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HIGHER SCHOOL OF ECONOMICS

Noah Buckley, Timothy Frye, Scott Gehlbach, Lauren McCarthy

**COOPERATING WITH THE STATE:
EVIDENCE FROM SURVEY
EXPERIMENTS ON POLICING IN
MOSCOW**

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Noah Buckley,¹ Timothy Frye,² Scott Gehlbach,³ and Lauren McCarthy⁴

**COOPERATING WITH THE STATE: EVIDENCE FROM SURVEY
EXPERIMENTS ON POLICING IN MOSCOW**

What factors affect citizens' willingness to cooperate with the state? We explore this question through a study of citizens' willingness to report crimes to the police, one of the quintessential forms of cooperation with the state apparatus. We develop a "calculus of cooperation" that highlights three sets of factors that potentially influence citizens' incentives to report a crime: benefits of cooperation received only if the crime is solved, benefits of cooperation received regardless of whether the crime is solved, and costs of cooperation. We evaluate the importance of these considerations using data from a set of survey experiments conducted in Moscow, Russia in December 2011. We find that citizens' willingness to cooperate with the police is influenced by the nature and perpetrator of the crime but not by material rewards, appeals to civic duty, or the time required to report a crime. These results suggest skepticism about the ability of governments to easily engineer cooperation with the state.

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¹Columbia University and the International Center for the Study of Institutions and Development at the Higher School of Economics, nmb2137@columbia.edu.

²Columbia University and the International Center for the Study of Institutions and Development at the Higher School of Economics, tmf2@columbia.edu.

³University of Wisconsin–Madison and the International Center for the Study of Institutions and Development at the Higher School of Economics, gehlbach@polisci.wisc.edu.

⁴University of Massachusetts–Amherst and the International Center for the Study of Institutions and Development at the Higher School of Economics, mccarthy@legal.umass.edu.

1 Introduction

Why citizens cooperate with the state is a central question of social inquiry that has engaged philosophers from Marx to Weber to Foucault. In recent years, scholars have explored the normative and material motivations that drive cooperation with the state in such specific realms as taxation and conscription (North 1981; Levi 1988, 1997; Lieberman 2003; Gehlbach 2008). In this paper, we focus on citizen cooperation with the police, a quintessential form of interaction between citizens and the state, by exploring the conditions under which citizens are willing to report a crime that they have witnessed or experienced.

The decision to report a crime to the police is a critical juncture in the criminal justice process and thereby central to the state's ability to protect its citizens. Policing is by and large a reactive activity. Although the citizen call is only the first step in a longer process in which each actor makes a decision about whether to move forward with the case (Bowles, et al. 2009), citizens act as "gatekeepers" by deciding whether or not to help the state do its job. In the ideal scenario, citizens call to report that something is amiss, following which police are dispatched to assess the situation and take appropriate action. When citizens fail to inform the police of crimes they have witnessed or experienced, the ability of the police to do their jobs is compromised. The belief that the police are not protecting citizens can lead to distrust, perhaps further discouraging citizens from reporting crimes and leading the police to be even less successful at ensuring public safety and order.

Cross-country studies of crime victimization suggest a widespread failure to cooperate with the state in providing public order, with as many as half of all crimes in industrialized countries not reported (e.g., Bouten, et al. 2002).⁵ A large literature, which we summarize below, has attempted

⁵The primary data source for cross-country comparisons is the International Crime Victim Survey, which focuses primarily on European countries, though 13 developing and 6 transition countries (including Russia) were added in the 2000 survey wave. Most studies of crime reporting have focused on developed, industrialized states. For exceptions, see Birkbeck et al. (1993), who compare the U.S. and Venezuela, and Bennett and Weigand (1994) on Belize.

to identify demographic and contextual covariates of the decision of a citizen to contact the police after experiencing or witnessing a crime. The limitation of nearly all of these studies, which are based on observational data, is the potential for some unobserved variable to drive observed correlations.

Our research takes a different approach, using survey experiments to randomly assign contextual variables across respondents to measure their influence on reporting behavior. This method comes with obvious tradeoffs. On the one hand, we cannot directly test the assumption that respondents would behave in practice as they state in response to survey questions. On the other hand, we are able to explore contextual variables (e.g., the perpetrator of a crime) that could not be easily or ethically manipulated in a field experiment.

The setting of our study—Moscow, Russia—is an excellent testing ground for exploring the determinants of crime reporting. Trust in the police is quite low,⁶ and police at both the street level and in the higher echelons of the ministry complain that they are hindered in their work by a lack of cooperation from the public and bad publicity (McCarthy, 2011). Yet efforts to encourage greater cooperation have not met with much success. The public remains wary of a police force that displays predatory behavior toward the citizens it is supposed to protect (Gerber and Mendelson 2008). In short, Russia displays many of the problems that characterize other countries with weak institutions, raising the possibility that our findings generalize to similar environments in which policing is substantially undermined by the absence of citizen cooperation.

Our key finding is that citizens' stated willingness to report crimes to the police is determined largely by the nature and perpetrator of the crime itself, not by various factors that are more under the direct control of state authorities: monetary awards, appeals to civil duty, and the time spent reporting a crime. These results reinforce a central lesson from the study of cooperation with the state in realms such as taxation and conscription. State capacity is not built easily, but rather is the

⁶In the fifth wave (2005–2008) of the World Values Survey, only 32% of Russians expressed “a great deal of” or “quite a lot of” trust in the police, placing Russia 48th out of 55 countries in which the trust question was asked.

outcome of a slowly evolving social contract between citizens and the state.

Closest to our design is Tolsma et al. (2012), who focus on general crime reporting, and Goudriaan and Nieuwbeerta (2007), who examine the reporting behavior of juveniles. However, the research setting in their work (the Netherlands, a country with generally strong institutions and trust in the police) is quite different from that in ours, as is the emphasis of their survey experiments, which focus exclusively on reporting by victims. Also somewhat similar is work by Aviram and Persinger (2010) and Kivivuori et al. (2012), who explore bystander willingness to report non-traditional crimes of domestic violence (same sex or female on male violence) in the U.S. and Finland, respectively. Survey experiments have also been used to assess policy interventions, as opposed to determinants of reporting behavior (Goudriaan and Nieuwbeerta 2007). Finally, also methodologically related is Lasley and Palombo (1995), a lab experiment in which university students were randomly assigned to different modes of reporting, an instrument that we do not consider.

The paper proceeds as follows. In the next section, we summarize the existing literature, identifying three broad sets of factors that influence citizens' willingness to report crimes to the police. In Section 3, we develop a simple "calculus of cooperation" that incorporate these factors into a decision-theoretic framework, and we use this framework to motivate our research design. We describe our data and the design of our survey experiments in Section 4, and we present results in Section 5. Section 6 concludes.

2 Motivations for cooperating with the police

When might a crime victim or a witness to a crime decide to contact the police? Several studies have suggested that this decision can be modeled in a rational-choice framework, where a citizen chooses to report if and only if the benefits of doing so outweigh the costs (Skogan 1984; Got-

tfredson and Gottfredson 1987; Goudriaan, 2006; Bowles, et al. 2009).⁷ But which benefits and which costs? Here, we review the costs and benefits of cooperation with the police as suggested by the non-experimental literature. In the following section, we organize these into a theoretical framework that provides a basis for our experimental manipulations.

Benefits of cooperation received if and only if crime is solved

Citizens may choose to cooperate with the police because there is value to them if the crime is solved (Bureau of Justice Statistics 2003; Soares 2004; Van Kesteren and Van Dijk 2010). Such benefits may be both material and non-material.

In terms of material benefits, in the case of property theft, there is the possibility that a victim's property will be recovered if she reports a crime to the police. In addition, a crime that is solved based on citizen information may produce a reward, offered either by the police for information leading to a successful arrest or by an individual trying to incentivize the return of stolen property. For those who are motivated to report because they believe it is the right thing to do (a possibility we consider further below), a reward may externalize their motivation and make it less likely that they will report crimes to the police (Bickman and Helwig 1979). Payment for information may also make the reporter feel like a police informant rather than a good citizen, though it is possible that the strength of these feelings may depend on the size of the reward.

Non-material benefits include the potential for an increase in public safety and consequent reduction in crime if the criminal is found and removed from the street. In addition, victims especially may be motivated to report by the possibility of retribution or punishment or in the hope that if the offender is caught, someone else will not have to go through the same experience.

Both material and non-material benefits may be greater if the crime is considered severe in terms of physical or property damage (Skogan 1984). In fact, in most international crime-victim surveys, the most common reason given for not reporting is that the crime is not serious enough

⁷This is not to say that emotion plays no part in the decision to report, but that potential reporters consider the possible consequences of reporting before making a final decision.

to do so (Carach 1997; Bureau of Justice Statistics 2003; Goudriaan, et al. 2004; Van Kesteren and Van Dijk 2010). Perceptions of severity can be quite individual, however. In the case of theft of family heirlooms, for example, there may be a strong emotional attachment to the item, which can increase the perceived severity of the crime even though the physical value of the item is low (Bowles, et al. 2009). Certain characteristics of the crime may also increase perceived severity regardless of the extent of physical or property damage, including: the presence of a weapon or multiple offenders, and the relationship between the perpetrator and the victim (Skogan 1984; Lynch and Danner 1993; Block, 1974).

Benefits from cooperation that are received if and only if the crime is solved obviously depend on the perceived likelihood that the citizen's cooperation makes a difference, which in turn may depend on how much trust the person has that the police will do their job. If the citizen believes that the police are ineffective, incompetent or corrupt, she may not bother reporting the crime. In a cross-national survey, Skogan (1984) finds that such perceptions are less important predictors of reporting than the seriousness of the crime, though Goudriaan et al. (2004) conclude that perceptions of police effectiveness matter in reporting some crimes but not others.

Similarly, crime victims may not bother to report because they do not believe that they have information that would be useful to the police. For example, victims may be uncertain of the identity of the perpetrator or they may not be able to report in a timely manner and therefore may believe that the window of opportunity where the information might be useful has closed (Goudriaan, et al. 2004). Finally, citizens may update their beliefs about the probability that their cooperation will make a difference based on prior personal experience of reporting (Conaway and Lohr 1994)

Benefits of cooperation received regardless of whether crime is solved

In addition to these considerations, citizens may derive some benefit from cooperating with the police regardless of whether the crime is solved (Bureau of Justice Statistics 2003; Soares 2004;

Van Kesteren and Van Dijk 2010). As before, such benefits may be both material and non-material. For victims, reporting may lead to compensation and access to victim services, even if the perpetrator of the crime is not caught. (If the victim has property insurance—not a common scenario in our research setting—a police report is almost always a precondition for claiming insurance benefits.) Alternatively, a citizen may be predisposed psychologically to cooperate because she is law-abiding by nature. She may feel a sense of civic duty that compels her to cooperate, or she may report the crime because she hopes that others would do the same in her position.

Costs of cooperation

Finally, the decision to cooperate is typically not costless. A primary cost of reporting to the police is the opportunity cost of time spent. This includes the time it takes to go to the police station or phone the police to file a report, which in turn depends on the time spent by the police officer taking the report.⁸ If the case does go forward, additional time may be spent at trial.

There is also the cost of emotional energy that may come with the long and drawn-out process of participating in an investigation and trial. For a victim, there is the emotion of reliving the crime when they have to describe it to an investigator. Some crimes, particularly assaults, may also bring shame and embarrassment to the victim. For example, robbery victims may blame themselves for not being careful enough when walking home at night. With sexual violence, the potential costs are greater yet, depending on society's and the police's judgment of the victim. These costs imply that many crimes are reported by witnesses other than the victim.

There is also the potential cost of reprisal. If the offender learns the identity of the person who reported the crime, he may choose to retaliate or at the very least intimidate the victim or witness into not participating in the criminal justice process. In crime-victim surveys, fear of retaliation

⁸In a survey-experimental design set in the Netherlands, Tolsma et al. (2012) find that changing the accessibility of the police (i.e., whether the crime had to be reported during working hours or could be reported at any time) and reporting method (phone, internet, or in person) does not make much difference in people's stated willingness to report, whereas reducing the time spent on reporting does do so. Lasley and Palombo (1995), in turn, find in a lab experiment that being able to use the internet rather than the telephone does encourage more reporting.

is rarely mentioned as a reason that victims did not report crimes, but we do not know how that translates to bystanders' decisions (Van Kesteren and Van Dijk 2010).

A final cost may be social. In many cultures, there is a negative social stigma that accompanies cooperation with the police, including reporting (Ruback, et al. 1999). This may be particularly true in the post-Soviet context, where there is a long history of the state using ordinary citizens to inform on one another. The relationship between the victim or witness and the offender may also impact the likelihood of reporting if offenders are friends, neighbors or family members (Felson, Messner, and Hoskin 1999). In these cases the victim may wish to try to solve the problem on her own rather than involving the police so as not to bear the social cost of reporting on a friend or relative. Such issues are especially salient for crimes of domestic violence (Felson, Messner, Hoskin, and Dean 2002).

3 Theoretical framework

In this section, we develop a “calculus of cooperation” that draws on the three potential determinants of cooperation discussed in the previous section, and we use this theoretical framework to preview our empirical strategy.⁹ Let a denote the decision to report a crime, where $a = 1$ indicates that the citizen reports, whereas $a = 0$ indicates that the citizen does not report. Reporting a crime may increase the probability that the crime is solved, where the benefit to the citizen of solving the crime is $v \geq 0$; we normalize to zero the benefit of not solving the crime. In addition, the citizen may derive some benefit from cooperating with the police, independent of whether the crime is solved. We denote this benefit by $r \geq 0$. Finally, reporting a crime may be costly, where $c \geq 0$ denotes the cost.

⁹The discussion to follow bears a passing resemblance to Riker and Ordeshook's (1968) “calculus of voting.” The empirical implications are quite different, however, as there is no *a priori* reason in our setting to expect the perceived likelihood that one's action makes a difference to be negligible: reporting a crime in which one may have uniquely valuable information is different from voting in a large electorate.

The expected payoff to the citizen from reporting the crime is therefore

$$\Pr(\text{crime solved} \mid a = 1) \cdot v + [1 - \Pr(\text{crime solved} \mid a = 1)] \cdot 0 + r - c.$$

The citizen receives the payoff v if and only if the crime is solved, whereas the payoff r is received and cost c incurred regardless of whether the crime is solved. (In this decision-theoretic framework, it is useful to think of the probabilities as subjective, that is, as the perceived probability that the crime will be solved, conditional on the citizen's action.) Similarly, the expected payoff from not reporting the crime is

$$\Pr(\text{crime solved} \mid a = 0) \cdot v + [1 - \Pr(\text{crime solved} \mid a = 0)] \cdot 0.$$

The citizen prefers to report the crime if the first expression is greater than the second, or

$$[\Pr(\text{crime solved} \mid a = 1) - \Pr(\text{crime solved} \mid a = 0)] \cdot v \geq c - r. \quad (1)$$

In words, the benefit of seeing the crime solved, weighted by the marginal probability that reporting the crime results in its being solved, must be greater than the cost of reporting the crime, net of any other benefits of doing so.

The purpose of our experimental design is to manipulate some elements of Condition 1 while holding others constant. For the sake of illustration, consider treatment T to be the benefit of solving the crime, where $T = 0$ corresponds to the state where this benefit is low, and $T = 1$ corresponds to the state where this benefit is high. Further, assume a linear probability model based on Condition 1, where the probability of reporting the crime, conditional on the treatment

T , is

$$\Pr(a = 1 | T = 0) = [\Pr(\text{crime solved} | a = 1) - \Pr(\text{crime solved} | a = 0)] \cdot v_0 + r - c + \varepsilon_0. \quad (2)$$

$$\Pr(a = 1 | T = 1) = [\Pr(\text{crime solved} | a = 1) - \Pr(\text{crime solved} | a = 0)] \cdot v_1 + r - c + \varepsilon_1. \quad (3)$$

The variables v_0 and v_1 represent the benefits of solving the crime in the states $T = 0$ and $T = 1$, respectively, whereas ε_0 and ε_1 are stochastic terms.

The problem of causal inference is that for any particular citizen making a decision about whether to report a crime, we observe the decision only for the case where $T = 0$ or $T = 1$, not for both simultaneously. Formally, the probability that the citizen reports the crime can be represented as a function of T , as follows:

$$\Pr(a = 1) = (1 - T) \cdot \Pr(a = 1 | T = 0) + T \cdot \Pr(a = 1 | T = 1).$$

Substituting in from Equations 2 and 3 gives

$$\begin{aligned} \Pr(a = 1) &= [\Pr(\text{crime solved} | a = 1) - \Pr(\text{crime solved} | a = 0)] \cdot v_0 + r - c \\ &+ [\Pr(\text{crime solved} | a = 1) - \Pr(\text{crime solved} | a = 0)] \cdot (v_1 - v_0) \cdot T \quad (4) \\ &+ \varepsilon_0 + (\varepsilon_1 - \varepsilon_0) \cdot T. \end{aligned}$$

The causal effect of increasing the benefit from solving the crime v is the interactive effect of two terms: the (subjective) marginal probability that the crime is solved and the increase in the benefit of solving the crime. This illustrates that the treatment effect may be conditioned on contextual variables such as citizens' trust in the police to act on the information provided.

With observational data, it would be difficult to identify the causal effect of increasing the benefit of solving the crime, as in general the error term in Equation 4, $\varepsilon_0 + (\varepsilon_1 - \varepsilon_0) \cdot T$, will be

correlated with the treatment variable T . In contrast, successful random assignment of manipulations ensures that T is independent of the probabilities given by Equations 2 and 3. In the following section, we describe the survey experiments used to manipulate various determinants of citizens' choice to cooperate with the police.

4 Data and design of survey experiments

As part of a larger project to explore citizen attitudes toward the police, we hired a leading polling firm based in Moscow to conduct a survey of 1,550 adult residents of Moscow in late 2011.¹⁰ The sample was designed to be representative of the city population. We employed a multi-stage stratification strategy, first establishing the proportion of respondents to be chosen in each of Moscow's ten administrative districts (*okrugi*) based on their share of the population. Within each administrative district, we selected from one to seven regions (*raiony*). The probability that each region was selected was weighted according to population. In all, we included 50 of Moscow's 123 regions in the sample. At the next stage, interviewers selected three to four electoral districts within each region and sampled households within each electoral district. We included quotas based on age and gender to ensure that women and the elderly were not overrepresented.¹¹

Within the survey, we embedded a number of survey experiments, including three questions that manipulated the costs and benefits of reporting a crime to the police. As discussed in the previous section, randomized assignment of treatment in these survey experiments allows us to identify the impact of specific costs and benefits on the probability of reporting a crime to the police, independent of other variables discussed in the literature. (The appendix reports various checks on our randomization procedure.) We follow the literature by asking citizens to put themselves

¹⁰The Levada Center is one of the most respected polling agencies in Russia, with more than twenty years of experience and a long list of clients, including the World Bank, the EBRD, and many scholars from Europe and the United States. For more information, see www.Levada.ru.

¹¹Interviewers spoke with respondents face-to-face at their homes; the survey took place November 25 to December 25. Only one respondent per household took part in the survey, and the response rate of those who were contacted was 41 percent. Forty percent of those who took part in the survey were telephoned to check the accuracy of their responses as reported by the interviewers.

in hypothetical scenarios; for obvious reasons, it is usually impractical to directly test citizens' reactions to such events.¹²

Two of our experimental questions ask our respondents to put themselves in the shoes of a bystander witnessing a crime. For reasons described above, many crimes are not reported by victims, but by bystander witnesses. In the first question we vary the severity of the crime and the identity of the offender, as follows:

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?

1. Completely unlikely
2. Somewhat unlikely
3. Hard to say (50/50)
4. Somewhat likely
5. For certain

We anticipate that most respondents would view beating a defenseless person as a more severe crime than theft, potentially increasing the non-material benefits from reporting it (e.g., it increases public safety more if a violent offender is taken off the street). In terms of the theoretical framework in the previous section, we anticipate that the benefit to the citizen of solving the crime may be higher when the crime is violent. With respect to the identity of the offender, the costs of cooperation may be higher if reporting on a police officer, as a police officer may have greater ability to retaliate (anonymous reporting is not allowed in Russia, though whether the survey respondent knows this is unclear).¹³ Negative perceptions of the police—that they protect their own, rather

¹²One study in the U.S. did, however. Bickman and Helwig (1979) first surveyed subjects about the likelihood they would report shoplifting and then staged multiple shopliftings at a supermarket to see if intent matched behavior. It did: 78 percent of those who said they would report did so, whereas most of those who said they would not did not.

¹³Unfortunately, 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.

than protecting the public—also imply that there may be a higher perceived likelihood that the offense will go uninvestigated or unpunished, thereby lowering the (subjective) marginal probability of success from reporting and attenuating the possible benefits of doing so.

In the second question, we investigate the impact of non-material and material benefits for reporting a crime, as follows:

Survey experiment 2

1. [No civic-duty frame or reward.]
2. Many people consider it their civic duty to report to the police if they have information about a crime that has been committed.
3. Imagine that there is a reward of 100,000 rubles for information leading to an arrest.
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?

1. Completely unlikely
2. Somewhat unlikely
3. Hard to say (50/50)
4. Somewhat likely
5. For certain

Despite the relatively high value of the material reward—similar to that in a program recently proposed by the Russian Interior Ministry, and roughly equivalent to 2.5 times an average monthly salary in Moscow—it is possible that perceptions of police corruption or inefficiency (corresponding in our model to a low marginal probability that reporting the crime results in its being solved) could render the reward ineffective. As discussed in Section 2, a further interesting question is whether material rewards crowd out intrinsic motivations, which for this question would imply that individuals would be less likely to report to the police in Scenario 4 than in Scenario 2.

Our final survey experiment asks what respondents would do if they were themselves the victim of a crime. In this question, we vary the severity of the crime (and thus the potential benefit from solving it) and the opportunity cost of time, as follows:

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?

1. Completely unlikely
2. Somewhat unlikely
3. Hard to say (50/50)
4. Somewhat likely
5. For certain

The phrasing “of low/high value” is intended to capture both the physical and sentimental value of the stolen objects, implying both material and non-material rewards from reporting the crime. The wording “a lot of other things to do,” in turn, 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).

5 Results

Following the conceptual discussion in Section 2 and theoretical framework in Section 3, we anticipate that the likelihood of reporting should be higher for more severe crimes and lower when citizens fear retaliation or anticipate that reporting would be unlikely to make a difference. Our results from the first survey experiment are consistent with these predictions. As Table 1 shows, citizens are most likely to say that they would report a crime when it involves a generic stranger (rather than policeman) beating a defenseless person (rather than stealing a wallet and mobile phone). Averaging across all possible responses, the mean respondent reports that she would be “somewhat likely” (4.06 on a 5-point scale) to report the crime. This result is about 0.4 higher than the next highest cell, a difference that is statistically significant at $p = 0.01$. In turn, the crime least likely to provoke a response is a police officer engaging in petty theft (3.18 on a 5-point scale),

with nearly a full standard deviation separating the mean response for this group from that for the “police beating” treatment. Other combinations falls between these two extremes.

Direct examination of the distributions of responses to this question in each of the four experimental groups support this statistical finding, as shown in Figure 1. Respondents given the “stranger beating” version of the question are more likely than those in any other group to say that it is “somewhat likely” or “for certain” that they would report the crime. Non-response, depicted with triangles in the “NR” column, is also marginally lower for this experimental group than for any other. Respondents receiving the “policeman stealing” treatment, in contrast, are most likely to say that it is “completely unlikely” or “somewhat unlikely” that they would cooperate with the police.

Table 2 presents results for our second survey experiment, where we manipulate non-material and material benefits from reporting the crime. Conditional on being provided the “civic duty” frame, the presence of a monetary reward provides a substantively small rise in average willingness to report that is statistically significant at the 10% level. (Thus, we find no evidence of crowding out of intrinsic motivations by monetary rewards.) There is no significant difference when conditioning on the absence of the civic duty frame. These small differences are consistent with the possibility, discussed above, that perceptions of police corruption or inefficiency render even sizable rewards ineffective. That said, it is important to stress that the mean respondent in all four experimental groups reports that she is more likely than unlikely to report the crime to the police.

Conditional on no reward having been offered, the civic-duty frame itself actually appears to decrease willingness to report. It is possible that being reminded of civic duty evokes negative associations in a post-authoritarian context, though the difference in mean responses is not large. As Figure 2 illustrates, the response patterns are in fact quite similar across the four experimental groups. In general, it is hard to make a case that either non-material or material benefits make a strong difference in citizens’ willingness to cooperate with the police.

Our first two survey experiments suggest that bystanders are likely to respond to the severity and perpetrator of the crime, but only weakly to other motivators. What about when the potential cooperator is the victim? As Table 3 demonstrates, respondents are far more likely to say that they would report a crime when items of “high value” rather than “low value” are stolen. Figure 3 illustrates that this difference is driven by a sharp increase in the percentage of respondents who say they would report the crime “for certain,” at the expense of those who state that it is “somewhat unlikely” or “hard to say” that they would report the crime.

In contrast, there is no evidence that the opportunity cost of time plays a strong role in explaining variation in cooperation with the police. 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.

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. Tables A1–A3 verify that this is the case. Column (3) of each table reproduces the 2×2 tables reported above in a regression framework; Columns (1) and (2) present results for the two treatments taken one at a time. Columns (4)–(6), in turn, present the analogous regressions when conditioning on a host of covariates. As expected, there is little difference from the results reported in Columns (1)–(3).

Our three survey experiments thus provide a consistent picture. The severity of the crime matters a great deal for whether citizens choose to cooperate with the police, as does the identity of the perpetrator of the crime. Other factors often discussed in the non-experimental literature—material rewards, perceptions of civic duty, the opportunity cost of time—seem to matter little. We discuss the implications of these results in the concluding section.

6 Conclusions

Using data from three survey experiments conducted in Moscow, Russia in 2011, we examine the stated willingness of citizens to report a crime to the police. Both bystanders and victims are more likely to report serious crimes to the police, and bystanders are less likely to report crimes committed by the police than by generic strangers. Being told of a monetary reward or primed to think about one's civic duty has little impact on respondents' expressed likelihood of cooperating with the police, as does being primed to think about the time that would be spent reporting a crime.

These results build on a large literature that mostly exploits observational data to identify correlates of individuals' willingness to report crimes. As in that work, the severity of the crime emerges as a key determinant of reporting behavior in our survey experiments.¹⁴ At the same time, the identity of the perpetrator has not been much emphasized in existing work, and to our knowledge no previous research has identified differences in reporting behavior depending on whether the perpetrator was himself part of the state apparatus.

Most striking, however, is what does not matter for individuals' stated willingness to report crimes. Among the various factors that we study, it is precisely those that might be manipulated to encourage greater reporting—material rewards, appeals to civic duty, or the time required to report a crime—that show the least effect. Although further study is necessary, these preliminary results suggest some skepticism about the ability of authorities to easily engineer cooperation with the state.

Our findings do, however, suggest a narrow opening through which citizens might be encouraged to report crimes to the police. Given that respondents are substantially less likely to report crimes perpetrated by those close to power, greater attention might be given to ensuring that citizens who do report such crimes are protected. Although the existing literature suggests that anony-

¹⁴Kury et al. (1999: 126) suggest that there has not been much recent research on crime reporting because most people have “generally acquiesced to Skogan’s ‘seriousness’ problem.”

mous reporting plays little role is encouraging cooperation (Bickman and Helwig 1979; Tolsma, et al. 2012), previous studies been carried out in countries with far greater trust in the police than is evident in Russia. Exploring cooperation with the state in such environments should be a continued topic of social inquiry.

Appendix: Randomization checks

The internal validity of our survey experiment results depends on successful randomization of respondents into our experimental groups. This procedure, if successfully implemented, ensures that—in expectation—respondents are identical in all observed and unobserved characteristics (which are potential confounders if they are strongly correlated with our outcome measures). A check of the randomization procedure can be done to provide suggestive evidence for or against egregious administrative error, but beyond this basic function, such a check cannot tell us anything about the credibility of our results or “balance” on unobserved characteristics. The p -values obtained from the statistical tests in our results section already include the possibility that we have simply obtained a “bad draw” (Imai, King and Stuart 2008; Mutz and Pemantle 2011).

In order to attempt to identify possible egregious administrative error in the conduct of our randomization procedure, we run a series of chi-squared tests and also show the distribution of p -values from all combinations of t -tests. The chi-squared test indicates whether there is statistically significant variation in the full cross-tabulation of responses to a given covariate over assignment to experimental groups in a given survey experiment. The results from 33 chi-squared tests for eleven variables (the covariates in Tables A1–A3, plus measures of trust in and satisfaction with the police) are shown in Table A4 as p -values. As with any other hypothesis test, we would expect 10% of p -values to be statistically significant at the 10% level by random chance. In our case, five of our p -values—about 15% of the total—are significant at this level.

In addition to testing for statistically significant variation over the entire cross-tabulation, we can test for the significance of difference-in-means tests between each of the six possible exper-

imental group pairings. Pooling the p -values from all 198 such t -tests (11 questions, 6 group pairings, 3 experimental questions), Figure A1 shows that there is no indication that our randomization procedure has failed. The proportion of statistically significant p -values is quite close to what we would predict to arise by chance.

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Table 1: Crime severity and perpetrator identity

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

Note: Cells report (differences in) means on 1–5 scale and standard errors.

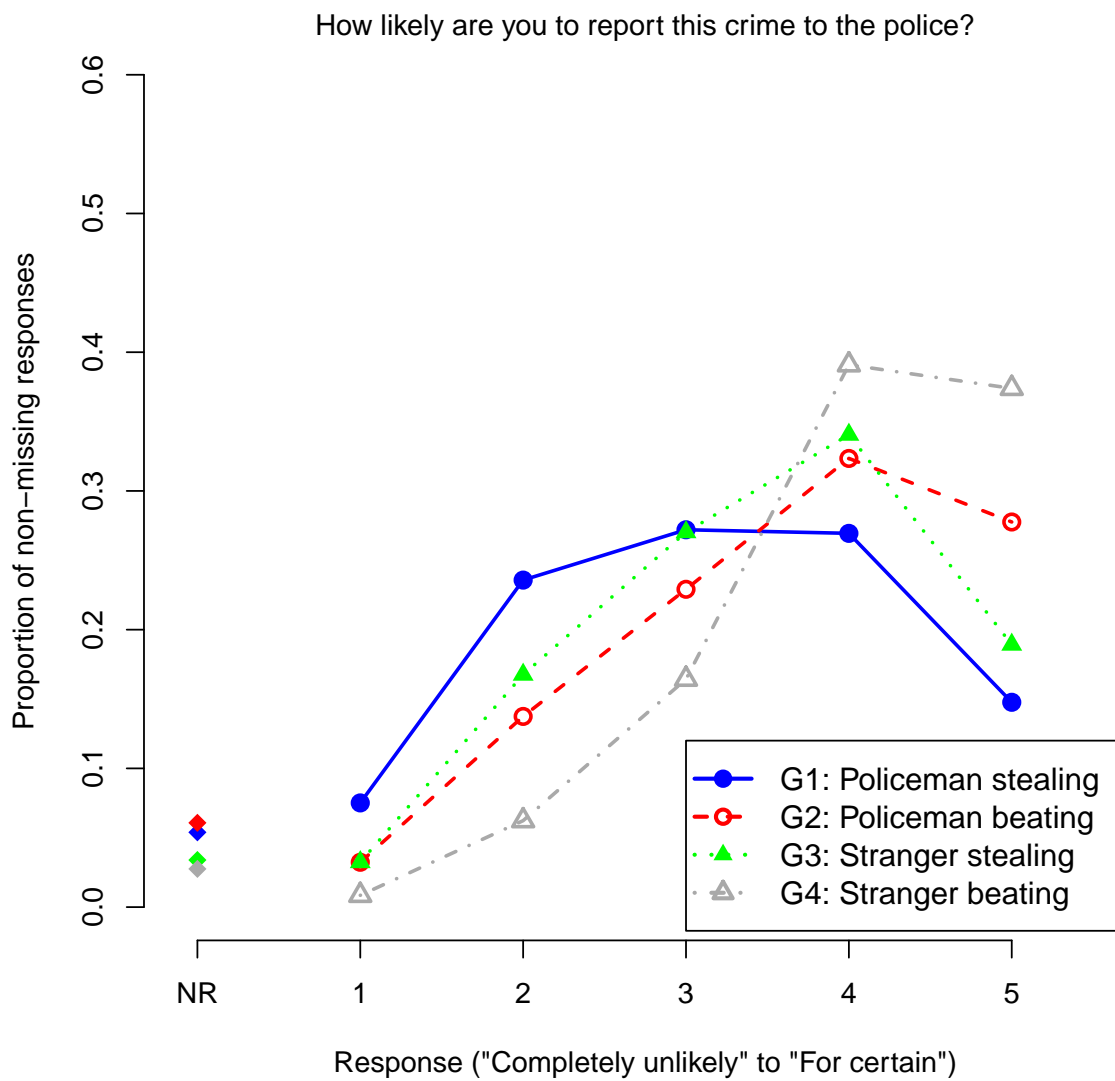


Figure 1: Crime severity and perpetrator identity

Table 2: Civic duty and monetary reward

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

Note: Cells report (differences in) means on 1–5 scale and standard errors.

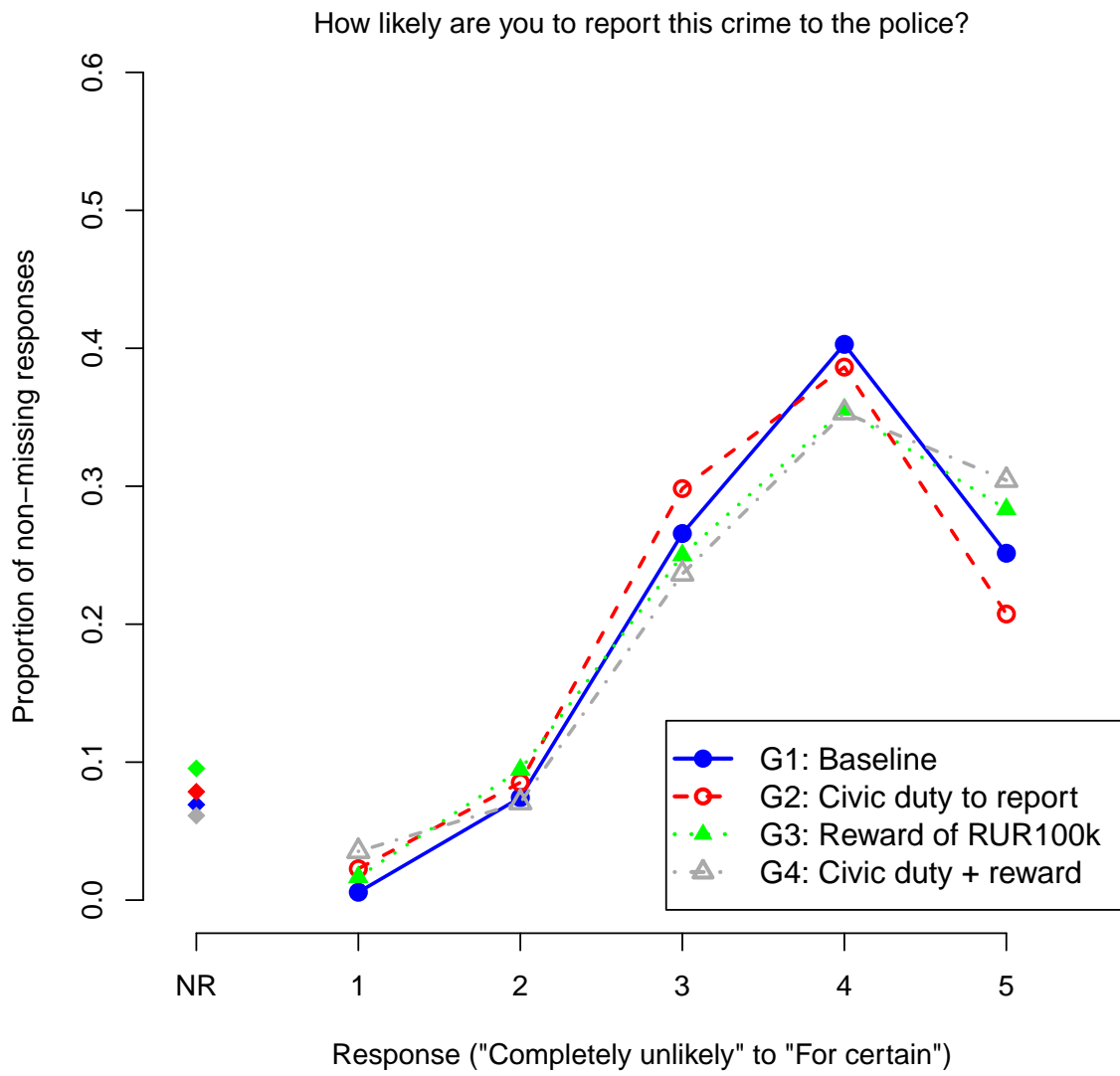


Figure 2: Civic duty and monetary reward

Table 3: Opportunity cost of time and crime severity

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

Note: Cells report (differences in) means on 1–5 scale and standard errors.

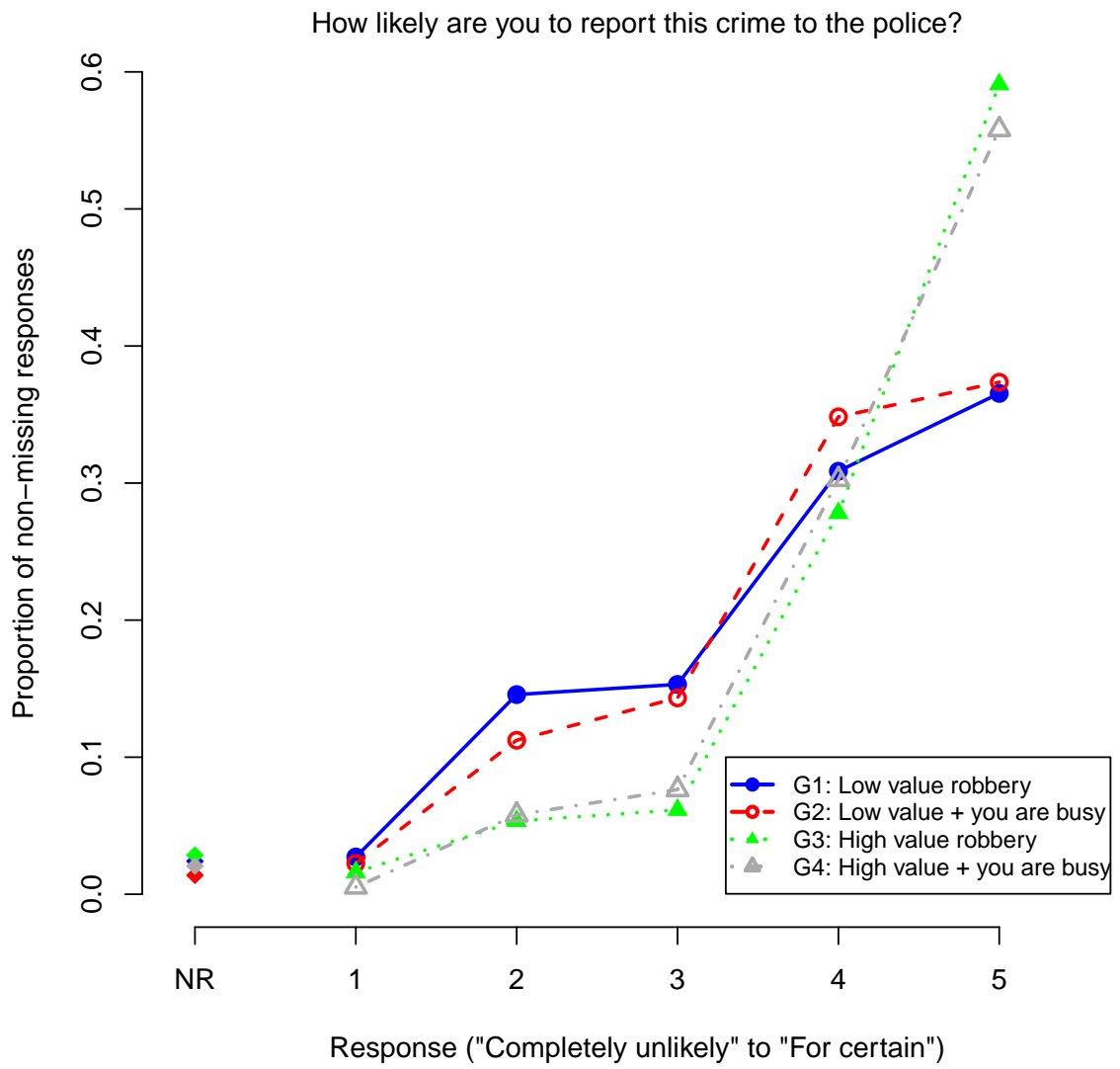


Figure 3: Opportunity cost of time and crime severity

Table A1: Crime severity and perpetrator identity: robustness

	(1)	(2)	(3)	(4)	(5)	(6)
Beating	0.53*** (0.06)		0.57*** (0.08)	0.54*** (0.06)		0.56*** (0.09)
Police		-0.34*** (0.06)	-0.31*** (0.08)		-0.31*** (0.06)	-0.29*** (0.08)
Beating × police			-0.08 (0.11)			-0.04 (0.12)
Age/100				0.49** (0.21)	0.50** (0.21)	0.50** (0.20)
Male				-0.08 (0.06)	-0.08 (0.06)	-0.07 (0.06)
Material security				0.07 (0.05)	0.09* (0.05)	0.08* (0.05)
Education				0.03* (0.02)	0.03* (0.02)	0.03 (0.02)
Interaction with police				0.02 (0.07)	0.00 (0.06)	0.00 (0.06)
Occurrence of crime in past 12 months				0.04 (0.11)	0.09 (0.10)	0.08 (0.10)
Know where nearest police station is				0.13* (0.07)	0.18*** (0.07)	0.16** (0.07)
New to Moscow				0.01 (0.09)	0.03 (0.08)	0.00 (0.08)
Russian nationality				-0.10 (0.13)	-0.06 (0.13)	-0.06 (0.13)
Constant	3.77*** (0.04)	3.33*** (0.04)	3.49*** (0.06)	3.08*** (0.28)	2.48*** (0.27)	2.70*** (0.28)
Observations	1,480	1,480	1,480	1,310	1,310	1,310
R-squared	0.02	0.06	0.08	0.03	0.07	0.09

Note: Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table A2: Civic duty and monetary reward: robustness

	(1)	(2)	(3)	(4)	(5)	(6)
Duty	-0.06 (0.05)		-0.15** (0.07)	-0.06 (0.06)		-0.15* (0.08)
Reward		0.06 (0.05)	-0.03 (0.07)		0.02 (0.06)	-0.07 (0.08)
Duty × reward			0.18* (0.10)			0.18 (0.11)
Age/100				0.53*** (0.19)	0.52*** (0.19)	0.52*** (0.19)
Male				-0.06 (0.06)	-0.06 (0.06)	-0.06 (0.06)
Material security				0.03 (0.04)	0.03 (0.04)	0.03 (0.04)
Education				0.02 (0.02)	0.02 (0.02)	0.02 (0.02)
Interaction with police				-0.01 (0.06)	-0.01 (0.06)	-0.01 (0.06)
Occurrence of crime in past 12 months				0.09 (0.10)	0.10 (0.10)	0.09 (0.10)
Know where nearest police station is				0.26*** (0.06)	0.26*** (0.06)	0.26*** (0.06)
New to Moscow				0.14* (0.08)	0.14* (0.08)	0.14* (0.08)
Russian nationality				-0.06 (0.12)	-0.05 (0.12)	-0.05 (0.12)
Constant	3.81*** (0.04)	3.75*** (0.04)	3.82*** (0.05)	3.24*** (0.23)	3.19*** (0.23)	3.28*** (0.24)
Observations	1,430	1,430	1,430	1,262	1,262	1,262
R-squared	0.00	0.00	0.00	0.03	0.03	0.03

Note: Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table A3: Opportunity cost of time and crime severity: robustness

	(1)	(2)	(3)	(4)	(5)	(6)
Busy	0.05 (0.05)		0.10 (0.07)	0.07 (0.06)		0.11 (0.08)
High value		0.48*** (0.05)	0.53*** (0.07)		0.54*** (0.05)	0.60*** (0.08)
Busy × high value			-0.12 (0.11)			-0.13 (0.11)
Age/100				0.06 (0.20)	0.06 (0.19)	0.07 (0.19)
Male				0.02 (0.06)	0.02 (0.06)	0.02 (0.06)
Material security				-0.06 (0.04)	-0.06 (0.04)	-0.06 (0.04)
Education				0.02 (0.02)	0.02 (0.02)	0.02 (0.02)
Interaction with police				0.00 (0.06)	0.01 (0.06)	0.01 (0.06)
Occurrence of crime in past 12 months				-0.05 (0.11)	-0.09 (0.10)	-0.09 (0.10)
Know where nearest police station is				0.07 (0.06)	0.07 (0.06)	0.07 (0.06)
New to Moscow				0.01 (0.08)	0.02 (0.08)	0.02 (0.08)
Russian nationality				0.17 (0.12)	0.19* (0.12)	0.19 (0.12)
Constant	4.10*** (0.04)	3.89*** (0.04)	3.84*** (0.05)	3.98*** (0.23)	3.70*** (0.23)	3.65*** (0.23)
Observations	1,515	1,515	1,515	1,337	1,337	1,337
R-squared	0.00	0.05	0.05	0.01	0.07	0.07

Note: Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table A4: Randomization checks

	Question 1	Question 2	Question 3
Age	0.44	0.96	0.35
Male	0.41	0.78	0.10
Material security	0.29	0.27	0.54
Education	0.92	0.19	0.41
Interaction with the police	0.27	1.00	0.49
Occurrence of crime in past 12 months	0.25	0.66	0.04
Know where nearest police station is	0.02	0.48	0.52
New to Moscow	0.04	0.90	0.42
Russian nationality	0.15	0.90	0.95
Trust in the police	0.69	0.89	0.68
Satisfaction with Moscow police	0.86	0.86	0.01

Note: Cells report p -values from chi-squared tests.

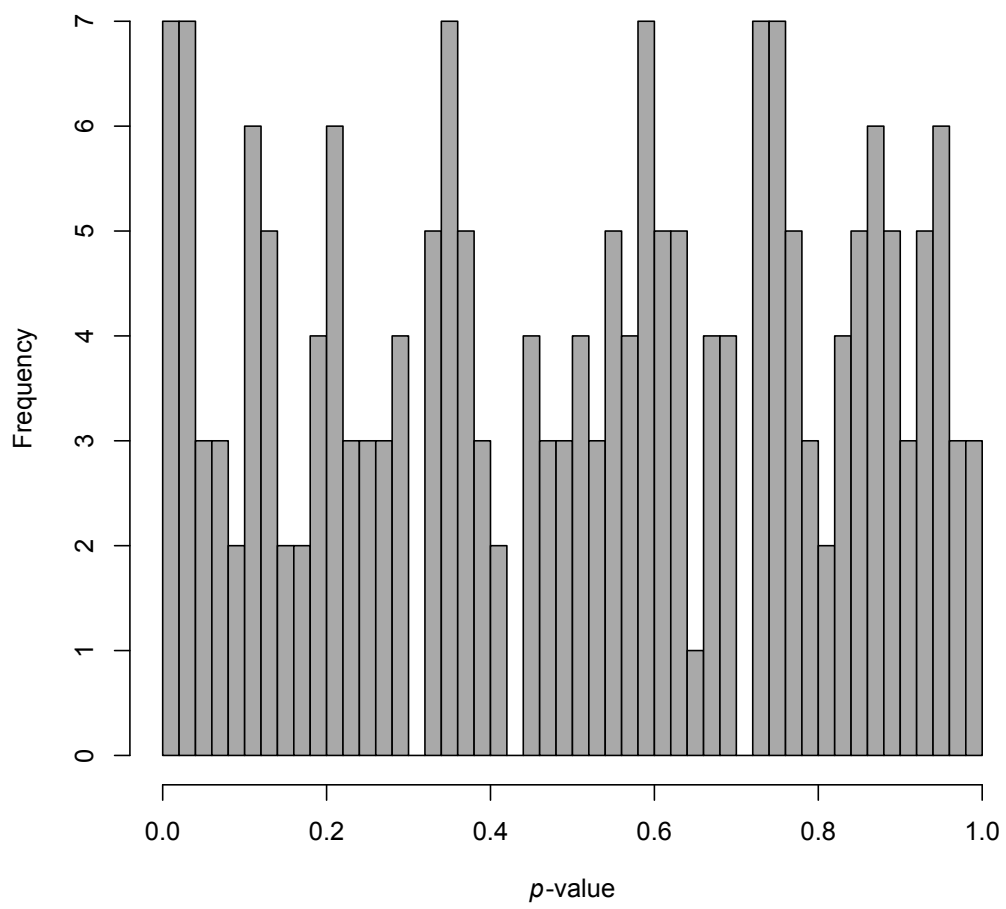


Figure A1: Histogram of p -values from 198 difference-in-means t -tests

Scott Gehlbach

Department of Political Science
University of Wisconsin–Madison
110 North Hall
Madison, WI 53706

gehlbach@polisci.wisc.edu
608-263-2391

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