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Building trust in a reformed security sector

A field experiment in Liberia



1. Executive summary

Beginning in June 2014, we conducted a randomised impact evaluation of the “confidence patrols” programme in rural Liberia, a community policing project implemented through the newly-created Regional Justice and Security Hubs. The Hubs are designed to decentralise security and justice provision in rural areas. The objective of the confidence patrols programme is to raise awareness about the Hubs, increase citizens’ understanding of the role of the police and courts and of Liberian law more generally, reduce the incidence of crime and violence, and enhance trust in the police and government.

Together with the Ministry of Justice and the Liberian National Police (LNP), we identified a sample of 74 eligible communities in Bong, Lofa and Nimba Counties, and randomly selected 36 to receive confidence patrols. Police officers visited each of these communities on average three times over a 14 month period. We conducted a population-based survey three months after the last patrol to evaluate the programme’s effects.

We find the programme had strong salutary effects on the security of property rights - an important result given the continued prevalence of land disputes in rural Liberia, and the persistent threat of violence that they pose. The programme also increased knowledge of the police, particularly of the Hubs themselves; reduced the incidence of simple assault and domestic violence; and increased

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When citing this paper, please use the title and the following reference number: S-51111-LIB-1

(self-reported) usage of the police and courts for some of the most serious types of crimes, though these latter effects are more muted. The programme had substantively small and statistically insignificant effects on most other outcomes.

We plan to disseminate our findings through an IGC policy memo and an academic paper, as well as through presentations to the Ministry of Justice, LNP and other stakeholders in Liberia. We also plan to incorporate additional non-survey data into our analysis (i.e. LNP crime reports and qualitative data), and to conduct additional analysis on the mechanisms through which the programme strengthened property rights, increased reporting and reduced crime.

2. Motivation

Restoring the rule of law is a prerequisite for economic development in countries recovering from civil war. Rule of law ensures security of property rights, builds confidence among businesses and investors, and provides reliable, transparent mechanisms for resolving disputes without recourse to violence. Rule of law also helps protect the rights of women and other historically marginalised groups by, for example, increasing reporting and prosecution of sexual and gender-based violence - crimes that are often neglected in post-conflict settings.

In countries such as Liberia, however, restoring the rule of law is a challenging and sometimes impossible task. Citizens often do not know how to contact the police or access the courts, and many assume that seeking redress to grievances through state security and justice sector institutions will prove prohibitively expensive. Many also fear that wartime patterns of corruption and abuse will persist into peacetime. As a result, victims often choose to bypass the police and courts altogether, relying instead on illegal or extra-judicial mechanisms of dispute resolution (e.g. lynchings, mob justice and trial by ordeal). These mechanisms are idiosyncratic and often biased against women and ethnic or religious minorities. Unpredictability and discrimination create a hostile environment for investment in property, business and human capital at both the micro and macro levels, stifling development and exacerbating the risk that conflict will recur.

Despite the importance of rule of law for economic growth, few studies have evaluated the effectiveness of specific policies designed to increase civilians' access to, trust in, and compliance with state security and justice sector institutions. While scholars have considered mechanisms for building trust in the police and courts in the US, lessons learned from this literature may not generalise to countries overcoming legacies of civil strife. And while a number of studies have explored "best practices" in post-conflict security and justice sector reform, few have addressed whether or how these reforms affect the relationships between civilians and state institutions. Moreover, these studies are almost all observational, and tend to rely on anecdotal or purely qualitative evidence alone.

In this report we assess whether recurring randomised patrols by elite, newly-retrained units of Liberian National Police (LNP) officers can increase trust in the police, reduce crime and violence, and enhance security of property rights in rural communities. Ours is one of just a small handful of programme evaluations conducted in collaboration with state security sector personnel in the developing world.¹ Our goal is not only to contribute to the academic literature on rule of law and security sector reform, but also to inform policymaking in Liberia at an especially crucial moment, as the UN mission prepares to withdraw and as the government extends its presence into rural areas long accustomed to state absence or abuse.

3. Background

The confidence patrols programme

Despite over a decade of reform, many Liberians continue to perceive the country's security and justice sectors as corrupt, inaccessible and ineffective. In an attempt to mitigate this problem, the Liberian government has established five Regional Justice and Security Hubs at strategic locations throughout the country. Each Hub hosts deployments from the police, courts and Bureau of Immigration and Naturalisation. With improved infrastructure and better-trained, better-equipped personnel, the Hubs constitute an unprecedented increase in the quantity and quality of justice and security provision in rural Liberia. The Hubs are widely considered the cornerstone of the government's efforts at security sector reform, and a prerequisite for the UN's withdrawal.

To raise awareness of the Hubs, the government also instituted a "confidence patrols" programme through which teams of 10-15 officers from the Police Support Unit (PSU) - an elite subunit of the LNP - travel to towns and villages throughout rural Liberia to demonstrate the LNP's improved capacity and "sensitise" citizens to increased police presence in and around their communities. During each patrol, PSU officers distributed informational posters about the Hubs; held public meetings to discuss issues related to justice and security with local leaders and residents; and circulated throughout the community to interact with citizens and solicit reports of crime and violence (see Figures 1 and 2). Each patrol typically lasted several hours; in more distant communities, the patrolling officers often spent the night.

1. Banerjee et al. (2012) evaluate reforms implemented in randomly-selected police stations in Rajasthan, India, including weekly duty rosters and a freeze on inter-station transfers [1]. One of the authors of this study (Karim) evaluates the effects of home visits by teams of police officers in Liberia, randomly varying the sex composition of the teams. Two of the authors (Blair and Karim) use lab-in-the-field experiments to test the effects of gender and ethnic balancing on cooperation and discrimination among teams of LNP officers, though these studies are not programme evaluations per se.

Figure 1: PSU officers hold a public meeting



Public meetings were an important component of the programme. Common topics of discussion included land disputes, familial disputes, domestic violence, police corruption, accessibility of the police, and use of the courts.

4. Expectations

We expected the programme to increase knowledge of the police (including the Hub) and Liberian law.² With its emphasis on community policing, we also expected the programme to improve perceptions of the police, and potentially of the government more generally. As a signal of the LNP's increasing capacity, we also expected the programme to reduce the incidence of crime and violence, increase reporting to the police and reduce reliance on illegal or extrajudicial mechanisms. Finally, we expected increased police presence to reassure landowners, and thus to improve security of property rights.

We estimate the effects of the programme on eight “clusters” of outcomes. Specifically, we expect the programme to:

2. Our expectations and research design are summarised in our pre-analysis plan, registered with the [Evidence in Governance and Politics \(EGAP\)](#) network

1. Increase knowledge of the police
2. Increase knowledge of Liberian law more generally
3. Improve perceptions of the police
4. Improve perceptions of the government more generally
5. Reduce the incidence of crime and violence
6. Increase reliance on the police when incidents of crime and violence occur
7. Reduce reliance on illegal or extrajudicial mechanisms for dispute resolution
8. Improve security of property rights

Figure 2: PSU officers meeting with citizens



After the public meetings, the PSU officers walked throughout the community in small groups to engage with citizens.

5. Impact evaluation

Our evaluation began in June 2014, focusing on three counties in particular - Bong, Lofa and

Nimba.³ In collaboration with the Ministry of Justice and the LNP, we identified a sample of 74 eligible communities based on three criteria: (1) prior exposure to confidence patrols, (2) proximity to the Hub in Gbarnga, Bong County, and (3) proximity to the nearest usable road. Within this sample we randomly assigned 36 communities to participate in the programme, stratifying by county. On average, each community was visited about three times over the course of the evaluation. The programme was suspended between September 2014 and February 2015 due to the Ebola epidemic, and continued thereafter until September 2015.⁴

We assess the effects of the programme using three sources of data. First, we conducted a large- N survey of all 74 communities in November and December of 2015 in collaboration with Parley Liberia, an NGO. The survey consisted of two instruments, one administered to a sample of 18 randomly-selected residents, and a second administered to five purposively-selected local leaders - the town or village chief, two elders, a women's group leader and a youth group leader. In total, the residents and local leaders surveys included 1,382 respondents and 383 respondents, respectively.⁵

Second, we collected LNP records of all crimes reported by any resident of the 74 communities in our sample at any time during the 2015 calendar year. Because the LNP's files are not digitised, this involved sending a Liberian research assistant to each of the 6 LNP depots with jurisdiction over the communities in our sample to collect and transcribe the records. Analysis of these data is ongoing, and is not included in this report. To assess medium- to long-term impacts of the programme, we hope to return to the depots to collect records for the first half of 2016 as well.

Finally, we hired a Liberian research assistant to accompany the PSU on each patrol as a participant observer, keeping a detailed qualitative log of the proceedings, including topics discussed by the PSU and questions asked by residents. We used these logs to inform the design of our survey instruments. Further analysis is ongoing.

3. Each Regional Justice and Security Hub is designed to cover three counties. At the time of the evaluation, only the Bong County Hub was operational. Two additional Hubs have since been constructed in Maryland and Grand Gedeh Counties, but the confidence patrols programme has only been implemented in Bong, Lofa and Nimba, which fall under the jurisdiction of the Bong County hub.

4. All PSU officers were trained in Ebola prevention and care prior to deployment on the patrols. We received IRB approval for the project under Emory University protocol IRB00075899.

5. To maximise the efficiency of our resources, we opted not to collect baseline data. Instead, we used the 2008 census to verify balance on observables, including population, public services (clinics, schools, wells, latrines and guesthouses) and wealth.

6. Estimation

We operationalise treatment as a dummy indicating whether or not the community was assigned to the treatment group. All outcomes are measured at the individual level. To mitigate the possibility of both Type I and Type II errors, we estimate the Average Effect Size (AES) across all outcomes within each of our eight clusters of outcomes, following the procedure proposed in Kling (2007) and Clingingsmith et al. (2008).⁶ For residents we control for gender, age, household size, tribe, religion, education and literacy. For local leaders we also control for position in the community (e.g. town or village chief, women's group leader, etc.) These controls are measured at the individual level. We also control for population, mobile phone coverage, distance from the nearest usable road, distance from the nearest police station, an indicator for whether or not there is an LNP depot in the community, and an index of public services (clinics, schools, wells, latrines and guesthouses) at the community level. Community-level controls are measured in the survey of local leaders and using census data.

7. Results

Descriptive results

Table 1 summarises the component dependent variables for each of our eight outcome clusters across both treatment and control communities. 90% of respondents knew the location of the nearest police station and 12% knew the phone number of a police officer, though a greater proportion could likely access this information in the event of a crime. In contrast, only 16% of respondents knew about the Hub despite significant efforts by the government of Liberia to raise awareness through radio, media, and the confidence patrols programmes. Indeed, as we report below, awareness of the Hub is about 8 percentage points higher in treatment communities than in control communities, a rather modest increase given the intensity of the programme.

Knowledge of Liberian law varied by question. For example, respondents were almost unanimous in their understanding that Liberian law does not allow citizens to beat crime suspects, but were more divided on whether or not Liberian law requires the LNP to investigate witnesses as suspects (it does not). More worrisome is the fact that 23% of respondents believe trial by ordeal is legal (it is not), and that 37% of respondents believe they have no recourse to the courts if they suspect the

6. The AES across J related dependent variables is given by $\tau = \sum_{j=1}^J \frac{\pi_j}{\sigma_j}$ where π_j is the average treatment effect on each dependent variable and σ_j is the standard deviation of dependent variable j in the control group. To test the null hypothesis of no average effect, the effects π_j are jointly estimated using seemingly unrelated regression. The J dependent variables are stacked to compute a variance-covariance matrix for testing the statistical significance of τ , the AES. For further details see Clingingsmith et al. (2008) and Kling (2007).

town or village chief of wrongdoing. On the positive side, 83% of respondents know they have a legal right to habeas corpus if they are suspects in a criminal case.

Variable	(1) N	(2) Mean
Knowledge of police		
Know where nearest police station is?	1,316	0.90
Know phone number of any police officer?	1,316	0.12
Know about the Hub?	1,316	0.16
Knowledge of Liberian law		
Law allows citizens to beat suspects?	1,315	0.09
Law requires LNP to investigate witnesses as suspects?	1,315	0.68
Law requires habeas corpus?	1,315	0.83
Law proscribes investigating town or village chief?	1,314	0.37
Law allows trial by ordeal?	1,315	0.23
Perceptions of police		
Police will make victim pay a bribe to investigate?	1,315	0.50
Police will take victim's case seriously?	1,315	0.26
Police will free suspect without trial?	1,315	0.21
Police will verbally abuse suspect?	1,315	0.09
Police will physically abuse suspect?	1,315	0.10
Police will free suspect for a bribe?	1,314	0.34
Police are corrupt?	1,315	0.56
Police treat all tribes equally?	1,315	0.80
Police treat women and men equally?	1,315	0.70
Perceptions of government in general		
Government is corrupt?	1,413	0.54
Government treats all tribes equally?	1,413	0.90
Government makes decisions transparently?	1,413	0.40
Reliance on police (hypothetical)		
Prefer police to respond to burglary?	1,413	0.42
Prefer police to respond to domestic violence?	1,413	0.20
Prefer police to respond to armed robbery?	1,413	0.67
Prefer police to respond to murder?	1,413	0.69
Prefer police to respond to mob violence?	1,413	0.44
Prefer police to respond to inter-ethnic riot?	1,413	0.59
Reliance on extrajudicial resolution mechanisms (hypothetical)		
Community supports trial by ordeal for mysterious death	1,324	0.18
Community supports trial by ordeal for missing person	1,324	0.19
Community supports trial by ordeal for burglary	1,324	0.26

You yourself support trial by ordeal for mysterious death	1,324	0.17
You yourself support trial by ordeal for missing person	1,323	0.18
You yourself support trial by ordeal for burglary	1,322	0.23
Incidence of crime (individual)		
Victim of armed robbery in past 12 months?	1,310	0.02
Victim of theft or burglary in past 12 months?	1,311	0.16
Victim of aggravated assault in past 12 months?	1,308	0.02
Victim of simple assault in past 12 months?	1,308	0.03
Victim of domestic abuse (physical) in past 12 months?	1,310	0.02
Victim of domestic abuse (verbal) in past 12 months?	1,310	0.05
Victim of domestic abuse (threats) in past 12 months?	1,311	0.02
Incidence of crime (neighbourhood)		
Any armed robbery in town in past 12 months?	1,413	0.01
Any theft or burglary in town in past 12 months?	1,309	0.21
Any aggravated assault in town in past 12 months?	1,307	0.02
Any simple assault in town in past 12 months?	1,308	0.06
Any domestic violence in town in past 12 months?	1,309	0.36
Any rape in town in past 12 months?	1,310	0.04
Usage of police, courts, and town chief for reported crimes		
Reported crime to the police?	1,833	0.05
Reported crime to the chief?	1,833	0.15
Crime went to court?	1,833	0.29
Security of property rights		
House property is secure?	1,413	0.80
Made improvements to house property in past 12 months?	1,317	0.25
Farm property is secure?	1,413	0.80
Made improvements to farm property in past 12 months?	1,043	0.76
Fallowed land in 2015?	1,041	0.85
Plan to fallow land in 2016?	1,043	0.84
Dispute over house property in past 12 months?	1,317	0.05
Dispute over farm property in past 12 months?	1,044	0.11

Perceptions of the police were mixed, but generally unfavourable. Half of all respondents believed they would have to pay for the police to investigate a crime, and only 25% believed the police would take their case seriously. Over half of all respondents (56%) described the police as corrupt. That said, the majority (80%) believed the police treat all tribes equally, and only a small minority believed the police would verbally or physically abuse crime suspects in their custody (9% and 10% respectively). Perceptions of government were similarly mixed, with 54% describing the government as corrupt and only 40% describing the government's decisions as transparent, but 90% agreeing that the government treats all tribes the same.

When asked about their preferences over security and justice providers, most respondents preferred to rely on the police for most hypothetical scenarios of crime and violence. Preferences for the police were strongest for robbery (67%) and murder (69%) and weakest for domestic violence (20%). Support for illegal or extrajudicial mechanisms of dispute resolution varied between 18-26%, depending on the question. Whether respondents referred actual cases to the police also varied. Only 5% reported taking a case to the police, whereas 15% took a case to the town or village chief. But 29% of cases eventually went to court, suggesting that chiefs often referred victims' claims to the formal sector.

We measured the incidence of crime by asking respondents whether they themselves were victims of crime, as well as whether they knew anyone else in their community who was a victim of crime. For each reported incident, we asked where the case was taken (e.g. chief, police, courts, etc.) and for each forum used, whether respondents were satisfied with how the case was handled. Overall, 17% of respondents reported being a victim of at least one crime. (3% were a victim of two crimes and just under 1% were victims of three crimes.) Burglaries and thefts were most common (16% of respondents), followed by simple assault (3%), aggravated assault (2%), and armed robbery (2%). Verbal abuse by a family member was also common (5%).

Unsurprisingly, reports of crime against other community members were more common, with 30% of respondents reporting at least one crime in the community in the past year. While respondents reported low rates of domestic violence in their own households, they reported much higher rates (36%) in the community as a whole. Self-reports of domestic violence may be low due to fears of reprisal, but the high prevalence of community reporting confirms that this remains a pervasive problem in rural Liberia (and in Liberia in general).⁷ Reports of burglary and theft were common as well (26%); reports of assault were less so (6%).

Property and land disputes are endemic in rural Liberia, and frequently result in violence [2]. To measure security of property rights, we asked respondents 1) how secure they felt about their farm and household properties, 2) whether they had any disputes over these properties in the past year, and 3) whether they recently made or anticipated making investments in their land. Although most respondents felt secure about their households and farms (80% and 76%, respectively), disputes were not uncommon. In the past year alone, 5% of respondents reported a dispute over their household land and 11% reported a dispute over farm land. Moreover, 45% of disputes entailed acts or threats of violence, and 12% entailed destruction of property.

7. See Peace without Security.

Main effects

Table 2: Average Effect Size (AES) on all outcomes by cluster

	(1) Residents	(2) Leaders	(3) Both
Knowledge of the police	0.09*** (0.03)	–	–
Knowledge of Liberian law	0.04 (0.02)	–	–
Perceptions of police corruption & abuse	–0.02 (0.03)	–0.02 (0.05)	–0.02 (0.03)
Perceptions of government corruption & abuse	–0.01 (0.04)	0.03 (0.06)	0.00 (0.04)
Reliance on the police (hypothetical)	0.00 (0.05)	–	–
Reliance on extrajudicial resolution (hypothetical)	–0.06 (0.05)	0.07 (0.07)	–0.03 (0.04)
Incidence of crime (individual)	0.02 (0.03)	–	–
Incidence of crime (neighbourhood)	–0.00 (0.04)	–0.05 (0.06)	–0.01 (0.03)
Usage of police for reported crimes	–0.01 (0.04)	–	–
Security of property rights	0.09*** (0.03)	–	–
Observations	1,382	383	1,765
Individual-level controls	Y	Y	Y
Community-level controls	Y	Y	Y
Stratum fixed effects	Y	Y	Y

Notes: Average Effect Size (AES) coefficients estimated via seemingly unrelated regression. Omitted individual-level controls include gender, age, ethnicity, education and literacy. Omitted community-level controls include population, cell phone coverage and social services, as well as an indicator for communities with LNP depots. Standard errors clustered by community. *p<0.1; **p<0.05; ***p<0.01.

Table 2 reports the AES for each cluster of outcomes. We estimate treatment effects for residents and leaders separately (columns 1 and 2) and together (column 3). The residents survey was more extensive than the leaders survey, allowing us to estimate the AES on more outcome clusters for the former than the latter.

Overall, the programme had substantively small and statistically insignificant effects on most outcomes. It did not reduce the incidence of most types of crime, nor increase reliance on the police when crimes occur. It did not improve perceptions of the police or of the government more generally; did not improve knowledge of Liberian law; and, perhaps relatedly, did not reduce reliance on illegal or extrajudicial mechanisms of dispute resolution.

The programme did, however, have a strong positive effect on knowledge of the police, driven largely by greater knowledge of the Regional Justice and Security Hub. This is unsurprising, since very few rural Liberians know about the Hub, and since the patrolling officers repeatedly emphasised the importance of the Hub in their conversations with civilians. While modest given the intensity of the LNP’s messaging, these effects are important insofar as they suggest increased awareness of services available at the Hub. The programme also had strong salutary effects on security of property rights. Citizens in treatment communities were more likely to feel secure about their household and farm properties, more likely to report recent improvements to their homes, less likely to report a dispute over their farms in the past year, and modestly more likely to say they were planning to fallow their land in 2016. While some of these effects are only marginally significant, the pattern is consistent across all outcomes and, in the aggregate, highly significant.

We also find that the null AES on crime overall masks important variation in effects on particular types of crime. Table 3 disaggregates the cluster of crime outcomes into its six component parts: armed robbery, burglary and theft, aggravated assault, simple assault, domestic violence and rape. The programme reduced the incidence of simple assault as reported by both residents (a two percentage point decline) and leaders (eleven percentage points), and reduced the incidence of domestic violence as reported by residents (seven percentage points) as well. (The coefficient is negative for leaders too, but is not statistically significant.)

Table 3: Incidence of crime (town)

In your town in the past 12 months, were there incidents of ... ?							
	Armed robbery?	Unarmed robbery?	Aggravated assault?	Unarmed assault?	Domestic violence?	Rape?	Average effect
Treatment	-0.00 (0.01)	-0.01 (0.02)	-0.00 (0.01)	-0.04** (0.01)	-0.07* (0.03)	0.02 (0.02)	0.01 (0.03)
Ctrl mean	-0.00	0.21	0.00	0.06	0.33	0.00	NA
Observations	1741	1621	1619	1620	1621	1622	1251

Notes: Omitted individual-level controls include gender, age, ethnicity, education and literacy. Omitted community-level controls include population, cell phone coverage and social services, as well as an indicator for communities with LNP depots. Standard errors clustered by community. *p<0.1; **p<0.05; ***p<0.01.

The results leave open a number of questions about the mechanisms through which the patrols affected property rights. For one, the programme's strong impact on security of property rights and some types of crime is surprising given that it did not improve perceptions of the police in general or change community norms about where disputes should be reported and adjudicated. One possible explanation is that the programme entailed visits by elite PSU officers rather than the "regular" LNP. Citizens are more likely to encounter the latter than the former in everyday life, and are likely to know that the LNP continues to lack basic resources (e.g. vehicles) needed to investigate and resolve crimes.

Nonetheless, improved expectations about the quality of security and justice services in the formal sector, including those offered at the Hub, may serve as an important avenue of redress for high-stakes disputes, even if not accompanied by improved perceptions of the police in everyday matters. While access to these services is high-cost, greater awareness of their availability and quality may be enough to both deter some high-stakes crime (e.g. assault) and improve security of property rights. If this interpretation is correct, we would expect effects on usage of the police and courts to be strongest for more serious crimes, as well as those in which the victim is likely to be able to identify the alleged perpetrator. Consistent with this hypothesis, we find preliminary evidence that the programme increased usage of the police and courts for aggravated crimes (Appendix Table 4). To a lesser degree, the programme appears to have reduced usage of town leaders for aggravated crimes as well, though this effect is not significant. By contrast, we find no evidence of effects on usage of police, courts or town leaders for less serious crimes.

These explanations remain preliminary, and more data analysis and qualitative research is needed to unpack the relationship between the confidence patrols, security of property rights, and the incidence of crime. Another important limitation of our analysis is its reliance on self-reported survey data. (We discuss our plan to include additional, non-survey data below.)

Overall the preliminary findings in this report offer encouraging albeit preliminary evidence about the efficacy of the confidence patrols programme. Although the programme did little to improve perceptions of the LNP in general or increase knowledge of Liberian law, it does appear to have increased awareness about the Hub and the services it offers, reduced reports of some types of crime, increased reported usage of formal institutions for some of the most serious crimes, and improve security of property rights.

Next steps

We see three main priorities moving forward. First and foremost, we plan to extend our analysis to better understand the programme's impacts and the channels by which these impacts may have come about. For example, we have not yet conducted a thorough heterogeneity analysis to examine which subgroups are most affected by the programme. We might expect, for example, to see impacts concentrated among subgroups that face bias in the informal sector of dispute resolution

(e.g. women or ethnic minority groups).

Second and related, we plan to incorporate additional data into our analysis. For example, as a behavioural measure of support for community-level institutions designed to facilitate coordination between civilians and the police, we offered respondents the opportunity to donate their sitting fee for the survey (70 LD) to a public fund to support the community watch forum. We have only recently completed entry of these data. Another priority is to incorporate crime reports from the LNP into our analysis, which constitute an invaluable complement to our self-reported survey data. Data entry for these reports is completed for calendar year 2015, and analysis of these data is ongoing. Finally, we also hope to conduct additional qualitative work in treatment and control to validate our findings and interpretations.

Our third priority is to disseminate our findings to the Ministry and Justice and the LNP as they continue their outreach efforts in Monrovia ahead of the 2017 elections and in the vicinity of the Zwedru and Harper Hubs, which have opened only recently. We see our project as well-positioned to make timely recommendations to these efforts. To that end, we plan to write an IGC policy memo in the coming months, which we will disseminate through in-country presentations and discussions. Later in 2016, we intend to have a draft academic working paper for dissemination to the broader academic and practitioner communities.

References

- [1] **Abhijit Banerjee, Sendhil Mullainathan, and Rema Hanna. Corruption. Tech. rep. National Bureau of Economic Research, 2012.**
- [2] **Christopher Blattman, Alexandra C Hartman, and Robert A Blair. "How to promote order and property rights under weak rule of law? An experiment in changing dispute resolution behavior through community education". In: American Political Science Review 108.01 (2014), pp. 100–120.**
- [3] **David Clingingsmith, Asim Ijaz Khwaja, and Michael Kremer. "Estimating the impact of the Hajj: Religion and Tolerance in Islam's Global Gathering". In: (2008).**
- [4] **Jeffrey R Kling, Jeffrey B Liebman, and Lawrence F Katz. "Experimental Analysis of Neighborhood Effects". In: Econometrica 75.1 (2007), pp. 83–119.**

Appendix

Table 4: Treatment effects by time of crime

	(1)	(2)	(3)
	Police?	Was this case taken to . . . Court?	Leaders?
Aggravated crime			
Armed robbery (individual) x Treatment	0.28+ (0.17)	0.15 (0.13)	-0.00 (0.15)
Armed robbery (in town) x Treatment	0.21 (0.31)	0.30* (0.16)	0.08 (0.19)
Armed assault (individual) x Treatment	0.24 (0.24)	-0.15 (0.20)	0.17 (0.22)
Rape x Treatment	0.29* (0.16)	0.12 (0.14)	-0.04 (0.10)
Domestic abuse (individual) x Treatment	0.13 (0.10)	0.10 (0.11)	-0.13 (0.18)
Domestic violence (in town) x Treatment	-0.00 (0.04)	0.00 (0.02)	-0.02 (0.05)
Armed assault x Treatment	-0.23 (0.21)	0.08 (0.08)	-0.05 (0.25)
Average effects, aggravated crime	0.08* (0.05)	0.04+ (0.03)	-0.06 (0.05)
Less severe crime			
Assault (individual) x Treatment	-0.14 (0.14)	0.02 (0.01)	0.04 (0.16)
Robbery (individual) x Treatment	0.04 (0.05)	0.02+ (0.01)	-0.01 (0.06)
Robbery (in town) x Treatment	0.02 (0.06)	-0.01 (0.02)	-0.07 (0.06)
Assault (in town) x Treatment	0.08 (0.19)	-0.05 (0.04)	0.26* (0.15)
Average effects, less serious crime	0.00 (0.05)	-0.05 (0.04)	0.26* (0.15)
<i>N</i>	1104	1104	1104

Notes: Dispute-level analysis for all reported disputes. Omitted dispute-level controls include the base category for each type of crime; omitted individual level controls include gender, age, ethnicity, education, and literacy. Omitted community-level controls include population, cell phone coverage and social services, as well as an indicator for communities with LNP depots. Standard errors clustered by community. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.