime support. A theory of political motivated reasoning would expect that people who support the incumbent would support repression while people who oppose the regime would view such acts as illegitimate, hypotheses 3 and 4, respectively. Alternatively, I argued that political support for the regime should have a conditional effect on repression. People who support the regime fear

experiencing repression less relative to those who oppose the regime; however, they are still concerned about the incumbent using the police to repress others. So we should observe a weaker effect of repression on incumbent supporters.

Results from Equation 2 demonstrate the effects of selective repression on perceptions of police legitimacy are conditioned by political loyalty. Including the interaction term, β_1 shows the effect when the incumbent term equals 0. Model 2 shows that assignment to treatment has a negative effect on whether people view the police as legitimate authorities ($\beta_1 = -0.5163$). To examine the effect of repression when incumbent supporters is equal to 1, I sum the coefficients for the treatment measure and its interaction with incumbent supporter (β_1 and β_3). Considering the conditional effect of incumbent support in Model 2, the heterogeneous effect of selective repression on perceptions of the police being legitimate authorities decreases (-0.1091).

Turning to the second measure of support, Model 4 shows that assignment to treatment again has a negative effect on people obligation to obey the police ($\beta_1 = -0.7523$). The heterogeneous effect of selective repression on people's obligation to obey the police also decreases (-0.3239). Even controlling for parish-level fixed effects, the results show that selective repression of the Social Media Tax Protesters decreased individuals' support for the police. The effects of selective violence are conditioned by political loyalty to the regime. However, even those who identified as supporting the ruling political party viewed the police in lower regard following the incident. This demonstrates that an explanation based on political motivated reasoning does not fully explain how civilians interpret repression by the police.

6.1 Procedural Fairness and Normative Alignment

Does repression affect other perception measures of support for the police? Public perceptions of procedural fairness and normative alignment are key inputs of whether people support and trust the police (Knight and Schwartzberg 2019, Trinkner, Jackson and Tyler

Table 2: Effect of social media tax protest/arrests on public perception of police legitimacy and obligation to comply: results from parish fixed-effects OLS models

| Dependent Variable | Police are legitimate authorities & you should do what they say | | You should obey the police even if you don't agree | |
	Model 1	Model 2	Model 3	Model 4
Protest/Arrests	−0.2498*	−0.5163*	−0.4720***	−0.7523***
	(0.1084)	(0.2108)	(0.0972)	(0.1421)
Incumbent Supporter	−0.0336	−0.0602	0.0050	−0.0229
	(0.0519)	(0.0523)	(0.0491)	(0.0500)
Incumbent Supporter*Protest/Arrests		0.4072*		0.4284**
		(0.2402)		(0.1844)
Adjusted R^2	0.2539	0.2555	0.1496	0.1518
Observations	1920	1920	1920	1920

Note: Parish fixed effects and control variables indicating education, age, gender, economic status, and urban/rural are included in all models. Robust standard errors are clustered by respondent in parentheses. ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$.

2017). I use two questions that capture respondents' perception of the procedural fairness of police to consider the effects of repression on these crucial perception of police. The first statement measures procedural fairness in interpersonal treatment: "The police treat people with dignity and respect." The second statement captures procedural fairness in the decision making of the police officers: "The police make fair and impartial decisions in the cases they deal with." In turn, I examine two statements that focus on whether respondents see the police as normatively aligned with the communities they are policing: "the police stand up for values that are important to you;" and, "the police usually act in ways consistent with your own ideas about what is right and wrong."

Table 3 shows the effect of selective repression on public perception of procedural fairness of police in interpersonal treatment. The odd columns show the results of Equation 1 and the even columns report the results of Equation 2 (including the interaction term between $T_{i,p}$ and $X_{i,p}$). Considering these dimensions of police legitimacy shows that selective repression affects people's beliefs about whether the police treat people with dignity and respect (Models 5 and 6) and attitudes about whether the police are fair and impartial in their decisions (Model 7 and 8). In each of these models, the interaction between the repression and incumbent support remains in the hypothesized direction; however, the interaction is only

Table 3: Effect of social media tax protest/arrests on public perception of procedural fairness of police: results from parish fixed-effects OLS models

Dependent Variable	Police treat people with dignity & respect		Police make fair & impartial decisions	
	Model 5	Model 6	Model 7	Model 8
Protest/Arrests	−0.2715**	−0.3768*	−0.2905***	−0.5032***
	(0.1100)	(0.2043)	(0.0967)	(0.1495)
Incumbent Supporter	0.0494	0.0389	0.0883*	0.0671
	(0.0530)	(0.0535)	(0.0501)	(0.0510)
Incumbent Supporter*Protest/Arrests		0.1609		0.3251*
		(0.2396)		(0.1917)
Adjusted R^2	0.1419	0.1417	0.1421	0.1432
Observations	1920	1920	1920	1920

Note: Parish fixed effects and control variables indicating education, age, gender, economic status, and urban/rural are included in all models. Robust standard errors are clustered by respondent in parentheses. ***$p < 0.01$, ** $p < 0.05$, *$p < 0.1$.

statistically significant in Model 8.

Next, I examine how selective repression affects public perception of the normative alignment of police operationalized through statements that measure shared values between respondents and the police. Table 4 considers the effect of social media tax protest/arrests on public perception that the police stand up for values that are important to the respondent (Models 9 and 10) and the police act in ways that the respondent considers to be right (Models 11 and 12). Again, odd columns show the results of Equation 1 and even columns show results from Equation 2 with the interaction term. These results provide additional support for my main hypotheses: selective repression i) decreases support for the police; and ii) the effects of state repression on perceptions of police legitimacy decrease in magnitude among those who support the regime.

In Model 10, we observe a decrease in the perception that the police stand up for values that are important to those individuals who do not support the ruling political party (−0.6384). However, incumbent support attenuates these effects again to almost 0 (−0.0063). Similarly, in Model 12, the treatment effects reduce perceptions that the police act in ways the respondents considered to be right among those who do not support the ruling political party (−0.6582). Once again these effects are attenuated by political loyalty to the ruling

Table 4: Effect of social media tax protest/arrests on public perception of normative alignment of police: results from parish fixed-effects OLS models

Dependent Variable	Police stand up for values that are important to you		Police act in ways you consider to be right	
	Model 9	Model 10	Model 11	Model 12
Protest/Arrests	−0.2248**	−0.6384***	−0.2904***	−0.6582***
	(0.0899)	(0.1587)	(0.0944)	(0.1605)
Incumbent Supporter	0.0985**	0.0572	0.1175**	0.0808*
	(0.0483)	(0.0491)	(0.0471)	(0.0479)
Incumbent Supporter*Protest/Arrests		0.6321***		0.5621***
		(0.1872)		(0.1948)
Adjusted R^2	0.1764	0.1823	0.1603	0.1651
Observations	1920	1920	1920	1920

Note: Parish fixed effects and control variables indicating education, age, gender, economic status, and urban/rural are included in all models. Robust standard errors are clustered by respondent in parentheses. $***p < 0.01$, $**p < 0.05$, $*p < 0.1$.

party; however, these effects remain negative (-0.0961). This suggests support for the fear mechanism. People who are normatively aligned with the political authorities provide more support for the police relative to those who oppose the regime.
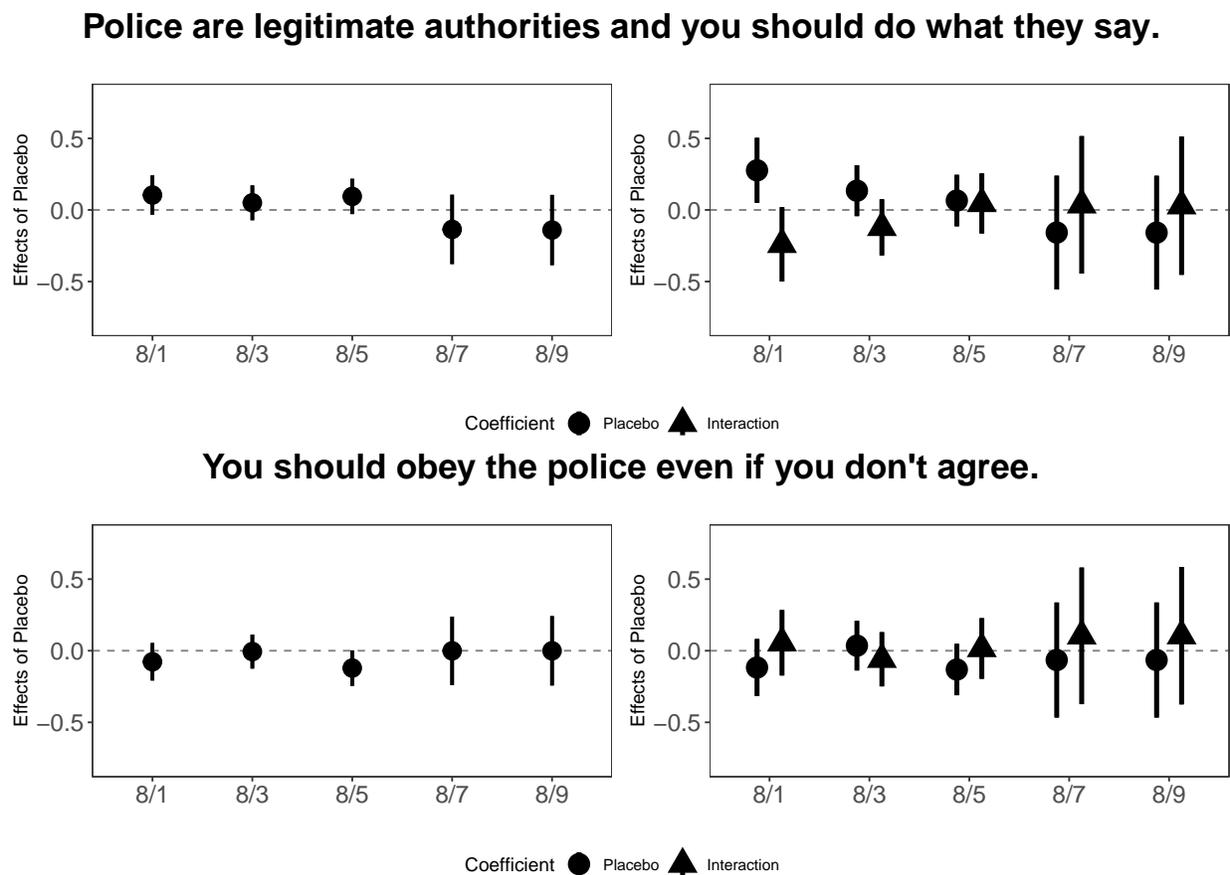
6.2 Pre-Existing Time Trends

Although the results above provide robust evidence for my theoretical expectations, there are potential threats to inference. For example, one possibility is that pre-existing time trends that are unrelated to the event of interest might bias the finding. This section considers this possibility by employing a series of placebo treatments to test for plausible existing time trends that might bias the above results. If there are pre-existing time trends, we should expect an arbitrary cutoff point to affect the outcome of interest. However, assuming no pre-existing time trends then in expectation, an arbitrary point to the left of the cutoff point should not affect the outcome of interest. I construct five placebo treatments to test for time trends.

In these tests, I use the control group subsample, setting aside all respondents assigned to the treatment group (Imbens and Lemieux 2008, Muñoz, Falcó-Gimeno and Hernández 2019). Data collection for the control group ran from May 29 to June 10. Rather than just

use the empirical median of the control group subsample to split the sample, as suggested by Imbens and Lemieux (2008), Muñoz, Falcó-Gimeno and Hernández (2019), I create 5 placebo treatments in two day windows (8/1, 8/3, 8/5, 8/7, and 8/9). Figure 1 shows the results of 20 regression models to examine whether the placebos have any effect on the two main measures of support for the police. By and large, the results show that there are no consistent time trends that occurred prior to the repressive event.[28]

Figure 1: Results from 20 regression models of the date on which peoples attitudes changed

Police are legitimate authorities and you should do what they say.

You should obey the police even if you don't agree.

---

[28]Only one coefficient was statistically significant (β_1 in the top right figure when the placebo is 8/1). The placebo effects captured in the remaining 39 coefficients were statistically indistinguishable from 0.

24

6.3 Falsification Test: Effects of the event on other outcome variables

Another potential threat to inference is a violation of the excludability assumption by the occurrence of simultaneous events. One approach to consider this is to run a falsification test that examines the effect of the event on outcome variables that should not be affected by the repressive treatment event (Muñoz, Falcó-Gimeno and Hernández 2019). To ensure that another event T' is not driving the effect, one plausible falsification test is using a relevant outcome DV' that is theoretically unrelated to the repressive event, T, but might be affected by T' that might also have an effect on DV. I use a series of outcome variables relating to how people perceive others in their community that are as close to possible to the survey instruments on policing but should not be affected by the selective repression. An effect of t on DV' would indicate a potential violation of the exclusion restriction, suggesting a broader time trend T' might be driving people's perception of others DV' Alternatively, if we observe null effects of t on DV', we can have more confidence that the estimated effects for DV are not biased by other events.

Theoretically, a related series of events like an increase in crime, other security threat, or even frustration about the protester (as opposed to the state response) might affect both people's trust in the police *and* their trust in others. Alternatively, the selective repressive event by police should not have an affect on the way people view other individual members of the society, even though it does affect public perception of the police and the broader political system. I construct a falsification test to rule out this possibility.

To do so, I employ a Relational Justice Schema Index used by Pickett, Nix and Roche (2018). The relational justice schema maps to individuals' "beliefs about the degree of procedural justice (as distinct from injustice) exhibited by others in society during interpersonal interactions" (Pickett, Nix and Roche 2018, 99). These measures focus on interactions between various members of the public rather than on interactions between the public and the police. Broadly, this schema measures the extent to which people in society "generally exhibit procedural justice in their dealings with others... whether they tend to be respectful,

fair, and unbiased" (Pickett, Nix and Roche 2018, 99). Participants were asked to think about how people in society generally treat one another, and then responded whether they agreed or disagreed with three statements. 1) Most people are polite when dealing with others. 2) Most people treat other people fairly. 3) Most people treat other people with dignity and respect.

Table 5 shows the results of the falsification tests. I estimate the baseline OLS models from Equation 1 (odd columns) and Equation 2 (even columns); however, the dependent variables are participants' responses to the justice schema instruments. Most people are polite when dealing with others (Models 13 and 14). Most people treat other people fairly (Models 15 and 16). Most people treat other people with dignity and respect (Model 17 and 18). Across each of the baseline models from Equation 1, the treatment coefficients (β_1) are indistinguishable from zero. Similarly, the results are null in each of the models estimated from Equation 2, except for Model 16.

Interestingly, Model 16 shows non-incumbent supporters express a lower assessment about whether people treat others fairly following the repressive event (-0.3196); however, incumbent supporters expressed a higher assessment (0.051.) This was the only falsification statement that includes fairness, relating to a more general system of equality. This was the only result, including the policing measures, that provided any evidence of the motivated reasoning hypotheses.

The falsification tests are neither necessary nor sufficient to demonstrate that the estimated effects of the selective repressive event on public perception of police is not caused by another event. However, they do increase our confidence that the exclusion restriction assumption is credible. In short, the link appears to be the state repression by the police against the protesters that affects public perception of the police and not mistrust of others in general or another event.

Table 5: Effect of social media tax protest/arrests on public perception of other members of society: results from parish fixed-effects OLS models

	Most people are polite when dealing with others		Most people treat other people fairly		Most people treat other people with dignity and respect	
	Model 13	Model 14	Model 15	Model 16	Model 17	Model 18
Protest/Arrests	0.0700	0.0438	−0.0771	−0.3196**	−0.0366	−0.1735
	(0.0816)	(0.1246)	(0.0807)	(0.1286)	(0.0808)	(0.1244)
Incumbent Supporter	0.0305	0.0279	0.0013	−0.0229	−0.0168	−0.0305
	(0.0457)	(0.0473)	(0.0445)	(0.0458)	(0.0456)	(0.0470)
Incumbent Supporter∗Protest/Arrests		0.0400		0.3706**		0.2091
		(0.1649)		(0.1641)		(0.1617)
Adjusted R^2	0.1349	0.1344	0.1534	0.1555	0.1357	0.1360
Observations	1920	1920	1920	1920	1920	1920

Note: Parish fixed effects and control variables indicating education, age, gender, economic status, and urban/rural are included in all models. Robust standard errors are clustered by respondent in parentheses. ***$p < 0.01$, $**p < 0.05$, *$p < 0.1$.

7 Discussion and Conclusion

What are the effects of state repression by police on public perceptions of the legitimacy of the police? Using an unexpected event during surveys design approach to causal inference, I show that even selective repression by the police negatively affects how individuals view the police. In my theory, I argue that fear of the dual role of police is the main theoretical mechanism by which repression decreases support. When political authorities rely on the police to repress dissent, it increases people's fear that the police function as agents of repression and undermines people's trust in the police as legitimate authorities who provide law and order. Repression decreases support for the police across the levels of support for the incumbent regime.

However, a theory of political motivated reasoning does not completely capture changes in people's attitudes toward the police following repression. Political loyalty to the political authorities, operationalized by support for the ruling party, does condition the effect of state repression by police on individuals' perceptions of police abuse. I demonstrate the effects of selective state repression are strongest among those who do not identify as supporting the political party. Yet, even respondents who identify with the ruling party view the police as more illegitimate authorities and they are less likely to comply with their directives after they engage in repression.

This study makes several theoretical and empirical contributions to a growing literature on the politics of policing. Existing studies of state repression, by and large, focus on its effects on political participation either voter turnout or protests. Answering how repression affects political participation matters because even non-democracies employ protests and elections as important sources of information, if not a way to foster legitimacy (Brownlee 2007, Gandhi 2008, Magaloni 2006). However, one limitation is that this work primarily focuses on the costs of repression based on the negative effects it might have politically (i.e, future protests or more support for the opposition at the ballot box).

By examining the effects of state repression on how the public views the legitimacy of the

actors responsible for implementing it, I identify another cost for political authorities and society more generally. When political authorities rely on state security institutions, such as the police or military, as agents of repression, it undermines people's willingness to cooperate with them. Even if fear associated with selective repression might induce political loyalty and deter dissent (Young 2019), relying on official members of the state security apparatus for coercive force against political challengers adversely affects people's perceptions of the legitimacy of these institutions. This study demonstrates that even selective repression by the police undermines public perceptions of the police and people's confidence that the police exist to protect and serve the interests of the community. This raises several implications for the relationship between repression and the politics of policing and crime.

Next, I join previous work that relaxes the unitary actor assumption within the state repression literature (Carey, Colaresi and Mitchell 2016, DeMeritt 2015, Greitens 2016, Hassan 2017, Svolik 2012). However, rather than focusing only on the principal-agent problems associated with repression, I argue the co-production of security depends on the relationship between political authorities, members of the security apparatus, and citizens. This has implications for the state's ability to provide law and order (i.e., fostering cooperation between law enforcement officers and civilians) when political authorities rely on the police to repress dissent. By examining the relationship between political authorities, the police, and citizens, I explore important variation in how people might view repression depending on their political preferences. In the context of this study, incumbent supporters did not support the use of repression by the police (at least we did not observe a positive effect of selective repression on their assessment of the police). Future work might consider the strategic role that citizens play not only in the co-production of security but also the co-production of repression.

Finally, this analysis raises several questions about the challenges of rebuilding trust in security institutions in post-conflict environments or after democratic transition (Blair, Karim and Morse 2018). If the recent work on the lingering political effects of state repression

are any indicator (Rozenas and Zhukov 2019, Zhukov and Talibova 2018), the negative effects of state repression on people's perception of the legitimacy of their security providers are likely to persist. Future studies could examine the lingering effects of repression on public perceptions of the police. One future avenue of research could examine challenges of police to solicit information to deter crime among politically marginalized communities, especially among those who have experienced past exposure to state abuse at the hands of law enforcement officers. This study provides a rare window into the effects of repressive action of a regime that is increasingly relying on the security apparatus to maintain power. This study demonstrates an additional cost of repression to political authorities. Using the police to repress dissent decreases support for police.

References

Balcells, Laia. 2012. "The consequences of victimization on political identities: Evidence from Spain." *Politics & Society* 40(3):311–347.

Bautista, Maria Angélica. 2015. "Political Effects of State-led Repression: The Chilean Case.".

Beetham, David. 1991. *The Legitimation of Power.* Macmillan.

Blair, Robert A., Sabrina M. Karim and Benjamin S. Morse. 2019. "Establishing the Rule of Law in Weak and War-torn States: Evidence from a Field Experiment with the Liberian National Police." *American Political Science Review* p. 1–17.

Blair, Robert, Sabrina Karim and Ben Morse. 2018. "Establishing the Rule of Law in Weak and War-Torn States: Evidence from a Field Experiment with the Liberian National Police.".

Blattman, Christopher. 2009. "From violence to voting: War and political participation in Uganda." *American political Science review* 103(2):231–247.

Blaydes, Lisa. 2018. *State of Repression: Iraq under Saddam Hussein.* Princeton, NJ: Princeton University Press.

Bratton, Michael and Eldred Masunungure. 2006. "Popular reactions to state repression: Operation Murambatsvina in Zimbabwe." *African Affairs* 106(422):21–45.

Bratton, Michael and Eldred Masunungure. 2007. "Popular reactions to state repression: Operation Murambatsvina in Zimbabwe." *African Affairs* 106(422):21–45.

Brownlee, Jason. 2007. *Authoritarianism in an Age of Democratization.* Cambridge University Press.

Carey, Sabine C. 2006. "The dynamic relationship between protest and repression." *Political Research Quarterly* 59(1):1–11.

Carey, Sabine C, Michael P Colaresi and Neil J Mitchell. 2016. "Risk mitigation, regime security, and militias: beyond coup-proofing." *International studies quarterly* p. isqu12210.

Cheng, Kevin Kwok-yin. 2015. "Prosecutorial procedural justice and public legitimacy in Hong Kong." *British Journal of Criminology* 57(1):94–111.

Chenoweth, Erica and Maria J Stephan. 2011. *Why civil resistance works: The strategic logic of nonviolent conflict.* Columbia University Press.

Conrad, Courtenay R, Sarah E Croco, Brad T Gomez and Will H Moore. 2018. "Threat perception and American support for torture." *Political Behavior* 40(4):989–1009.

Curtice, Travis and Brandon Berhlendorf. 2018. "Street-Level Repression: Protest, Policing, and the Generation of Dissent in Uganda." SSRN.
URL: *https://ssrn.com/abstract=3277556 or http://dx.doi.org/10.2139/ssrn.3277556*

Davenport, Christian. 2007. *State repression and the domestic democratic peace.* Cambridge University Press.

Davenport, Christian, Håvard Mokleiv Nygård, Hanne Fjelde and David Armstrong. 2019. "The Consequences of Contention: Understanding the Aftereffects of Political Conflict and Violence." *Annual Review of Political Science* 22(1):361–377.

DeMeritt, Jacqueline HR. 2015. "Delegating Death Military Intervention and Government Killing." *Journal of Conflict Resolution* 59(3):428–454.

Finkel, Evgeny. 2015. "The phoenix effect of state repression: Jewish resistance during the Holocaust." *American Political Science Review* 109(2):339–353.

Gandhi, Jennifer. 2008. *Political institutions under dictatorship.* Cambridge University Press Cambridge.

García-Ponce, Omar and Benjamin Pasquale. 2015. How political repression shapes attitudes toward the state: Evidence from Zimbabwe.

Gonzalez, Felipe and Edward Miguel. 2015. "War and local collective action in Sierra Leone: A comment on the use of coefficient stability approaches." *Journal of Public Economics* 128:30–33.

Greitens, Sheena Chestnut. 2016. *Dictators and their Secret Police: Coercive Institutions and State Violence.* Cambridge University Press.

Gurr, Ted Robert. 2015. *Why Men Rebel.* Princeton University Press.

Hassan, Mai. 2017. "The strategic shuffle: Ethnic geography, the internal security apparatus, and elections in Kenya." *American Journal of Political Science* 61(2):382–395.

Henderson, Conway W. 1991. "Conditions affecting the use of political repression." *Journal of Conflict Resolution* 35(1):120–142.

Hobbes, Thomas. 1946. *Leviathan; Or, The Matter, Forme and Power of a Commonwealth, Ecclesiasticall and Civil.* New Haven, CT: Yale University Press.

Imbens, Guido W and Thomas Lemieux. 2008. "Regression discontinuity designs: A guide to practice." *Journal of econometrics* 142(2):615–635.

Jackson, Jonathan, Ben Bradford, Mike Hough, Andy Myhill, Paul Quinton and Tom R Tyler. 2012. "Why do people comply with the law? Legitimacy and the influence of legal institutions." *British journal of criminology* 52(6):1051–1071.

Jonathan-Zamir, Tal and Amikam Harpaz. 2014. "Police understanding of the foundations of their legitimacy in the eyes of the public: The case of commanding officers in the Israel National Police." *British Journal of Criminology* 54(3):469–489.

Kalyvas, Stathis N. 2006. *The logic of violence in civil war.* Cambridge University Press.

Knight, Jack and Melissa Schwartzberg. 2019. *Political Legitimacy: NOMOS LXI.* Vol. 8 New York University Press.

Lerman, Amy E and Vesla Weaver. 2014. "Staying out of sight? Concentrated policing and local political action." *The ANNALS of the American Academy of Political and Social Science* 651(1):202–219.

Levi, Margaret. 1997. *Consent, dissent, and patriotism.* Cambridge University Press.

Lichbach, Mark Irving. 1987. "Deterrence or escalation? The puzzle of aggregate studies of repression and dissent." *Journal of Conflict Resolution* 31(2):266–297.

Lupu, Yonatan and Geoffrey PR Wallace. 2019. "Violence, Nonviolence, and the Effects of International Human Rights Law." *American Journal of Political Science* 63(2):411–426.

Lyall, Jason. 2009. "Does indiscriminate violence incite insurgent attacks? Evidence from Chechnya." *Journal of Conflict Resolution* 53(3):331–362.

Magaloni, Beatriz. 2006. *Voting for autocracy: Hegemonic party survival and its demise in Mexico.* Cambridge University Press Cambridge.

Mason, T David and Dale A Krane. 1989. "The political economy of death squads: Toward a theory of the impact of state-sanctioned terror." *International Studies Quarterly* 33(2):175–198.

Mazerolle, Lorraine, Emma Antrobus, Sarah Bennett and Tom R Tyler. 2013. "Shaping citizen perceptions of police legitimacy: A randomized field trial of procedural justice." *Criminology* 51(1):33–63.

Mitchell, Neil J, Sabine C Carey and Christopher K Butler. 2014. "The impact of pro-government militias on human rights violations." *International Interactions* 40(5):812–836.

Moore, Will H. 2000. "The repression of dissent a substitution model of government coercion." *Journal of conflict resolution* 44(1):107–127.

Muñoz, Jordi, Albert Falcó-Gimeno and Enrique Hernández. 2019. "Unexpected Event during Survey Design: Promise and Pitfalls for Causal Inference." *Political Analysis* p. 1–21.

Nagin, Daniel S. and Cody W. Telep. 2017. "Procedural Justice and Legal Compliance." *Annual Review of Law and Social Science* 13(1):5–28.

Nordås, Ragnhild and Christian Davenport. 2013. "Fight the youth: Youth bulges and state repression." *American Journal of Political Science* 57(4):926–940.

Ong, Lynette H. 2015. "'Thugs-for-Hire': State Coercion and 'Everyday Repression' in China.".

Pickett, Justin T, Justin Nix and Sean Patrick Roche. 2018. "Testing a social schematic model of police procedural justice." *Social psychology quarterly* 81(2):97–125.

Ritter, Emily Hencken and Courtenay R Conrad. 2016. "Preventing and responding to dissent: The observational challenges of explaining strategic repression." *American Political Science Review* 110(1):85–99.

Rozenas, Arturas and Yuri M Zhukov. 2019. "Mass Repression and Political Loyalty: Evidence from Stalin's 'Terror by Hunger'." *American Political Science Review* 113(2):569–583.

Skogan, Wesley and Kathleen Frydl. 2004. *Fairness and Effectiveness in Policing: the Evidence. Committee on Law and Justice, Division of Behavioral and Social Sciences and Education.* Washington DC: National Academies Press.

Sullivan, Christopher M. 2016. "Political repression and the destruction of dissident organizations: Evidence from the archives of the Guatemalan national police." *World Politics* 68(4):645–676.

Svolik, Milan W. 2012. *The politics of authoritarian rule.* Cambridge University Press.

Tankebe, Justice. 2009. "Public cooperation with the police in Ghana: Does procedural fairness matter?" *Criminology* 47(4):1265–1293.

Tankebe, Justice. 2013. "Viewing things differently: The dimensions of public perceptions of police legitimacy." *Criminology* 51(1):103–135.

Trinkner, Rick, J Jackson and T Tyler. 2017. "Expanding 'appropriate'police behavior beyond procedural justice: bounded authority and legal legitimation." *Retrieved from osf. io/preprints/socarxiv/nezm6* .

Tyler, Tom R. 2003. "Procedural Justice, Legitimacy, and the Effective Rule of Law." *Crime and Justice* 30:283–357.

Tyler, Tom R. 2004. "Enhancing Police Legitimacy." *The Annals of the American Academy of Political and Social Science* 593(1):84–99.

Tyler, Tom R. 2006. *Why People Obey the Law.* Princeton, NJ: Princeton University Press.

Tyler, Tom R and Jeffrey Fagan. 2008. "Legitimacy and cooperation: Why do people help the police fight crime in their communities." *Ohio St. J. Crim. L.* 6:231.

Weart, Spencer R. 1998. *Never at war: Why democracies will not fight one another.* Yale University Press.

Weber, Max. 1946. Politics as a Vocation. In *From Max Weber: Essays in Sociology.* Oxford: Oxford University Press.

Wilson, James Q. 1978. *Varieties of Police Behavior: The Management of Law and Order in Eight Communities.* Cambridge, MA: Harvard University Press.

Young, Lauren E. 2019. "The Psychology of State Repression: Fear and Dissent Decisions in Zimbabwe." *American Political Science Review* 113(1):140–155.

Zhukov, Yuri M and Roya Talibova. 2018. "Stalin's terror and the long-term political effects of mass repression." *Journal of Peace Research* 55(2):267–283.

Online Appendix for How Repression Affects Public Perception of Police: Evidence from Uganda

Supporting Information not meant for print publication. Online version of appendix available at the publisher's website:

List of Figures

List of Tables

A Robustness Checks

The main analyses provided in the paper uses OLS models with parish level fixed effects with robust standard errors clustered at the respondent. However, the results are robust to alternative models and specifications.

1. Table 6 shows the results are robust to using Ordered Logit Models rather than OLS.

2. Table 7 show the results with an alternative specification that uses district level fixed effects with robust standard errors clustered at the district level rather than employing parish level fixed effects with robust standard errors clustered at the respondent level.

3. Table 8 replaces the main measure of Incumbent Supporter with an alternative measure of loyalty to the regime: Incumbent Vote. Incumbent Vote is coded as 1 if respondent said that they would vote for the NRM and 0 otherwise. Similar, to the main measure of Incumbent Support, people's responses were recording during the baseline survey collection prior to the survey round on policing and security. Importantly, this means that the Social Media Tax Protests and Arrests did not affect people's response as their answers were recorded prior to the event.

4. Table 9 reports the results of the main models using July 12 (the day following the event) as the assignment to treatment cutoff rather than July 11.

Table 6: Results from Ordered Logit Models

	Police are legitimate authorities & you should do what they say		You should obey the police even if you don't agree		Police treat people with dignity & respect		Police make fair & impartial decisions		Police stand up for values that are important to you		Police act in ways you consider to be right	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
Protest/Arrests	−0.3947**	−1.0652***	−1.0260***	−1.6946***	−0.4467***	−0.6620**	−0.4678***	−0.9104***	−0.3398*	−1.2345***	−0.4864***	−1.2505***
	(0.1784)	(0.3079)	(0.1774)	(0.2974)	(0.1711)	(0.3088)	(0.1730)	(0.3007)	(0.1744)	(0.3088)	(0.1734)	(0.3091)
Incumbent Supporter	0.0944	0.0334	0.0629	−0.0028	0.1568*	0.1370	0.2921***	0.2495***	0.2919***	0.2092**	0.2725***	0.2015**
	(0.0925)	(0.0954)	(0.0915)	(0.0944)	(0.0930)	(0.0960)	(0.0921)	(0.0951)	(0.0928)	(0.0958)	(0.0929)	(0.0959)
Protest/Arrests*Incumbent Supporter		0.9949***		1.0327***		0.3106		0.6656*		1.3165***		1.1175***
		(0.3765)		(0.3667)		(0.3710)		(0.3681)		(0.3751)		(0.3735)
AIC	5339.5877	5334.6468	5190.0278	5184.0412	5228.2015	5229.4994	5124.2876	5122.9982	4975.5424	4965.1365	4923.7690	4916.7587
BIC	5495.2700	5495.8891	5345.7100	5345.2836	5383.8837	5390.7417	5279.9698	5284.2406	5131.2246	5126.3788	5079.4513	5078.0010
Log Likelihood	−2641.7939	−2638.3234	−2567.0139	−2563.0206	−2586.1007	−2585.7497	−2534.1438	−2532.4991	−2459.7712	−2453.5683	−2433.8845	−2429.3793
Deviance	5283.5877	5276.6468	5134.0278	5126.0412	5172.2015	5171.4994	5068.2876	5064.9982	4919.5424	4907.1365	4867.7690	4858.7587
Observations	1920	1920	1920	1920	1920	1920	1920	1920	1920	1920	1920	1920

Note: Each model includes control variables indicating education, age, gender, economic status, and urban/rural. Standard errors in parentheses. ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$

Table 7: Effect of social media tax protest/arrests on public perceptions of police: results from district fixed-effects OLS models and standard errors clustered at the district level

	Police are legitimate authorities & you should do what they say		You should obey the police even if you don't agree		Police treat people with dignity & respect		Police make fair & impartial decisions		Police stand up for values that are important to you		Police act in ways you consider to be right	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
Protest/Arrests	−0.2039	−0.5394**	−0.4117***	−0.6929***	−0.2770**	−0.3618*	−0.2917***	−0.4875***	−0.2203**	−0.6280***	−0.3009***	−0.6160***
	(0.1423)	(0.2463)	(0.1094)	(0.1470)	(0.1051)	(0.1882)	(0.1006)	(0.1540)	(0.1053)	(0.1919)	(0.1031)	(0.1702)
Incumbent Supporter	−0.0117	−0.0463	−0.0021	−0.0311	0.0439	0.0352	0.0938*	0.0736	0.1068**	0.0648	0.1065**	0.0741*
	(0.0493)	(0.0485)	(0.0454)	(0.0448)	(0.0438)	(0.0445)	(0.0537)	(0.0517)	(0.0456)	(0.0447)	(0.0420)	(0.0429)
Protest/Arrests*Incumbent Supporter		0.5109**		0.4282**		0.1291		0.2982		0.6207**		0.4798**
		(0.2492)		(0.1850)		(0.2187)		(0.1917)		(0.2276)		(0.1938)
Adjusted R^2	0.1759	0.1786	0.1100	0.1123	0.1205	0.1202	0.1275	0.1283	0.1512	0.1569	0.1407	0.1441
Observations	1920	1920	1920	1920	1920	1920	1920	1920	1920	1920	1920	1920

Note: District fixed effects and control variables indicating education, age, gender, economic status, and urban/rural are included in all models. Robust standard errors are clustered at the district in parentheses. ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$.

Table 8: Effect of social media tax protest/arrests on public perceptions of police (with alternative NRM vote measure): results from parish fixed-effects OLS models

	Police are legitimate authorities & you should do what they say		You should obey the police even if you don't agree		Police treat people with dignity & respect		Police make fair & impartial decisions		Police stand up for values that are important to you		Police act in ways you consider to be right	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
Protest/Arrests	-0.2490^{**}	-0.3719^{*}	-0.4716^{***}	-0.7017^{***}	-0.2704^{**}	-0.2146	-0.2905^{***}	-0.4392^{***}	-0.2249^{**}	-0.4316^{***}	-0.2905^{***}	-0.4541^{***}
	(0.1082)	(0.2051)	(0.0972)	(0.1414)	(0.1103)	(0.1930)	(0.0969)	(0.1508)	(0.0906)	(0.1559)	(0.0951)	(0.1554)
Incumbent Vote	-0.0135	-0.0262	0.0146	-0.0093	0.0719	0.0777	0.0823^{*}	0.0668	0.0906^{*}	0.0691	0.1082^{**}	0.0912^{*}
	(0.0520)	(0.0525)	(0.0481)	(0.0492)	(0.0529)	(0.0536)	(0.0495)	(0.0506)	(0.0473)	(0.0484)	(0.0466)	(0.0475)
Protest/Arrests*Incumbent Supporter		0.1938		0.3631^{*}		-0.0881		0.2347		0.3262^{*}		0.2581
		(0.2366)		(0.1887)		(0.2319)		(0.1948)		(0.1887)		(0.1950)
Adjusted R^2	0.2538	0.2538	0.1496	0.1512	0.1424	0.1420	0.1420	0.1423	0.1761	0.1774	0.1599	0.1605
Observations	1920	1920	1920	1920	1920	1920	1920	1920	1920	1920	1920	1920

Note: Parish fixed effects and control variables indicating education, age, gender, economic status, and urban/rural are included in all models. Robust standard errors are clustered by respondent in parentheses. $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$.

Table 9: Effect of July 12 on public perceptions of police: results from parish fixed-effects OLS models

	Police are legitimate authorities & you should do what they say		You should obey the police even if you don't agree		Police treat people with dignity & respect		Police make fair & impartial decisions		Police stand up for values that are important to you		Police act in ways you consider to be right	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
Protest/Arrests 2	-0.3081^{**}	-0.6945^{***}	-0.5503^{***}	-0.7239^{***}	-0.3183^{***}	-0.3922^{*}	-0.3767^{***}	-0.6065^{***}	-0.2766^{***}	-0.7756^{***}	-0.3549^{***}	-0.7516^{***}
	(0.1199)	(0.2281)	(0.1033)	(0.1540)	(0.1206)	(0.2233)	(0.1087)	(0.1731)	(0.1013)	(0.1779)	(0.1087)	(0.1905)
Incumbent Supporter	-0.0327	-0.0624	0.0071	-0.0063	0.0505	0.0448	0.0893^{*}	0.0716	0.0993^{**}	0.0609	0.1186^{**}	0.0881^{*}
	(0.0519)	(0.0522)	(0.0492)	(0.0501)	(0.0532)	(0.0537)	(0.0500)	(0.0509)	(0.0483)	(0.0489)	(0.0472)	(0.0476)
Protest/Arrests*Incumbent Supporter		0.5749^{**}		0.2584		0.1100		0.3420		0.7425^{***}		0.5903^{**}
		(0.2618)		(0.1994)		(0.2612)		(0.2182)		(0.2098)		(0.2278)
Adjusted R^2	0.2548	0.2576	0.1513	0.1516	0.1424	0.1420	0.1442	0.1451	0.1773	0.1839	0.1617	0.1660
Observations	1920	1920	1920	1920	1920	1920	1920	1920	1920	1920	1920	1920

Note: Parish fixed effects and control variables indicating education, age, gender, economic status, and urban/rural are included in all models. Robust standard errors are clustered by respondent in parentheses. $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$.

Covariate Balance

Is there balance across pre-treatment observables? Covariate balance across observables by and large justifies the as good as random assumption. Table 10 provides two models showing the effect of pre-treatment covariates on the likelihood of assignment to treatment. Control and treatment groups did not systematically vary by people's pre-test assessment of whether the national government is doing well: reducing crime; maintaining roads and bridges; or ensuring free and fair elections. Similarly, there is balance on those who said they would vote for the NRM party and consider themselves loyal to the NRM. Depending on whether the model includes parish level fixed effects there are some in-balances in the level of education and wealth. However, these covariates are used as control variables among others in the main analyses.

Table 10: Effect of pre-treatment covariates on likelihood of assignment to treatment group

	Model 1	Model 2
Believe the national gov. is doing well reducing crime	−0.0082	−0.0180
	(0.0122)	(0.0127)
Believe the national gov. is doing well maintaining road & bridges	−0.0002	0.0026
	(0.0119)	(0.0130)
Believe the national gov. is doing well ensuring free and fair elections	0.0200	0.0202
	(0.0124)	(0.0136)
Would vote for the NRM incumbent party	−0.0079	−0.0095
	(0.0258)	(0.0325)
Incumbent Supporter (Loyal to the NRM)	−0.0051	−0.0069
	(0.0261)	(0.0323)
Gender (Female == 1)	0.0057	0.0113
	(0.0120)	(0.0135)
Age (25-34 yrs == 1	−0.0012	−0.0085
	(0.0176)	(0.0184)
Age (35-44 yrs == 1	−0.0038	−0.0060
	(0.0187)	(0.0199)
Age (45-54 yrs == 1	−0.0142	−0.0076
	(0.0209)	(0.0216)
Age (55-64 yrs == 1	−0.0133	−0.0274
	(0.0243)	(0.0253)
Age (65+ yrs == 1	−0.0233	−0.0177
	(0.0271)	(0.0268)
Education (no schooling == 1)	0.0659	0.0994*
	(0.0785)	(0.0513)
Education (pre nursery school == 1)	0.1839	0.2344
	(0.1368)	(0.2147)
Education (primary in complete (not certified) == 1)	0.0595	0.0949*
	(0.0769)	(0.0485)
Education (primary complete (certified) == 1)	0.0607	0.0958*
	(0.0777)	(0.0496)
Education (secondary/high school incomplete (not certified) == 1)	0.0848	0.1197**
	(0.0776)	(0.0504)
Education (secondary/high school complete (certified) == 1)	0.0657	0.0800
	(0.0796)	(0.0533)
Education (college (non degree related certification) == 1)	0.0542	0.0934
	(0.0809)	(0.0542)
Education (university incomplete (not certified) == 1)	0.0625	0.0815
	(0.0959)	(0.0761)
Education (university complete (certified) == 1)	0.1172	0.1463*
	(0.0905)	(0.0720)
Education (masters degree incomplete (not certified) == 1)	0.0044	0.1052
	(0.1652)	(0.0518)
Education (masters degree complete (certified) == 1)	0.0105	0.0485
	(0.1651)	(0.0736)
Urban	−0.0055	0.0267
	(0.0163)	(0.0348)
Wealth (Quintile 2 == 1)	−0.0246	−0.0200
	(0.0180)	(0.0198)
Wealth (Quintile 3 == 1)	−0.0077	0.0028
	(0.0185)	(0.0222)
Wealth (Quintile 4 == 1)	−0.0551***	−0.0274
	(0.0186)	(0.0201)
Wealth (Quintile 5 == 1)	−0.0407**	−0.0174
	(0.0207)	(0.0214)
Parish FEs	No	Yes
Clusted SEs	No	Yes
Adjusted R^2	-0.0019	0.0390
Observations	1920	1920

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$