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Cooperating with the State: Evidence from Survey Experiments on Policing*

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Abstract

We examine cooperation with the state using a series of survey experiments on policing conducted in late 2011 in Moscow, Russia, where distrust of the state is high and attempts to reform the police have been ineffective. Through various vignettes that place respondents in situations in which they are the witness or victim of a crime, we experimentally manipulate crime severity, identity of the perpetrator (whether the crime is committed by a police officer), monetary rewards, appeals to civic duty, and the opportunity cost of time spent reporting. Of these factors, crime severity and identity of the perpetrator are robustly associated with a propensity to report. Our research design and results contribute to a large literature on cooperation with the state by examining variables that may be more salient or function differently in countries with weak institutions than in developed democracies.

Keywords: Cooperation, police, post-Communism, autocracy, survey experiments.

All states rely on a mixture of coercion and cooperation to govern (Scott 1998; Tilly 2005; Weber 1978). The voluntary cooperation of citizens is especially valuable given the typically high costs to the state of coercion (Lieberman 2003; North 1990). Indeed, states that gain the cooperation of their citizens to perform core tasks such as taxation, conscription, and monitoring have significant advantages in economic development (Gehlbach 2008; Levi 1988; Mulligan and Shleifer 2005; Root 1994).

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Previous work has suggested that states can promote cooperation by providing material incentives such as rewards or fines (Becker 1968; Feldman and Lobel 2010). They may also appeal to intrinsic benefits, such as fairness, ideology, civic duty, or the legitimacy of authority (Dickson et al. 2014; Levi 1988; North 1981). Finally, states may try to reduce the transaction costs of cooperation via technology (Kazoora et al. 2005; Kopczuk and Pop-Eleches 2007; Tilly 1985). Unfortunately, there is little consensus as to the effectiveness of these three mechanisms and the extent to which they apply to different types of cooperation (Levi 1988, 1997; Tyler 2004).

What factors determine whether citizens cooperate with the state? Which of these can be easily and effectively manipulated by state authorities? We address these questions with a series of survey experiments on policing, one of the quintessential functions of the state. Our approach follows Tyler (2004) in emphasizing that cooperation with the police is more than simply obeying the law: without the active participation of citizens in reporting crimes to the police, there can be little progress in establishing law and order. Cross-country studies of crime victimization suggest a widespread failure to cooperate with the state in this way, with as many as half of all crimes in industrialized countries not reported (e.g. Bouten et al. 2002). Through various vignettes, we consequently place respondents in situations in which they are the witness or victim of a crime, which allows for analysis of variables that otherwise could not be easily or ethically manipulated in the field.

Although the literature on crime reporting is dominated by observational studies, there is a small body of previous work that utilizes experimental approaches. These are mostly situated in advanced industrialized countries with strong institutions and trust in the police (Aviram and Persinger 2012; Bickman and Helwig 1979; Goudriaan and Nieuwbeerta 2007; Kivivuori et al. 2012; Lasley and Palombo 1995; Tolsma et al. 2012).[1] Our research setting, in contrast, is contemporary Russia, where effective policing is hampered by various legacies of socialism, including distrust of the state, and where attempts to reform policing have been fitful and largely ineffective (Solomon 2005; Taylor 2014).

In moving to a context of weak institutions, we explore variables that may be salient for much of the world's population, though less so for many residents of developed democracies, such as whether the perpetrator of the crime is himself a state actor. We also examine the possibility that policy mechanisms such as providing financial rewards for reporting, which have had ambiguous results in strongly institutionalized settings (Challinger 2004), could be effective in encouraging crime reporting in more weakly institutionalized environments such as Russia's. Finally, we test important insights from a long history of observational studies suggesting

[1]The focus on advanced industrialized countries also extends to most observational studies on police reporting. For exceptions, see Birkbeck et al. (1993) comparing the U.S. and Venezuela, Bennett and Weigand (1994) on Belize, Zhang et al. 2007 on China, Tankebe (2009) on Ghana, Sheu and Chiu (2012) on Taiwan, Kochel et al. (2013) on Trinidad and Tobago, and Sidebottom (2015) on Malawi.

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that the severity of the crime is the primary motivation for citizens to report to police (for reviews, see Skogan 1984; van Kesteren and van Dijk 2010). Underlying our approach is the assumption that, even in an autocratic context, ordinary citizens have an interest in keeping crime rates low and the streets safe, which can be furthered by reporting everyday (i.e. non-political) crimes to the police. In the post-Soviet period, Russians have reported crimes at a reasonably high and relatively constant rate, notwithstanding major changes in the political context.[2] Muscovites, in particular, show high levels of support for the local beat cops who are responsible for combating everyday street crime (McCarthy 2014).

CRIME REPORTING AND INSTITUTIONAL CONTEXT

The criminology literature suggests that the decision to report a crime can be modeled in a rational-choice framework (Bowles et al. 2009; Gottfredson et al. 1988; Goudriaan 2006; Skogan 1984). Witnesses and victims weigh the costs and benefits of reporting and behave accordingly. To a political scientist, what is interesting about this idea is that the costs and benefits may depend on the institutional environment.[3] In this section, we describe various potential costs and benefits of reporting, which we situate in the institutional context of contemporary Russia.

One potential cost of reporting a crime is that the perpetrator will retaliate against the reporter. This concern may be particularly salient when the perpetrator is himself an officer of the state, such as a police officer—a possibility not explored in the existing experimental literature, which is situated almost entirely in countries with strong rule of law. In the Russian context that we explore, an absence of citizen and local-government control over the police apparatus provides significant room for misbehavior and corruption (Taylor 2011). The potential cost of reporting on a police officer in Russia is further compounded by the requirement that any individual who reports a crime must provide her name and passport information, thus precluding anonymity. Given these considerations, we expect that citizens in our setting would be less likely to report crimes committed by the police than by other individuals.

An additional cost of reporting is the opportunity cost of time spent traveling to a police station, filling out the necessary paperwork, and so forth (Lasley and

[2]In the 1992, 1996, and 2000 International Crime Victims Surveys, 61%, 63%, and 68% of Russian respondents, respectively, who had experienced a burglary stated that they had reported the crime to the police. These are similar to world averages (65% in 1992 and 64% in 1996) and to averages for Eastern Europe (61% for 1992, 58% of 1996) and for (mostly) capital cities in Central/Eastern Europe (63% in 2000); see Zvekic (1996) and Del Frate and van Kesteren (2003). In the survey described in this paper, 60% of respondents who had experienced a crime stated that they had reported it to the police.

[3]In an online appendix, we formalize a "calculus of cooperation" that is adapted from Riker and Ordeshook's (1968) "calculus of voting." A key insight of this formalization, which we exploit in the discussion to follow, is that the institutional environment may condition the effect of various benefits of reporting, to the extent that these are received only if the crime is solved.

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Palombo 1995; Tolsma et al. 2012)—costs that could, in principle, be manipulated by the state to improve institutional responsiveness. We expect that reducing the time required to report a crime would increase the likelihood that citizens cooperate with the state in this way.

Turning to the benefits of reporting, we draw on the existing literature to consider both intrinsic and material rewards (Bureau of Justice Statistics 2003; Soares 2004; van Kesteren and van Dijk 2010). Consistent with results from a substantial observational literature (Skogan 1984), both types of rewards may be greater when citizens report crimes that are more serious, such as those involving violence or large material losses. In the context of contemporary Russia, such considerations may be somewhat mitigated due to expectations that complaints will not be formally registered: front-line police officers are evaluated according to the percentage of registered crimes that have been cleared and so have an incentive to keep the caseload low (Paneyakh 2014; McCarthy 2015).[4] Similarly, the expected benefit of reporting a crime committed by a police officer may be smaller if citizens expect that the police will not investigate one of their own.

In principle, the intrinsic benefits of reporting may include a feeling of doing one's civic duty, which obtains regardless of whether the crime is solved. Observational studies of crime reporting behavior in advanced industrial democracies suggest that a feeling of civic duty, broadly conceived, is usually the main reason given by individuals who report crimes (Goudriaan et al. 2004; Smith and Maness 1976; Tarling and Morris 2010). Consequently, explicit appeals that remind people of this civic duty may make citizens more likely to report crimes. Depending on the particular legacies of living under socialism (Pop-Eleches and Tucker 2014), the impact of such appeals could be either magnified or weakened in a post-communist context. Soviet citizens were regularly encouraged to consider their duty to the state, including by acting as informants (e.g. Kelly 2005). Post-Soviet citizens might act either on or against this tradition.

Finally, the state may attempt to incentivize reporting by providing financial rewards, a common policy in well-institutionalized legal systems. Obtaining this financial benefit, however, typically depends on whether the crime is solved, which in turn may depend on the institutional environment. In the Russian context in particular, some have suggested that the police would likely find a way to pocket this extra money, rather than using it to reward citizens (Gridasov 2011). To the extent that this is anticipated by citizens, financial rewards would have limited impact on behavior.

[4]Observational studies in both developed and developing countries suggest an inconsistent effect of perceptions of police effectiveness on reporting behavior; see Kochel et al. (2013) and Tankebe (2010) for overviews.

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EXPERIMENTAL RESULTS

As part of a larger project exploring citizen attitudes toward the police, we hired a leading polling firm based in Moscow to conduct a face-to-face survey of 1,550 adult residents of Moscow, Russia in late 2011.[5] The sample was designed to be representative of the city population. Within the survey, we embedded a number of survey experiments, including three questions, each with a 2×2 factorial design, that manipulated the costs and benefits of reporting a crime to the police.[6] In addition to these experiments, the full survey included 11 demographic questions, 4 questions about general political behavior and attitudes, 52 topical questions about interactions with and attitudes towards the police, and an additional five survey experiments on police corruption and misbehavior. All eight survey experiments were administered in a fixed order and were split into two blocs. The three survey experiments used in this paper were presented in the first experimental bloc, which was presented to respondents after 8 demographic questions and 17 topical questions on the police had been asked. Randomization into treatment groups was conducted at the question level. The online appendix provides additional information on the design and implementation of our survey.

As discussed above, our survey vignettes emphasize variables not easily manipulated in field experiments. The obvious tradeoff with this design is that we cannot be certain that respondents' expressed willingness to report would match their actual reporting behavior.[7] There is, however, evidence to support this approach, with Bickman and Helwig (1979) showing that individuals who responded in a survey that they would report shoplifting subsequently did so when this crime was staged at a local supermarket.[8] In our setting, an implicit assumption is that any latent tendency to overstate one's willingness to report is uncorrelated with the assignment of treatment.

Experiment 1: Crime Severity and Perpetrator Identity

Our first experiment, in which respondents are asked to imagine that they have witnessed a crime, varies the severity of the crime and the identity of the perpetrator.

[5]The survey company, the Levada Center, was selected according to a public bidding process required of all state entities in Russia, including state universities.

[6]Our use of 2×2 designs was driven both by cost considerations and by an interest in exploring the interaction among certain variables (e.g. whether monetary rewards crowd out intrinsic motivations). Calculating the hypothesized effect sizes needed to conduct a power analysis is a challenge, given the scarcity of research on crime reporting in weakly institutionalized settings. However, relative to at least one fairly similar study, our study does not appear to lack power: Goudriaan and Nieuwbeerta (2007) use similar hypothetical vignettes, with far fewer respondents per treatment condition (47–51 vs. 361–415), to identify effects on crime reporting of the nature and seriousness of the crime.

[7]In particular, the survey did not include manipulation checks to determine how well respondents received the treatment.

[8]Among those who said they would report, 78% did so in fact, whereas most of those who indicated they would not indeed failed to do so.

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Table 1
Crime Severity and Perpetrator Identity

	Police officer	Stranger	Difference in means
Stealing	3.18	3.49	0.31‡
	(1.17)	(1.08)	(0.08)
Beating	3.68	4.06	0.38‡
	(1.12)	(0.93)	(0.08)
Difference	0.50‡	0.57‡	0.88‡
in means	(0.08)	(0.07)	(0.08)

Note: Cells report (differences in) means on 1–5 scale and associated standard errors. Standard errors in parentheses. *p < 0.01, †p < 0.05, ‡p < 0.10.

As discussed above, we anticipate that the benefit to the citizen of solving the crime may be higher when the crime is violent (e.g. because solving the crime takes a violent offender off the street), that is, for the "beating" treatment, though expectations in the Russian context that reporting would have little impact might mitigate the treatment effect.[9] The perceived costs of cooperation, in turn, may be higher if reporting on a police officer, as citizens may fear retaliation by the rogue officer. Alternatively, citizens may anticipate that police officers will protect their own, such that reporting the crime is unlikely to affect the probability that it is solved.[10]

Survey experiment 1

1. Suppose you saw a police officer taking a wallet and mobile phone from a drunkard who had fallen near a bus stop.
2. Suppose you saw a police officer beating a defenseless person.
3. Suppose you saw someone taking a wallet and mobile phone from a drunkard who had fallen near a bus stop.
4. Suppose you saw someone beating a defenseless person.

How likely is it that you would report this crime to the police?

Possible responses: completely unlikely, somewhat unlikely, hard to say (50/50), somewhat likely, for certain

Table 1 presents mean responses for each of four assignments from this experiment; Figure 1 depicts the full distribution of responses. There is a strong

[9]Similar considerations apply to our third experiment, where we also manipulate the severity of the crime.

[10]Unfortunately, due to an administrative error, the wording of "police officer" was slightly different for versions 1 and 2 of the question: "serzhant politsii" vs. "politseiskii," respectively, where "serzhant" is the third-lowest of 19 police ranks, and "politseiskii" is a generic term for any police officer. We have no *a priori* reason to suspect that respondents would perceive these as distinct categories.

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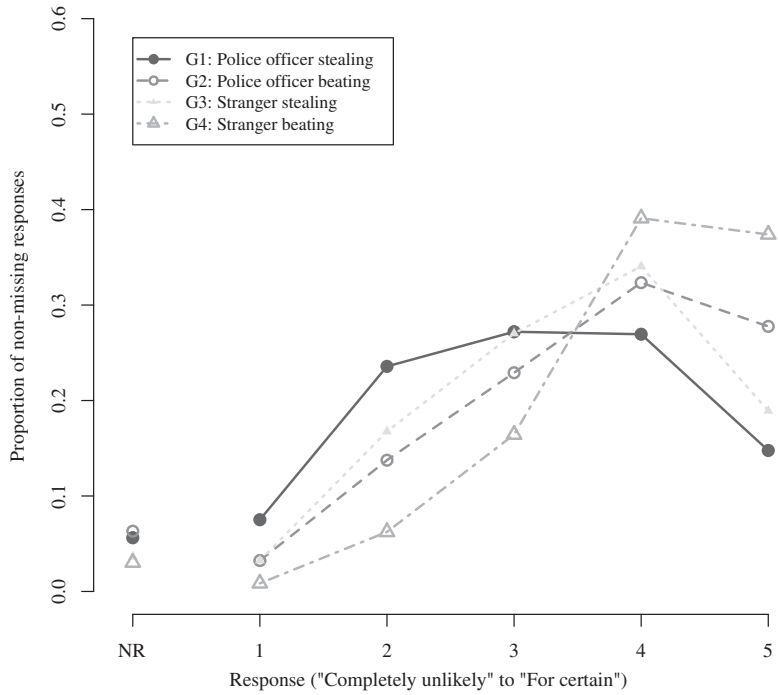

Figure 1
Crime Severity and Perpetrator Identity

effect of each of the two treatments. Consistent with the observational literature, respondents are considerably more likely to say that they would report a violent crime than petty theft, perhaps because the benefit of seeing a crime solved is greater in the former case. Although it is possible that this effect is muted by expectations of police inefficiency and corruption, relative to what one would observe if citizens were certain that the police would act on a report, the estimated effect of moving from the less to more serious crime—a half-point on a five-point scale—is nevertheless quite large. At the same time, respondents are substantially less likely to report a crime committed by a police officer, as would be the case if they feared retaliation from doing so or suspected that a report would be ignored. There is little evidence of interaction between the two effects: the difference in mean response for respondents given the "beating" treatment vs. "stealing" treatment, for example, is largely unaffected by whether the perpetrator is a police officer or stranger.

Experiment 2: Civic Duty and Monetary Reward

In the second experiment, we manipulate the material and non-material benefits of reporting a crime, respectively. With respect to the former, the experiment suggests a

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reward in the middle range of a program proposed by the Russian Interior Ministry in 2012 to pay citizens for information that helps solve serious crimes (Igorev 2012).[11] Notwithstanding the high value of the proposed reward (roughly 2.5 times the average monthly salary in Moscow at the time of our survey), perceptions of police corruption or inefficiency could render the treatment ineffective. As to non-material benefits, respondents are prompted, or not, to think of their civic duty to report a crime (a benefit that is received regardless of whether the crime is solved). In principle, the effectiveness of this appeal could be smaller when the monetary reward is also offered, to the extent that material rewards crowd out intrinsic motivations (Bickman and Helwig 1979). Further, as discussed above, the post-Soviet context of our study could influence the effectiveness of such appeals, though the direction of any such effect is unclear.

Survey experiment 2

1. If you knew about a crime that had been committed,
2. Many people consider it their civic duty to report to the police if they have information about a crime that has been committed. If you knew about a crime that had been committed,
3. Imagine that there is a reward of 100,000 rubles for information leading to an arrest. If you knew about a crime that had been committed,
4. Many people consider it their civic duty to report to the police if they have information about a crime that has been committed. Imagine that there is a reward of 100,000 rubles for information leading to an arrest. If you knew about a crime that had been committed,

...how likely is it that you would report it to the police?

Possible responses: completely unlikely, somewhat unlikely, hard to say (50/50), somewhat likely, for certain

We report results from this experiment in Table 2 and Figure 2. Strikingly, there is little evidence of an effect of either treatment, and no evidence whatsoever that monetary rewards "crowd out" intrinsic motivations. If anything, appeals to civic duty *reduce* the likelihood that respondents will cooperate with the state—a possible legacy of state socialism, as discussed above—though the estimated effect is small and evident only when no monetary reward is offered.[12] The mention of such an award, in turn, marginally increases the likelihood of reporting a crime to

[11] Since 1995, the Russian Interior Ministry has had legal authority to provide rewards for information leading to a person's arrest or a crime's being solved. In the 1990s and 2000s, such rewards were publicly advertised in several high-profile investigations of terrorism and political assassinations.

[12] In a regression framework, we find no evidence that the effect of the civic-duty treatment is correlated with age, that is, with years spent living under communism.

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Table 2
Civic Duty and Monetary Reward

	No reward	Reward	Difference in means
No civic-duty frame	3.82	3.79	− 0.03
	(0.91)	(1.01)	(0.07)
Civic-duty frame	3.67	3.82	0.15*
	(0.97)	(1.05)	(0.08)
Difference	− 0.15†	0.03	0.00
in means	(0.07)	(0.08)	(0.09)

Note: Cells report (differences in) means on 1–5 scale and standard errors. Standard errors in parentheses. *p < 0.01, †p < 0.05, ‡p < 0.10.

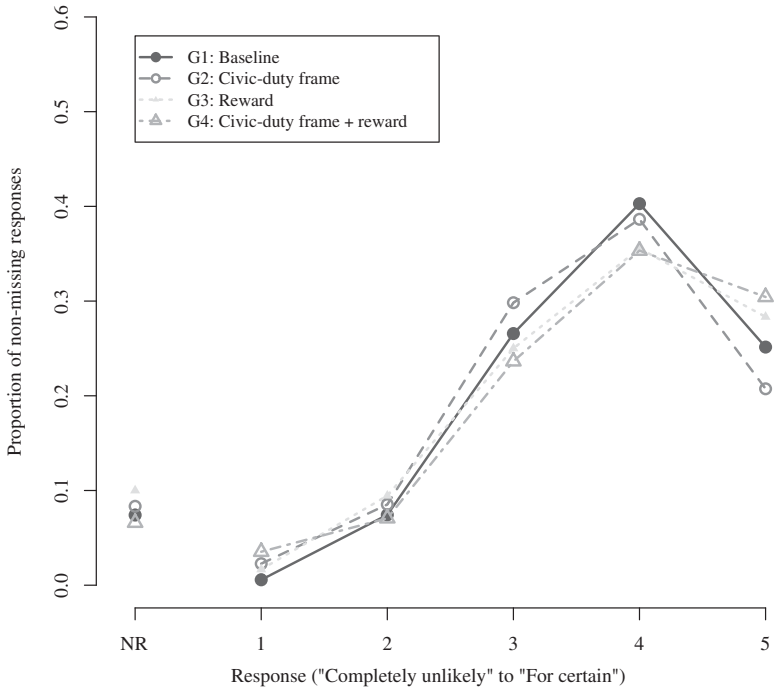

Figure 2
Civic Duty and Monetary Reward

the police, though only in conjunction with the civic-duty frame. With respect to monetary rewards in particular, it is possible that perceptions of police corruption and inefficiency are so large as to render promises of compensation not credible, though it is worth emphasizing that the modal response across all four experimental assignments is that the witness is "somewhat likely" to report a crime to the police. Regardless of interpretation, there is little in these results to suggest that the state could easily engineer cooperation through rhetorical appeals or monetary incentives.

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Table 3
Opportunity Cost of Time and Crime Severity

	Low-value robbery	High-value robbery	Difference in means
No "busy" frame	3.84	4.37	0.53‡
	(1.15)	(0.93)	(0.07)
"Busy" frame	3.94	4.35	0.41‡
	(1.08)	(0.89)	(0.07)
Difference	0.10	−0.02	0.51‡
in means	(0.08)	(0.07)	(0.07)

Note: Cells report (differences in) means on 1–5 scale and standard errors. Standard errors in parentheses. *p < 0.01, †p < 0.05, ‡p < 0.10.

Experiment 3: Opportunity Cost of Time and Crime Severity

In our last experiment, we ask respondents to imagine that they are themselves victims of a crime. As in the first survey experiment, we vary the severity of the crime (and thus the benefit received if it is solved) and the opportunity cost of time spent reporting. With respect to the latter, the wording "a lot of other things to do" is meant to standardize the question across respondents of different incomes, employment states, and other demographic characteristics that could affect the opportunity cost of time (Bowles et al. 2009).

Survey experiment 3

1. Suppose some robbers broke into your apartment and stole a few things of low value.
2. Suppose some robbers broke into your apartment and stole a few things of low value. You have a lot of other things to do this week.
3. Suppose some robbers broke into your apartment and stole a few things of high value.
4. Suppose some robbers broke into your apartment and stole a few things of high value. You have a lot of other things to do this week.

How likely is it that you would report this crime to the police?

Possible responses: completely unlikely, somewhat unlikely, hard to say (50/50), somewhat likely, for certain

Table 3 and Figure 3 present results for this experiment. As in the first survey experiment, respondents are considerably more likely to report serious crimes to the police, with an increase in the proportion of those who say they would report a crime "for certain" of approximately 50%. In contrast, we find no evidence that the opportunity cost of time spent reporting a crime to the police affects respondents'

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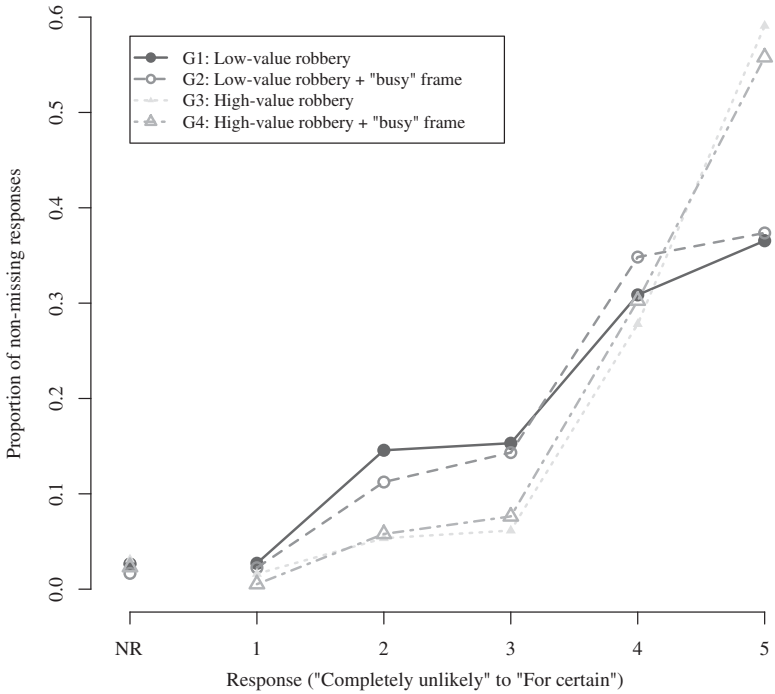

Figure 3
Opportunity Cost of Time and Crime Severity

propensity to cooperate with the state. Regardless of the severity of the crime, respondents who are told that they "have a lot of other things to do" are no less likely to say that they would report a crime to the police. Although it is possible in principle that citizens believe that reporting will take little time, such that it does not matter whether they are busy, this seems implausible in the Russian context, where unwieldy bureaucracy permeates most aspects of daily life.

Robustness

Given our survey-experimental design, there is little reason to expect that these qualitative results would differ substantially were we to condition on demographic characteristics. In Tables A1–A3, we show that the results reported above are indeed robust to controlling for various characteristics, including age, gender, education, and ethnicity. Perhaps of independent interest, crime reporting in the first two experiments is positively correlated with age, which may reflect Soviet-era socialization in the need to cooperate with the state,[13] and with knowing the location of the nearest police station.

[13] Pop-Eleches and Tucker (2014) similarly find that time spent living under communism is correlated with various political and economic attitudes.

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As demonstrated in Figures 1–3, item non-response for all three of our survey experiments is relatively low. As summarized in the online appendix, however, there is variation in non-response across strata, which is not fully captured by demographic characteristics. As an additional check on our results, we reran the regressions in Column 6 of Tables A1–A3 with region (*raion*) fixed effects. The point estimates for all three survey experiments are generally quite similar to those when conditioning only on demographic characteristics,[14] though the already-weak effect of appeals to civic duty (in the absence of monetary rewards) loses significance.

CONCLUSION

The results from our survey experiments in Moscow in late 2011 build on a large literature that exploits mostly observational data to identify correlates of individuals' willingness to report crimes. Consistent with much of this prior work, severity of the crime emerges as a key determinant of this form of cooperation with the state. Our use of survey experiments to randomly assign contextual factors suggests that the effect of crime severity is not driven by unobserved variables.

Our findings also contribute to a substantially smaller experimental literature that is situated almost entirely in countries with strong institutions and rule of law. Our empirical setting is quite different: contemporary Russia, a country with weak institutions and a generally ineffective and corrupt police force. Given this institutional context, we explore the relationship between crime reporting and identity of the perpetrator, finding that bystanders are less likely to report crimes committed by the police than by generic strangers. To our knowledge, no previous research has identified differences in reporting behavior based on whether the perpetrator was himself part of the state apparatus. Future work may attempt to replicate this finding in other countries with comparatively weak institutions and state officials that act with impunity.

From a methodological perspective, our research demonstrates the value of using vignettes embedded in survey experiments to examine variables—severity of the crime, identity of the perpetrator—that are difficult or unethical to manipulate in field experiments. While we are limited to studying crime reporting using hypothetical scenarios, we suspect that this approach provides the most internally valid and best-identified results possible when investigating these fundamentally important aspects of citizen cooperation with the state.

Finally, our research is also notable for what we do not find: in our setting of weak institutions, appeals to civic duty, the mention of monetary rewards, and the opportunity cost of time are largely unassociated with propensity to report crimes to the police. Our results on civic duty stand in stark contrast to those from numerous

[14]Focusing on the first three rows of Column 6, 0.53, 0.27, and 0.01 for Table A1, −0.11, 0.01, and 0.10 for Table A2, and 0.58, 0.06, and −0.06 for Table A3.

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studies, discussed above, that show that individuals offer some version of civic duty as motivation for having reported crimes. A key finding from the observational literature may therefore be contaminated by ex-post rationalization. We cannot rule out, however, that various legacies of socialism may have rendered such appeals less effective. As to monetary incentives, our null finding is consistent with our prior expectation that such outcome-contingent rewards may be less effective when the police are viewed as inefficient or corrupt—contextual variables that were not manipulated in our study. A similar logic may apply to the time spent reporting, to the extent that citizens report crimes only if they have an interest in seeing them solved.

In contrast to the other variables on which we focus, appeals to civic duty, monetary rewards, and time spent reporting are instruments that could, in principle, be manipulated through field experiments. Given the importance that states attach to citizen cooperation with the police, verifying that these null findings hold in a field setting—where state officials (rather than survey enumerators) appeal to civic duty, where actual monetary rewards are provided, and where reporting requirements are manipulated— and in other countries with weak institutions should be a high priority for future research.

SUPPLEMENTARY MATERIALS

To view supplementary material for this article, please visit http://dx.doi.org/10.1017/XPS.2015.18

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