

# Consequences of inconvenient information: Evidence from sentencing disparities

Michal Šoltés 

Faculty of Law, Charles University, nám.  
Curieových 7, Praha, 116 40, Czech Republic

## Correspondence

Michal Šoltés, nám. Curieových 7, Department  
of Economics, Faculty of Law, Charles  
University, Praha 1, 116 40, Czechia  
Email: [mich.soltes@gmail.com](mailto:mich.soltes@gmail.com)

Inconvenient information about the performance of public institutions may undermine public trust. In an experiment, I test how information about sentencing disparities among judges in the Czech Republic affects respondents' perception of the judicial system. I find no effect on respondents' declared institutional trust and willingness to rely on the formal judicial system. Instead, the information marginally increased respondents' policy involvement: they became more likely to (i) sign a petition that invites politicians to address the underlying issue, and (ii) consider the fairness of the judicial system to be a more important policy issue. The increased interest in signing the petition was driven by mothers, who are arguably more sensitive to the particular treatment information in the presented case of a *failure to pay alimony*.

## 1 | INTRODUCTION

Public sector institutions repeatedly have been found reluctant to disclose inconvenient information, even if not doing so may jeopardize public health and safety, and undermine modern democratic principles. Censorship of information after the Chernobyl catastrophe by Soviet propaganda, and repeated efforts to cover up the spread of diseases in China, are two prominent examples. The effort to hide information and restrict the usage of data has also been documented in the context of criminal justice systems. In 2019, the French government adopted a law that aims to prevent anyone from publicly revealing the patterns of judges' decisions, including information about sentencing disparities.

In many cases, the aversion to disclosing information was supposedly motivated by concerns that the information might reveal the incompetence and systematic failure of responsible authorities. This, in turn, might lead to public distrust in the system and its institutions.<sup>1</sup>

Such concerns may be valid. In general, information about the performance and competence of public institutions to deliver on their responsibilities (e.g. public health ensured by health officers) affects public trust and importantly, shapes citizens' behaviour, with economic and social consequences. For example, Acemoglu *et al.* (2020) document that providing the general

public with positive information about state courts' performance (reduced delays) in Pakistan changed citizens' attitudes and increased the likelihood of using state courts instead of relying on informal institutions to resolve disputes. Since the asymmetric impact of negative and positive information has been documented in many domains (Eil and Rao 2011; Coutts 2019; Galil and Soffer 2011; Moutsiana *et al.* 2013), it may be that disclosing negative—and for the public institution 'inconvenient'—information would lead to the opposite: public distrust and avoidance of such institutions. This is documented by León-Ciliotta *et al.* (2022), who show that information disclosures about the alleged sterilizations of Peruvian women reduced the demand for medical services and decreased institutional trust.

To provide empirical evidence on the consequences of inconvenient information regarding the performance of public institutions, I conduct a survey experiment to study how citizens respond to information about sentencing disparities among judges in the Czech Republic. The fact that judges' characteristics (e.g. propensity to incarcerate) affect sentencing decisions is arguably one of the most worrying signals regarding the performance of judicial systems. It challenges the formal rules of equality before the law, and the clear, stable and predictable application of the law.<sup>2</sup>

In the experiment reported in this paper, 2410 participants were randomized into treatment and active control groups and provided with varying, yet not deceptive, information about sentencing disparities among judges at regional courts in the Czech Republic. The treatment group was informed about sentencing decisions at a regional court where judges differ in their sentencing practice—that is, a court with sizeable sentencing disparities—while the active control group was informed about a court where judges tend to decide consistently—that is, a court with negligible sentencing disparities.

The core of the information treatment consists of shares of cases in which judges imposed community service instead of other types of sanctions (e.g. incarceration) for one of the most frequent crimes in the Czech Republic, namely *failure to pay alimony*. In a between-subjects design, I then measure the effect of the information treatment on: (i) declared trust in several institutions, including the judicial system; (ii) court-related behaviour, including the willingness to apply to courts and the demand for alternative dispute resolution (ADR); and (iii) policy preferences regarding the judicial system, including a willingness to become actively engaged in addressing the problem of sentencing disparities by signing a petition.

The results show that the provision of inconvenient information about sentencing disparities did not lead to public distrust in the judicial system or any other institutions (e.g. the police). The share of respondents who declared a high level of trust does not differ in the control and treatment groups. I can rule out effects larger than 0.11 standard deviations ( $\sigma$ ) at the 95% level for each of the institutions. Furthermore, the treatment did not affect respondents' willingness to endorse applying to courts or demand for alternative dispute resolution. The effects are again precisely estimated, and I can rule out even small effects at the 95% level.

Instead, the treatment increased respondents' involvement in searching for a solution to reduce sentencing disparities. In particular, it increased respondents' willingness to read and sign a petition calling on politicians to suggest specifying sentencing principles that would assist judges in their sentencing decisions and thus limit the sentencing disparities. The share of respondents willing to read and sign the petition increased by 3.3 percentage points (5.4%). Additionally, respondents exposed to the treatment information ranked fairness of the judicial system as a marginally more important policy issue than those in the control group.<sup>3</sup> The effect is consistent with a situation in which respondents interpret the provided information as a signal of the weak performance of the judicial system, which, in turn, motivates them to act on the information.

In the majority of cases of *failure to pay alimony*, fathers are the defaulters and mothers are the victims and the suing party. Mothers are thus more likely to identify themselves with victims, which may lead to their higher sensitivity to inconvenient and worrying information in

such cases. The higher willingness to respond among mothers is consistent with my results. In particular, the increase in respondents' willingness to read and sign a petition is driven exclusively by mothers. Once I allow the treatment effect to vary by the mother-status of respondents, mothers in treatment groups are approximately 8.5 percentage points (12.6 percentage points in a more conservative specification) more likely to read and sign the petition than mothers in the control group, and about 8 percentage points (10 percentage points) more likely than non-mother-treated respondents. A similar pattern is discernible in the declared level of trust in the judicial system. Importantly, the potential negative consequences of inconvenient information on reliance on the judicial system are not visible even among mothers. Overall, zooming in on the most sensitive group of respondents makes the results stronger: information about sentencing disparities did not lead to avoidance of the judicial system. Instead, it motivated the respondents to become engaged in policy discussion and demand improvement. Interestingly, I find no heterogeneous effect with respect to the initial perception of the extent of the sentencing disparities.

My findings have two general implications. First, even though the general population (mothers) acts on the information and demands a policy change, the dissatisfaction does not pass through to the standard measures of trust or the willingness to rely on the institution. Second, the fact that the overall effect was driven by one demographic group suggests that inconvenient information, as worrying as sentencing disparities are, may remain ignored if it is not addressed or available to the right audience.

Previous literature has studied the consequences of publishing information under different conditions. First, scholars have studied the effects of information about the performance of private firms (see, for instance, Beyer *et al.* 2010). My project differs from that stream of literature, as a reaction to the disclosure of firms' performance usually materializes through market mechanisms and affects the firms' valuation, which is virtually impossible in the case of public institutions such as the criminal justice system. Second, previous discussions in economics regarding information disclosure by public institutions have focused on the precision of the information; in particular, on a trade-off between timely but noisy information and slow but more accurate information regarding volatile economic statistics such as GDP (Morris and Shin 2002), and on the communication strategies of central banks as a monetary policy tool (Blinder *et al.* 2008). This literature thus differs from my project in the nature of the information and its goals.

This project is more relevant to the stream of literature devoted to the consequences of publishing the performance indicators of hospitals (Smith *et al.* 2009), as public health is often (co-)financed through public budgets with regulated prices that limit the scope for market mechanisms. However, since patients are generally allowed to choose which hospital to use, even regulated market mechanisms work and patients prefer better-performing hospitals. As a result, the consensus in the literature suggests that publishing information has led to an improvement in under-performing hospitals (Hibbard *et al.* 2005). My project clearly differs, as offenders cannot generally choose which court to attend, and courts are not financed according to their performance; market mechanisms do not apply at all.

This project shares several features with Acemoglu *et al.* (2020). In contrast to my results, Acemoglu *et al.* (2020) show that information about reduced delays in state courts increased the reported likelihood of using formal courts instead of non-state institutions (*Panchayats*) in rural Pakistan. Their study differs from mine in several aspects; each may contribute to the different effects of the information provided.

First, their project was conducted in a rural area in Pakistan where households access the court system frequently<sup>4</sup> and thus are aware of, and are arguably more sensitive to, the performance of the judicial system. In my setting—a standard European democracy—awareness about courts' performance is less widespread, and respondents are less experienced in the judicial system and courts' practice. Only 10% of respondents in this study reported that they had had sizeable experience with the judicial system (first-hand and/or through people they know well,

e.g. family).<sup>5</sup> The fact that the respondents' sensitivity to the information provided is an important determinant of the overall effect is consistent with my results, as it explains the observed heterogeneity of the effect.

Second, the judicial systems in Pakistan and the Czech Republic enjoy different levels of public trust. According to Eurobarometer 90 (2018), 43% of respondents in the Czech Republic tend to trust the judicial system. That is 8 percentage points fewer than the average of the EU28, yet still comparable with most developed countries. Conversely, in Pakistan, the state institutions suffer from a lack of trust (Jackson *et al.* 2014; Cheema *et al.* 2017).<sup>6</sup>

Third, the information provided by Acemoglu *et al.* (2020) is viewed as positive, whereas mine is viewed as negative. Since the previous literature documented an asymmetric reaction to negative and positive news in many domains of human behaviour (Eil and Rao 2011; Coutts 2019; Galil and Soffer 2011; Moutsiana *et al.* 2013), it is likely an important difference in this setting too. All three aspects likely contribute to different information sensitivity.

My results resemble those of Khan *et al.* (2021), who find little or no effect of information about state success in managing crises on support for government policies and trust in the state in Pakistan. Their design, however, differs from mine and that of Acemoglu *et al.* (2020) in the generality of the treatment information. While this project and Acemoglu *et al.* (2020) provide very specific information about the performance of one particular institution—the judicial system—and study the consequences in that domain, Khan *et al.* (2021) study generalized measures of trust in the state.

Studies that analyse the consequences of disclosures of negative information remain rare. A recent project by León-Ciliotta *et al.* (2022) uses a quasi-experimental variation to identify the effect of disclosures of information about forced sterilization campaigns in Peru. They find that the disclosure reduced the usage of contraceptives and the demand for medical services more generally.

This project also relates to the effect of trust on citizens' participation in politics, often referred to as stealth and deliberative democracy (Hibbing and Theiss-Morse 2002; Neblo *et al.* 2010; Webb 2013; Lee and Schachter 2019). The two proposed theories differ in their view on whether less or more trust leads to more participation in politics. Proponents of stealth democracy argue that citizens generally do not want to participate in politics, and as long as they trust the government, they participate less. A lack of trust thus likely induces political engagement. Conversely, for supporters of deliberative democracy, institutional trust is a necessary condition for participation in politics. Apathy, in contrast, is a consequence of a lack of trust. Given that I find increased interest in reading and signing a petition with no effect on institutional trust, my results are consistent with the deliberate democracy view.

Finally, I also contribute to the literature studying the causal effects of interventions on institutional trust in the judicial and law enforcement systems. Two studies estimate the causal effect of the perceived quality of public institutions on institutional trust by analysing procedural justice protocol and trust in the police. Murphy *et al.* (2014) finds that when police officers followed an experimental protocol—that focused on voice, neutrality, trustworthiness and respect—during a control, drivers in Australia reported higher trust in the police. However, using a similar experimental design in Scotland, MacQueen and Bradford (2015) failed to replicate the effect of an increase in trust. A similar question of whether judicial system transparency affects institutional trust was studied by Grimmelikhuijsen and Klijn (2015). In their field experiment, respondents were invited to watch a TV series about a district court in the Netherlands that allowed the public to watch judges' daily work on real cases. The authors report that watching the TV series increased the declared level of trust in judges. The treatment, however, conveys different information. Information on the day-to-day practice for several cases can barely reveal (in)consistency in sentencing among judges. I extend this stream of literature by estimating the causal effects of information about public institutions' performance on declared institutional trust and other measures of intended behaviours related to that trust.

The rest of the paper is organized as follows. Section I introduces the design of the experiment, and the outcomes studied. Next, I discuss the results with attention to the heterogeneous treatment effect by the mother-status. Finally, before I conclude, I discuss the interpretation, underlying mechanisms, and implications of the results.

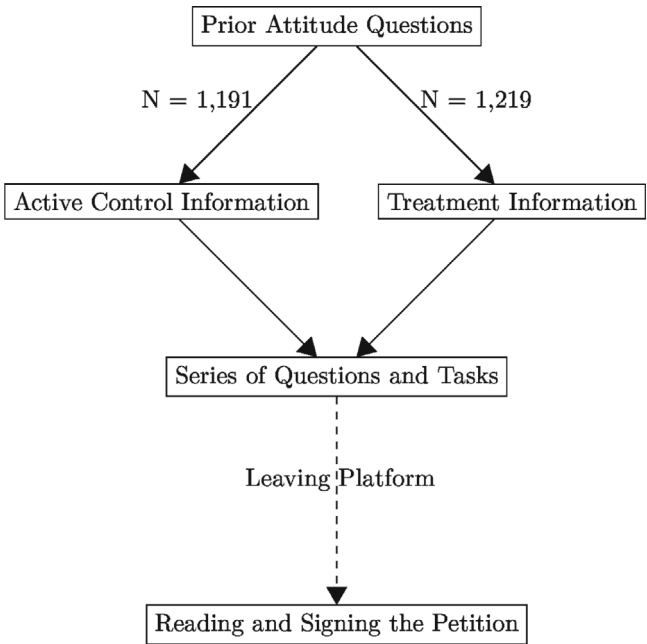
## 2 | DESIGN OF THE SURVEY EXPERIMENT

To conduct the survey experiment, I partnered with Behavio, a private company administrating a panel of regular respondents. Respondents were invited by email to take part in an online survey about courts and justice, and 2410 respondents completed the survey. In addition to the data collected in the experiment, I have the basic demographic characteristics of respondents collected in previous surveys. Except for the final task, the experiment was run on a Behavio platform that was familiar to the respondents.

The experiment consisted of four stages. When starting the survey, respondents were asked three questions regarding their prior attitude to the judicial system and their previous experience. Next, respondents were randomized into the treatment and active control groups, and were presented with the corresponding information. After the treatment phase, respondents were asked to complete five tasks and questions. The final task consisted of reading and signing a petition posted on a different website. Respondents interested in the petition had to leave the Behavio platform. Figure 1 captures the stages of the experiment. The order of tasks and questions in the first stage (prior attitude) and third stage (five tasks) were randomized at the individual level.<sup>7</sup>

### 2.1 | Respondents' prior attitude

The first stage aims to understand the respondents' initial attitudes towards the judicial system. They were asked to what extent, on a four-level scale, they agreed with two statements: (i) 'Depending on the judge, similar cases can be sentenced differently'; (ii) 'Overall, the judicial



**FIGURE 1** Flowchart of the experiment. *Notes:* After three questions about prior attitude, respondents were randomized into control and treatment groups, and provided with corresponding information. They then answered several questions and tasks. If interested, at the end of the experiment, respondents left the platform to read and sign the petition.

system in the Czech Republic works well'. Additionally, I asked how experienced with the judicial system they and/or people close to them are.

## 2.2 | Treatment and control information

I provided respondents with varying, yet not deceptive, information about sentencing disparities among judges within a regional court. The treatment group was informed about a court with high sentencing disparities among judges, and the active control group about a court with negligible sentencing disparities among judges. The source of the variation comes from sentencing disparities among judges at different courts. At some regional courts, judges vary significantly in their sentencing patterns, while at others, judges exhibit indistinguishable sentencing patterns. The information relies on variation within a given court, rather than between courts, as some of the regional (i.e. court-level) disparities in sentencing are justifiable and do not represent the intended variation.<sup>8</sup>

Data about sentencing decisions are complicated and multidimensional,<sup>9</sup> which makes it challenging to convey an understandable message. Additionally, to base the experimental variation on credible and truthful information, and to minimize the threat of showing spurious sentencing disparities, the offence presented needs to satisfy additional restrictions. To do this, I rely on *failure to pay alimony*, which is a suitable offence for four reasons. First, there are enough observations so that the aggregate statistics are based on at least 80 cases per judge (over the three-year period 2016–18). Second, while it is not part of the information provided in the treatment, the differences highlighted in the treatment are statistically significant. Third, since it is a general type of crime, cases are assigned to judges at random. Fourth, compared to other offences, in the objective elements of a crime, *failure to pay alimony* is a homogeneous crime. The choice of the offence—*failure to pay alimony*—was motivated by its convenient properties. Importantly, other frequent offences (e.g. theft) suffer from sentencing disparities of a similar magnitude. However, since there are fewer observations per judge, and cases are not always assigned to judges at random, the information provided would be based on less credible results.

According to the Czech legal system, if a defaulter fails to pay alimony for a period longer than 4 months, then (s)he can be accused of a crime against family and children (Section 196 Negligence of Mandatory Support).<sup>10,11</sup> The upper limit of the sentencing range for the first (less serious) subsection of this offence is 2 years of incarceration.<sup>12</sup> Many disputes over alimony start as civil cases, but if the defaulter continues to fail to fulfil their legal obligation for a period longer than 4 months, then the injured party can approach the police (and state prosecutors) and initiate the criminal procedure. There are around 4000 criminal cases of *failure to pay alimony* every year. The general population is thus more likely to have direct or indirect experience with *failure to pay alimony* than any other offence. That brings the advantage of a better understanding of the situation by respondents. A high frequency of cases, however, does not necessarily mean that *failure to pay alimony* is the major offence that represents the criminal justice system.

The treatment and control slides (see Appendix Figure A1 for English versions) present the shares of cases of *failure to pay alimony* in which a judge sentences a convicted person to community service as the primary sanction. The information was presented in a format similar to mainstream news media. The slide's core is a simple, self-explanatory bar graph accompanied by a few additional pieces of information providing an interpretation of the graph. In particular, the treatment slide consists of a bar graph showing shares of cases in which the convicted criminals were sentenced to community service by different judges (22%, 18%, 29%, 7% and 8%)—the headline says: 'Judges sentence differently'. Next, the slide explains that judge C (29%) sentenced almost a third of the convicted offenders to community service, whereas for some judges it is less than 10%, and instead, the other judges impose different types of sanctions. Finally, the slide



highlights that cases are assigned at random, and that being assigned to judge C implies up to a threefold higher probability of being sentenced to community service.

In the control group, the slide shows another bar graph with shares of cases that were sentenced to community service by different judges (17%, 14%, 16%, 17%). The headline says: 'Judges sentence very similarly'. The control slide further explains that regardless of the judge assigned, a convicted offender has a very similar probability of being sentenced to community service. Respondents in both groups are informed that the figures are based on actual sentencing decisions of judges at one of the Czech regional courts, but they do not know which one.<sup>13</sup>

## 2.3 | Experimental outcomes

The collected outcomes are classified into three main categories: (i) declared institutional trust, (ii) reliance on the judicial system, and (iii) policy preferences.

### 2.3.1 | Institutional trust

To measure institutional trust, I adopt standard survey questions of declared institutional trust similar to those used by international institutions, including the World Values Survey and Eurostat. In particular, respondents were asked to indicate their trust level on a scale of *a great deal*, *quite a lot*, *not very much* and *none at all* towards four different institutions. One of the institutions was the judicial system. The choice of the others was dictated by the proximity to the judicial system. The closest institution to the judicial system is the police, as police officers often cooperate on criminal cases. The next institution is the government, which is responsible for a functioning judicial system.<sup>14</sup> Finally, there is the public broadcasting service, which can be viewed as responsible for the lack of information about the sentencing disparities.

### 2.3.2 | Reliance on the judicial system

I propose two measures to decide whether information about sentencing disparities reduces respondents' willingness to apply to a court. And if it does, are the respondents more likely to search for alternatives to the formal judicial system? Since these questions ask about actual (intended) behaviour, arguably they provide more convincing measures of real-life consequences of the treatment information than the declared level of trust.

To understand whether providing information about sentencing disparities reduces the willingness to apply to the court, I cooperated with a non-governmental organization (NGO) *vasevyzivne.cz*, which assists single-parents in filing lawsuits against a spouse who is not paying alimony. In the experiment, I briefly explained a problem of a typical client of the NGO, namely, a single mother who is considering whether or not to apply to the court to sue for alimony: 'Applying to the court is potentially beneficial, but it also may lead to high costs, both in terms of money and time, and no benefits.' I then asked the respondents whether or not they would recommend her to apply to the court. I also informed them that the NGO might use their advice as material in similar cases. Presumably, the belief that their responses will potentially serve as a guideline for other people in actual problems increases the cost of an ill-concerned answer.

Should information about sentencing disparities discourage respondents from applying to the judicial system, they may be interested in a substitute for the judicial system. In a similar

vein, Acemoglu *et al.* (2020) document the substitutability between formal and informal courts motivated by perception of the poor performance of the formal courts. As the next task, I explained that in some cases it is possible to rely on alternative dispute resolution instead of the judicial system. I then offered a free booklet with basic information about alternative dispute resolution. A respondent first provided an indicative answer of their interest, and if it was affirmative, they were asked to provide their email address to have the booklet sent. The two-step procedure evaded legal concerns about using their email address for purposes other than inviting them to complete the survey. Furthermore, it imposed a small but positive cost on the action.

### 2.3.3 | Policy preferences

New information about the performance of public institutions may change policy preferences and evoke public reactions (e.g. petitions and political protests). To measure this effect, I first asked respondents to imagine that they were the prime minister of the Czech Republic and gave them a list of four policy issues to rank according to their perceived priority. The most pressing issue should be ranked as the top priority, the second most pressing as the second priority, and so on. The four policy issues were: (i) fairness of the judicial system, (ii) sufficient highway infrastructure, (iii) high-quality teachers in the education system, and (iv) the safety situation in the Czech Republic.

Second, I elicited respondents' willingness to become actively involved in policy debate. Subjects were presented with an extract of a petition inviting politicians (members of the Committee on Constitutional and Legal Affairs, Chamber of Deputies, Parliament of the Czech Republic) to suggest specifying sentencing principles. Respondents were asked to indicate their interest in reading the full text of the petition and signing it. If interested, the respondents were referred to a Google Forms website with the full text of the petition. The text highlights the importance and far-reaching consequences of sentencing decisions on individual lives, and suggests that it may be beneficial to have a manual that would lead to more consistent sentencing. The petition stated explicitly that the manual is meant to assist judges in their sentencing decisions but would not in any way undermine their independence and discretion. If interested in signing the petition, a respondent could leave their email address to receive the signature sheet.<sup>15</sup> I collected individual declaratory answers regarding their interest in reading and signing the petition. Once respondents left the Behavio website and opened the petition, I could not observe responses at the individual level. However, since the treatment and active control groups were referred to different forms of the identical petition, I observe the number of email addresses left by each group separately.

## 2.4 | Randomization

The groups are balanced on both observed demographic characteristics and their prior attitudes towards the judicial system. Roughly 19% (21% in the control group) of the respondents in the treatment group reported being single, 18% (17%) were cohabiting, and 43% (44%) were married. An additional 16% (15%) reported being divorced, and only 4% (3%) were widowed. The reported marital status reflects their status at the time of the survey experiment, but not their history; for example, respondents classified as married could have experienced a divorce before. Slightly more than 70% of respondents had at least one child, and the average number of children is 1.43 in the control group, and 1.49 in the treatment group. In both groups, there are fewer male than female respondents (46.7% in the treatment group, and 48.1% in the control group). For more details and balance tests, see Appendix Table A1.



### 3 | RESULTS

#### 3.1 | Prior attitude towards the judicial system

The majority of respondents (91.4%) agree that sentencing decisions are sensitive to the personality of a judge, and that, depending on the judge assigned, similar cases can be sentenced differently. The measure of the general approval of the judicial system is less unequivocal: 52.4% agree that the judicial system works well, while 47.6% disagree. The immediate implication is that many respondents (46.7%) tend to approve of the judicial system, despite the perceived sentencing disparity. Appendix Figure A2 shows the aggregate levels of responses.

Approval of the judicial system varies with the level of experience with that system. More experienced respondents hold more negative prior attitudes. Of the 10% of respondents with the highest level of experience, the majority (60%) strongly agree that, depending on the judge assigned, similar cases can be sentenced differently, and they do not consider the judicial system to be working well. Conversely, the less experienced respondents consider the judicial system to be working rather well and do not view the sentencing disparity as extreme, although they still admit that it may exist. Appendix Figure A3 shows that more experienced respondents differ in their prior attitude towards the judicial system. The Wilcoxon rank-sum test rejects the equality of attitudes ( $p$ -value 0.000) between the most experienced and the three levels of less experienced respondents taken together.

#### 3.2 | Experimental outcomes

##### 3.2.1 | Institutional trust

The most trusted institution is the police (56% of respondents report one of the two highest levels of trust), followed by the judicial system (42%) and the public broadcasting service (25%). The national government enjoys the lowest level of trust (21%). The results are consistent with international surveys. For example, according to Eurobarometer 90 (2018), similar shares of Czech respondents trust the police (63%), the judicial system (43%) and the national government (28%).<sup>16</sup> Overall, my results, while slightly less optimistic, resemble those from Eurobarometer 90 (2018).

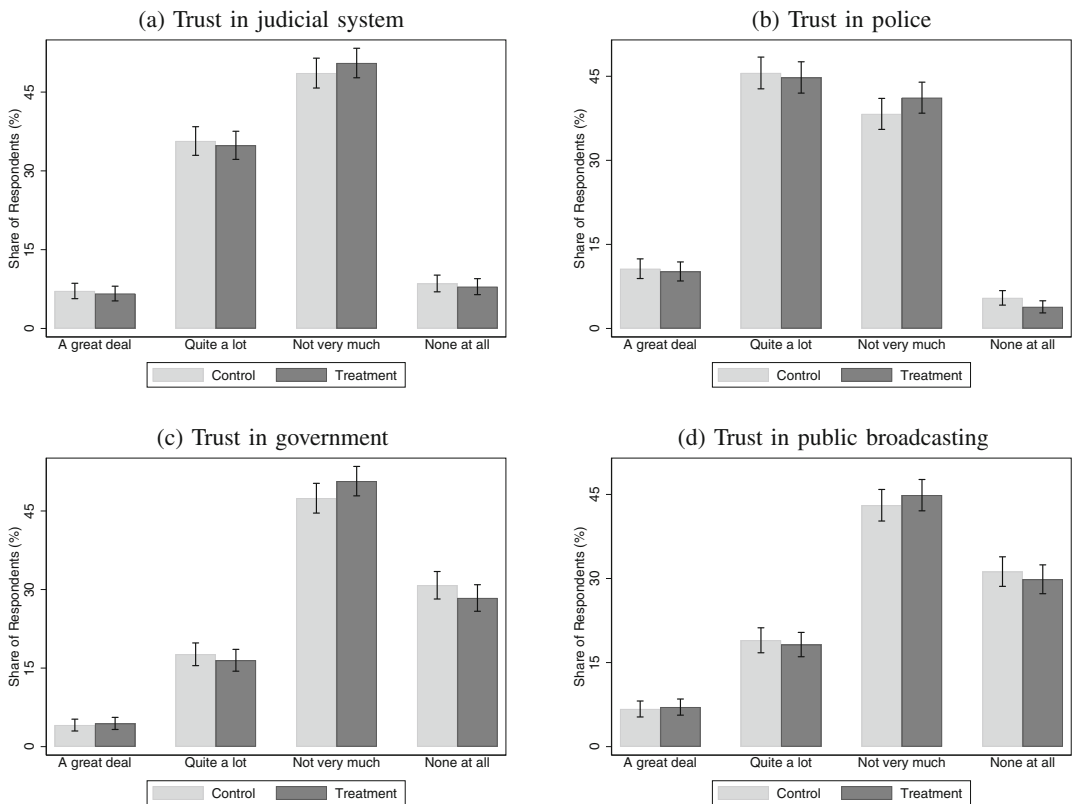
A high level of approval of the judicial system correlates positively with the level of declared trust in all four institutions. A respondent who views the judicial system as working well is approximately 45 percentage points more likely to report a high level of trust in the judicial system. More interestingly, they are also 25 percentage points more likely to trust the police, 12 percentage points the government, and 10 percentage points the public broadcasting service. The closer the institution is to the judicial system, the larger the effect is. All the effects are statistically significant. Appendix Table A2 summarizes the full results.

Figure 2 and results from four different empirical exercises suggest that the information provided about sentencing disparities has no effect on declared level of institutional trust.

First, for each institution  $j$ , I use the two answers indicating a high level of trust, namely *a great deal* and *quite a lot*, as one category denoted as *High Trust*, and proceed as follows. (i) I estimate univariate OLS regressions

$$High\ Trust^j = \alpha + \beta\ Treatment + \varepsilon.$$

(ii) I estimate OLS regressions with a set of controls (individual prior attitude towards the judicial system, income, age, level of education, gender, number of children, and heterogeneity of the



**FIGURE 2** Declared levels of institutional trust, by treatment status. *Notes:* Declared level of institutional trust, by treatment status: (a) in the judicial system; (b) in the police; (c) in the government; and (d) in public broadcasting service. For each institution, respondents were asked to choose from four levels of trust: (i) a great deal; (ii) quite a lot; (iii) not very much; (iv) none at all. 95% confidence intervals are displayed.

treatment effect by mother-status and by prior approval of the judicial system). (iii) I simulate the exact  $p$ -value for the sharp null hypothesis derived from the potential outcome framework (Athey and Imbens 2017) and then test

$$High\ Trust_i(0) = High\ Trust_i(1), \quad \text{for all } i = 1, \dots, N.$$

Second, since the levels of institutional trust represent an ordinal scale, I assign a rank (1,2,3,4) to these categories and apply the Wilcoxon rank-sum test.

Panel A of Table 1 shows results from the OLS regressions. The first column for each institution provides strong evidence that the average treatment effect is economically and statistically insignificant. All point estimates are safely less than 1.5 percentage points in absolute value. The estimates allow me to rule out effects larger than 0.11 standard deviations ( $\sigma$ ) at the 95% level for each of the institutions. Providing information about sentencing disparities among judges thus did not affect shares of respondents with high trust in institutions. Similarly, the exact  $p$ -value test and the Wilcoxon rank-sum test presented in panel C confirm the null average treatment effect.

The null average treatment effect masks heterogeneity. The treatment marginally decreases the share of trusting mothers<sup>17</sup> who are arguably more sensitive to inconvenient information regarding *failure to pay alimony*. In Table 1, the second column for each institution in panel A reports results with a focus on  $Treatment \times Mother$ . In this specification, I control for prior

TABLE 1 Treatment Effect on Declared Level of Institutional Trust

	Judicial system		Police		Government		Broadcasting	
<i>Panel A: Baseline sample</i>								
Treatment	−0.013	−0.007	−0.013	−0.026	−0.008	−0.030	−0.004	−0.044
	(0.020)	(0.035)	(0.020)	(0.041)	(0.017)	(0.032)	(0.017)	(0.036)
Treatment × Mother		−0.060*		−0.049		−0.034		0.011
		(0.035)		(0.040)		(0.034)		(0.034)
Prior attitude	No	Yes	No	Yes	No	Yes	No	Yes
Demographic characteristics	No	Yes	No	Yes	No	Yes	No	Yes
<i>N</i>	2410	2407	2410	2407	2410	2407	2410	2407
<i>Panel B: Restricted sample</i>								
Treatment	−0.010	−0.007	−0.013	−0.040	−0.013	−0.008	0.003	−0.043
	(0.022)	(0.038)	(0.022)	(0.046)	(0.018)	(0.035)	(0.019)	(0.039)
Treatment × Mother		−0.057		−0.041		−0.053		0.021
		(0.038)		(0.043)		(0.036)		(0.037)
Prior attitude	No	Yes	No	Yes	No	Yes	No	Yes
Demographic characteristics	No	Yes	No	Yes	No	Yes	No	Yes
<i>N</i>	2008	2005	2008	2005	2008	2005	2008	2005
<i>Panel C: Exact p-value and p-value of Wilcoxon test (baseline sample)</i>								
Exact <i>p</i> -value	0.510		0.518		0.625		0.810	
Wilcoxon test								
Full sample	0.652		0.760		0.509		0.702	
Only mothers	0.063*		0.094*		0.915		0.515	

Notes: Robust standard errors in parentheses. Panel A shows results from univariate and multivariate OLS regressions of *Treatment* on a dummy for a high level (‘a great deal’ and ‘quite a lot’) of institutional trust. Panel B shows results from univariate and multivariate OLS regressions of *Treatment* on a dummy for a high level of institutional trust using the *restricted* sample of more attentive respondents. Panel C presents *p*-values of two alternative measures: the exact *p*-value (Athey and Imbens 2017) derived from 20,000 simulations, and the *p*-value of the Wilcoxon rank-sum test that tests for the same rank of declared level of institutional trust.

\*, \*\*, \*\*\* indicate  $p < 0.1$ ,  $p < 0.05$ ,  $p < 0.01$ , respectively.

attitudes of respondents, interaction of the prior attitude and the treatment status, and other available individual characteristics. Taking the point estimates at their face values, the share of trusting respondents among mothers decreases by 6 percentage points more than among non-mother respondents. The marginal statistical significance of the effect on mothers is confirmed by the Wilcoxon test in panel C. I do not find a heterogeneous treatment effect on trust in the judicial system with respect to any other characteristics of respondents, including respondents’ initial perception of sentencing disparity. There seems to be only a limited and statistically insignificant spillover effect towards other institutions. Appendix Table A2 summarizes the full results.

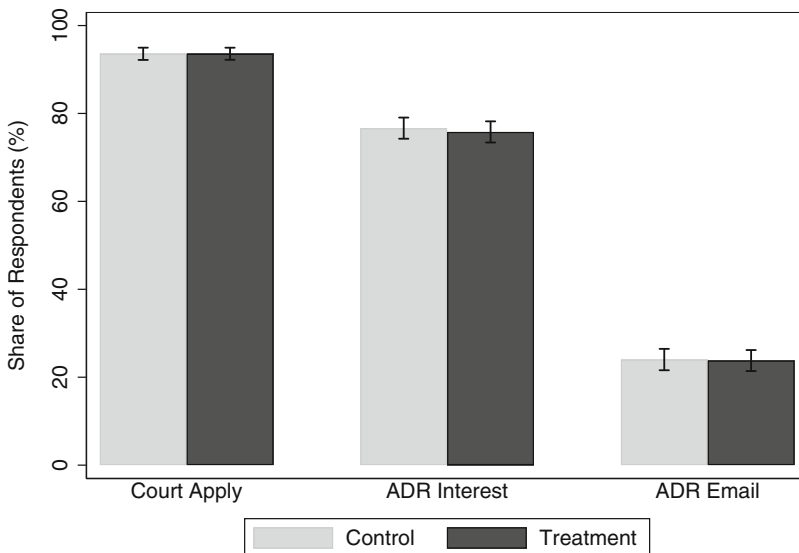
I next provide evidence that the null effect is not driven by the limited attention of respondents. I replicate the exercises on a sample that drops 10% of respondents who spent the least time on the treatment and control slides, respectively. Additionally, I also discard 10% of respondents who spent the least time on the slide with the institutional trust task, reaching 2008 observations (83% of the initial dataset). I refer to this sample as the *restricted* sample, and report the results

in panel B of Table 1. I find no effect on the restricted sample. The lack of effect is thus unlikely to be caused by respondents' limited attention.

### 3.2.2 | Reliance on the judicial system

Respondents exhibited a strong will to apply to the judicial system, as almost 93.6% of respondents recommended that a single mother should apply to the court in a situation in which she hesitates (*Court Apply*); respondents who consider the judicial system to be working well are by 4 percentage points more likely to do so. A majority of respondents (76.2%) were interested in receiving a booklet about alternative dispute resolutions (*ADR Interest*). However, when asked to provide an email address (*ADR Mail*) to have the booklet sent, only 23.9% of all respondents and 31.4% of those who declared their interest did so. Better educated and more experienced respondents were more likely to demand alternative dispute resolution, which suggests that demand for alternative dispute resolution requires a particular level of sophistication regarding the judicial system. Figure 3 shows the shares of affirmative decisions for respondents in the treatment and control groups.

Information about sentencing disparities affected neither the (intended) reliance on the judicial systems nor the demand for alternative dispute resolution. The first column for each outcome in Table 2 shows that the average treatment effects are statistically insignificant and economically negligible. All point estimates of the average treatment effects are bounded between  $-1$  and  $1$  percentage points. In terms of effect size, the effects are roughly of the same magnitude as those on institutional trust. I can rule out effects larger than  $0.11$  standard deviations ( $\sigma$ ) for *ADR Interest*, and  $0.09$  standard deviations ( $\sigma$ ) for *Court Apply* and *ADR Mail* at the 95% level. Panel C of Table 2 shows the exact  $p$ -value and provides additional evidence of strong null results for all three measures.



**FIGURE 3** Reliance on the judicial system, by treatment status. *Notes:* Shares of affirmative responses, by treatment status. 'Court Apply' captures whether respondents recommend that a single mother apply to the court when she hesitates. 'ADR Interest' measures shares of respondents who indicate their interest in receiving information about alternative dispute resolution (ADR). 'ADR Email' shows shares of respondents who provide their email addresses to have the information about ADR sent. 95% confidence intervals are displayed.

TABLE 2 Treatment Effect on Reliance on Judicial System

	Court Apply		ADR Interest		ADR Mail	
<i>Panel A: Baseline sample</i>						
Treatment	0.000	0.014	−0.009	−0.012	−0.002	0.006
	(0.010)	(0.022)	(0.017)	(0.037)	(0.017)	(0.036)
Treatment × Mother		−0.018		0.048		0.031
		(0.021)		(0.036)		(0.035)
Prior attitude	No	Yes	No	Yes	No	Yes
Demographic characteristics	No	Yes	No	Yes	No	Yes
<i>N</i>	2410	2407	2410	2407	2410	2407
<i>Panel B: Restricted sample</i>						
Treatment	0.002	0.002	−0.007	−0.013	0.006	0.028
	(0.010)	(0.022)	(0.018)	(0.040)	(0.019)	(0.041)
Treatment × Mother		0.002		0.050		0.010
		(0.021)		(0.037)		(0.039)
Prior attitude	No	Yes	No	Yes	No	Yes
Demographic characteristics	No	Yes	No	Yes	No	Yes
<i>N</i>	2020	2017	2023	2020	2023	2020
<i>Panel C: Exact p-value (baseline sample)</i>						
Exact <i>p</i> -value	0.993		0.620		0.898	

Notes: Robust standard errors in parentheses. Panel A shows results from univariate and multivariate OLS regressions of *Treatment* on a dummy variable for affirmative response from three tasks. Panel B shows results from univariate and multivariate OLS regressions of *Treatment* on a dummy variable for affirmative response from three tasks using the *restricted* sample of more attentive respondents. Panel C shows the exact *p*-value (Athey and Imbens 2017) derived from 20,000 simulations. \*, \*\*, \*\*\* indicate  $p < 0.1$ ,  $p < 0.05$ ,  $p < 0.01$ , respectively.

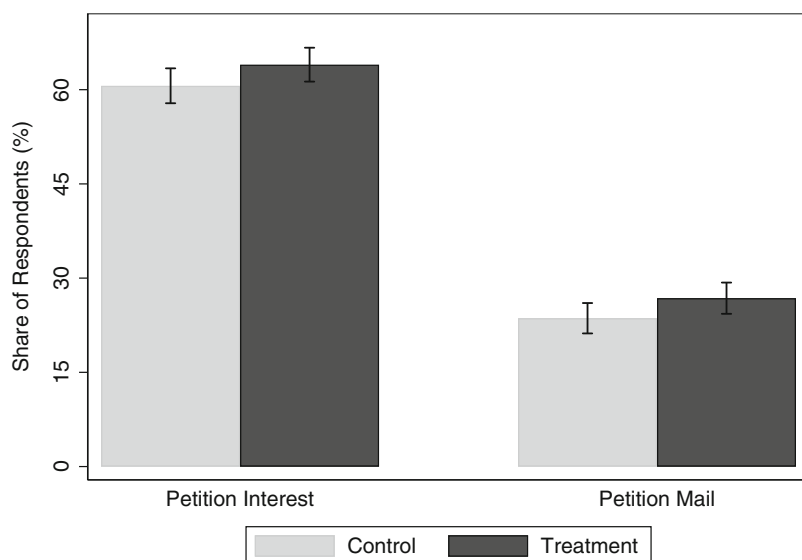
The second column for each outcome shows results when controlling for other characteristics. With regard to the heterogeneity of the treatment effect, not even the most sensitive respondents—mothers—change their behaviour. Similarly, there is no heterogeneous treatment effect with respect to approval of the judicial system or the initial perception of sentencing inconsistencies. The full results are reported in Appendix Table A3. Panel B of Table 2 shows results estimated on the restricted samples of respondents who spent enough time on the treatment and control slides, and on the slide with the corresponding task.<sup>18</sup> Results on the restricted sample confirm that the null effect is unlikely to be caused by the inattention of respondents.

3.2.3 | Policy preferences

Petition

I collected two measures of respondents’ reactions to the petition. At the individual level, I measured respondents’ interest in reading and signing the petition as an indicator variable and linked it to other characteristics of respondents. At the group level, I collected the number of email addresses provided by respondents once they left the platform to read the petition. More than 60% of the respondents showed interest in reading and signing the petition. Higher education, more experience with the judicial system, and perception of a sizeable sentencing disparity predict a higher likelihood of an affirmative decision.

Figure 4 shows the shares of respondents interested in reading and signing the petition, and those who provided their email addresses by groups. A visual comparison suggests a small



**FIGURE 4** Interest in reading and signing the petition, by treatment status. *Notes:* Share of respondents who declare their interest in reading and signing the petition, by treatment status. ‘Petition Interest’ measures shares of respondents of the *baseline* sample who indicate their interest in reading the petition. ‘Petition Mail’ measures shares of all survey respondents who provided their email addresses to have the petition sent. 95% confidence intervals are displayed.

but positive treatment effect. Panel A of Table 3 shows that the average treatment effect on respondents’ interest in reading and signing the petition is 3.3 percentage points, and it is marginally statistically significant. Given the baseline probability 60%, the effect corresponds to a 5.4% increase. The exact  $p$ -value in panel C also suggests that the effect is statistically significant. Estimates on the restricted sample presented in panel B suggest an even slightly higher effect of 4.7 percentage points.

The average treatment effect, however, masks sizeable heterogeneity. The effect is more pronounced among mothers who are more likely to act on that information. Roughly 61% of mothers in the control group and 70% in the treatment group expressed their interest in reading and signing the petition. The difference of 8.3 percentage points (14%) is statistically significant ( $p$ -value of the two-sample  $t$ -test is 0.006). Column (2) of panel A in Table 3 shows that mothers are more sensitive even when I control for other characteristics, including the interaction of treatment status and prior beliefs of respondents. Results from the restricted sample presented in panel B suggest an even larger effect of more than 10 percentage points. Table 3 also reports estimated heterogeneity with respect to respondents’ initial belief regarding the extent of sentencing inconsistencies. The variable *High SD* equals 1 if the respondent strongly agreed that depending on the judge, similar cases can be sentenced differently. I do not find a significant effect, suggesting that the initial perception of the situation does not drive the overall treatment effect.<sup>19</sup> Instead, the overall effect seems to be driven by the respondents’ sensitivity to the particular piece of inconvenient information. The full results are presented in Appendix Table A4.

Results from the aggregate number of email addresses provided by each group are presented in column (3) of panel A in Table 3. The data do not allow me to study heterogeneity, and restrict the sample only to attentive respondents. The main results, however, are in line with the former measure of interest in the petition. Treatment information marginally increased the policy involvement of respondents who are 3.2 percentage points more likely to be interested in the



**TABLE 3** Treatment Effect on Policy Preferences

	Petition		Petition Mail	Top priority judicial system	
	(1)	(2)	(3)	(4)	(5)
<i>Panel A: Baseline sample</i>					
Treatment	0.033*	0.008	0.032*	0.027	0.076*
	(0.019)	(0.042)	(0.017)	(0.019)	(0.041)
Treatment × Mother		0.079**			−0.008
		(0.040)			(0.039)
Treatment × High SD		0.058			−0.013
		(0.041)			(0.041)
Prior attitude	No	Yes	No	No	Yes
Demographic characteristics	No	Yes	No	No	Yes
N	2410	2407	2410	2410	2407
<i>Panel B: Restricted sample</i>					
Treatment	0.047**	0.025		0.034*	0.083*
	(0.021)	(0.045)		(0.020)	(0.044)
Treatment × Mother		0.101**			−0.006
		(0.043)			(0.043)
Treatment × High SD		0.039			−0.038
		(0.044)			(0.045)
Prior attitude	No	Yes		No	Yes
Demographic characteristics	No	Yes		No	Yes
N	2037	2034		2018	2015
<i>Panel C: Exact p-value (baseline sample)</i>					
Exact p-value		0.086*	0.079*		0.155
<i>Panel D: Rank judicial system—Wilcoxon test</i>					
	Baseline sample			Restricted sample	
Wilcoxon test	0.060*			0.041**	

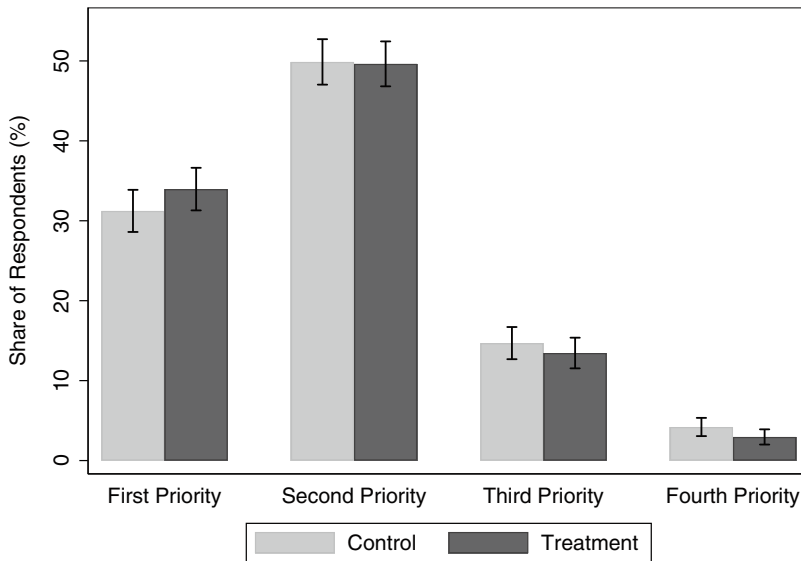
*Notes:* Robust standard errors in parentheses. SD stands for ‘sentencing disparity’. Panels A and B show results from OLS regressions of *Treatment* on dummy variables that measure whether a respondent (i) is interested in reading a petition, (ii) provides an email address to send the petition to, (iii) ranks fairness of the judicial system as the top or second priority. Panel B shows results estimated on the *restricted* sample of more attentive respondents. Panel C shows the exact *p*-value (Athey and Imbens 2017) derived from 20,000 simulations. Panel D shows *p*-values from the Wilcoxon rank-sum test on the baseline and restricted samples.

\*, \*\*, \*\*\* indicate  $p < 0.1$ ,  $p < 0.05$ ,  $p < 0.01$ , respectively.

petition. Compared to the baseline rate, the treatment increased the share of provided addresses by 13.6%.

### Relevance of policy issues

The respondents view the fairness of the judicial system as a relevant policy issue. A third (32.6%) of them ranked fairness of the judicial system as the top priority, and an additional 50% as the second most important priority. While the perception is likely affected by the survey experiment itself (e.g. through the experimenter demand effect) and is thus barely generalizable, it is a good signal of the relevance of the issue. Figure 5 shows shares of respondents who ranked fairness of the judicial system as the first, second, third and fourth priority, by both the treatment and



**FIGURE 5** Rank of fairness of the judicial system as priority, by treatment status. *Notes:* Share of respondents who rank fairness of the judicial system as the first, second, third and fourth priority, by the control and treatment groups. The remaining issues to be ranked were sufficient highway infrastructure, safety in the Czech Republic, and high-quality teachers in the education system. 95% confidence intervals are displayed.

control groups. The figure suggests that the ranking among the treated respondents is slightly shifted towards the higher priority.

The share of respondents who would address the fairness of the judicial system as the top priority in the treatment group is 34%, while in the control group it is 31.2%. The difference is not statistically significant. It increases and becomes marginally statistically significant when controlled for other characteristics and when estimated on the restricted sample of more attentive respondents. The full results are presented in Appendix Table A4. To formally test the differences in the rankings of the policy issues, I rely on the Wilcoxon rank-sum test. Panel D of Table 3 shows that the ranks differ marginally. This result confirms the apparent shift in the ranking of the judicial system among the treatment group. I find no heterogeneity effect with respect to mother status.

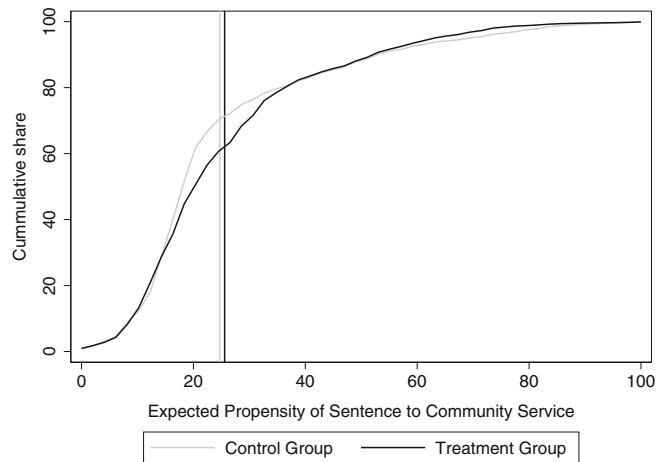
## 4 | DISCUSSION

### 4.1 | Interpretation of the treatment effect

An important concern in studying trust and trustworthiness based on information treatment is whether respondents trust the information provided. At the beginning of the experiment, respondents were informed that the information provided is truthful and based on data from the Ministry of Justice. This may evoke a tension between implicitly asking respondents to trust the data provided by the Ministry of Justice and, at the same time, asking them whether they trust the judicial system. To understand the degree of the potential risk, I elicited the perceived credibility of the information. To avoid influencing the experiment, the question regarding the credibility of the information came at the end of the experiment: 87% of respondents declared that they view the data as credible, and only less than 1% of them selected an extreme choice of *definitely not credible*. The shares are virtually identical in the control and treatment groups, and the results are thus not systematically affected by respondents' mistrust in the information treatment. See Appendix Figure A4 for more details.

For proper interpretation of the results, how respondents understood and interpreted the treatment information is important. The core of the treatment is to provide details on varying

**FIGURE 6** Expected share of cases sentenced to community service. *Notes:* The figure shows the empirical cumulative distribution function of respondents' estimates of the share of cases that are typically sentenced to community service at the national level, for both the control and treatment groups.



levels of sentencing disparities, that is, the second moment of the distribution of sentencing decisions. This is a novel feature. Most of the information and survey experiments existing in the literature exogenously vary beliefs about the first moment of a relevant distribution—for example, a probability of audit or a share of high-skilled immigrants (Haaland *et al.* 2023). Varying the signals about sentencing disparities is challenging, as it may be more complicated for citizens to understand the information and interpret it correctly.

Additionally, to derive the information treatment, other statistical properties of the data are varied. Conveniently, in the two courts used in the control and treatment groups, the average shares of convicted offenders sentenced to community service for *failure to pay alimony*—that is, the first moment of the distribution—were identical numerically (16%). Nevertheless, it is still plausible that the information provided affects respondents' perceptions of the propensity to sentence to community service differently in the control and treatment groups.

To understand this threat, I elicited the respondents' expectations regarding the average propensity to be sentenced to community service. In particular, the respondents were asked in what percentage of cases in the Czech Republic of *failure to pay alimony* is a convicted offender sentenced to community service. On average, respondents in both groups overestimate the actual shares. While the national average conveniently corresponds to the cases presented, namely 16%, the respondents in the control group expected 24.7%, and in the treatment groups they expected 25.6%. The difference between the groups is not statistically significant ( $p$ -value 0.255). Figure 6 shows the empirical cumulative distribution functions of the expected share of cases sentenced to community service, and suggests that most of their estimates, in both groups, are concentrated between 10% and 30%. The fact that the cumulative distribution functions resemble each other, and the averages are not statistically different, suggests that the information provided does not affect the perception of the propensity of sentence to community service differently in the control and treatment groups.

## 4.2 | Underlying mechanisms

The increased interest in reading and signing the petition among mothers suggests that the effect is driven by respondents who are sensitive to the information. Mothers do not differ from the other demographic groups in their prior beliefs about sentencing disparities, their attitude towards the judicial system, or their experience with the judicial system. Therefore I argue that the heterogeneity of the effect is driven by mothers' preferences.<sup>20</sup> Mothers are likely to be more

sensitive to *failure to pay alimony* than any other demographic group, as it is easier for them to identify themselves with the victims. They share similar experiences, including the role and responsibility of primary caregivers for their children, who may be harmed by the defaulter's behaviour.

Sensitivity to *failure to pay alimony*, however, does not necessarily imply that respondents will act on the information about sentencing disparities. The observed effect is consistent with a situation in which respondents interpret the information about sentencing disparity as a signal of weak performance or, worse, as a more widespread lack of competence within the judicial system. This also implies that different information about (a lack of) performance of the judicial system (e.g. excess delays in final verdicts) might lead to a similar response if the information was considered worrying enough and reached a sensitive group of respondents.

### 4.3 | Implications of the results

I next highlight three important implications of my results. First, evidence that inconvenient information did not lead to a decline in institutional trust and willingness to rely on formal institutions limits the concerns that revealing the information would be harmful from the public perspective. However, the personal incentives of public officers who decide whether or not to publish the information can still prevent publication. If a public officer suspects that the information may harm him, his reputation, and his future in office, then he may, in order to keep the information confidential, argue that if the information were public, it would cause distrust with a high (social) cost. My results imply that using that argument sounds more like a pretext than a real concern. Instead, the general public is likely to demand policy changes, which may indeed jeopardize the position of the incumbent public officer.

Second, even though the information increases the likelihood of signing a petition and demanding a change in the current system, suggesting dissatisfaction with sentencing disparities, the dissatisfaction did not pass through to the standard measures of trust or the willingness to rely on the institution. Suppose that policymakers and international organizations identify social issues and consequently build policies and recommendations based on survey measures of institutional trust alone. In that case, it is possible that the policies will miss an important feature of citizens' preferences and dissatisfaction with formal institutions.

Third, the observed heterogeneity shows the extent to which a particular group of citizens can drive the reaction to inconvenient information. This suggests that even issues as worrying as sentencing disparities may remain overlooked and ignored as long as the information is not provided or available to a particular group of citizens. This is likely to hold more generally in many other policy issues. The heterogeneity also implies that publishing information about sentencing disparities for more (all) offences might lead to a sizeable increase in the overall effect, as each of the offences may trigger additional groups of citizens based on their sensitivity to the particular topic and offence. From that perspective, the effect estimated in this study would represent a lower bar of the effect. While the idea is not new, I provide experimental evidence of such an effect.

## 5 | CONCLUDING REMARK

Publishing inconvenient information about the performance of public institutions in an environment where market mechanisms cannot operate raises the question of how citizens would

respond. I focus on a particular case of sentencing disparities that undermine the principles of a clear, stable and predictable application of law, and consequently equality before the law. The results suggest that inconvenient information about sentencing disparities does not lead to distrust and avoidance of the formal judicial systems. Instead, respondents exposed to the information were marginally more likely to read and sign a petition that calls on politicians to address the issue, and they consider fairness of the judicial system to be a more important policy issue. Additionally, I find a sizeable heterogeneity in the treatment effect. A personal connection to the offence seems more important for the effect of the information than a prior belief regarding the performance of the judicial system.

## ACKNOWLEDGMENTS

I thank Michal Bauer, Francesco Drago, Jakub Drápal, Christoph Engel, Ole Jann, Filip Matějka, Nikolas Mittag, Arnaud Philippe, and two anonymous referees for useful comments.

This study was supported by a grant from the CERGE-EI Foundation's Teaching Fellows programme and also received funding from the European Research Council under the European Union's Horizon 2020 research and innovation programme (grant agreement no. 101002898). All opinions expressed are those of the author and have not been endorsed by the CERGE-EI Foundation. Preregistration: AEARCTR-0005374.

## ENDNOTES

- <sup>1</sup> For example, AP News (2020) reports on the COVID-19 outbreak in China as follows: 'In Wuhan, local leaders were accused of telling doctors in December not to publicize the spreading virus in order to avoid casting a shadow over the annual meeting of a local legislative body. As the virus spread, doctors were ordered to delete posts on social media that appealed for donations of medical supplies. That prompted complaints authorities were more worried about image than public safety.'
- <sup>2</sup> Sentencing disparities along different dimensions—namely, (i) between judges across time, (ii) between judges in a single jurisdiction, and (iii) between jurisdictions (Sporer and Goodman-Delahunty 2009)—have been documented worldwide and discussed extensively by scholars. Many scholars leveraged the different practices (leniency) of judges as a source of quasi-exogenous variation to provide causal estimates of incarceration on various outcomes (see, for example, Kling 2006; Di Tella and Schargrodsky 2013; Dahl *et al.* 2014; Aizer and Doyle 2015).
- <sup>3</sup> The results correspond qualitatively to the reaction of the general public to information about and a video of the death of George Floyd. The general public has undoubtedly become more interested in the issue of racism documented by the Black Lives Matter protest and by online search (Barrie 2020). A survey conducted two months after George Floyd's death suggests that most Americans support major (58%) and minor (36%) changes in policing; however, only 15% support the idea of abolishing police departments (Crabtree 2020). Similarly, Vaughn *et al.* (2022) find that the public is significantly more supportive of reforming the police than defunding or abolishing it. Additionally, Philonise Floyd, George Floyd's brother, called on lawmakers to make law enforcement part of the solution, not the problem, during a House Judiciary Committee hearing to discuss police brutality and racial profiling, in Washington, DC, on 10 June 2020.
- <sup>4</sup> 'In our survey, one in every five households report that they have accessed the court system in the last three months' (Acemoglu *et al.* 2020, p. 3092).
- <sup>5</sup> A lack of knowledge about how the judicial system works among the general public seems to be common in European democracies. For example, according to Chapman *et al.* (2002), the British Crime Survey and other surveys have shown that the public is poorly informed about crime and the operation of the criminal justice system.
- <sup>6</sup> 'Pakistan is an ideal setting for such an investigation because of the well-recognized weakness of state institutions and the associated low levels of access to and trust in the state' (Acemoglu *et al.* 2020, pp. 3097–8).
- <sup>7</sup> The full script is available in the Online Appendix.
- <sup>8</sup> For example, a driving disqualification in a city with functional public transportation is arguably a more lenient sanction in terms of economic and social consequences than in regions at the foothills of mountains with limited public transportation. These and similar considerations may lead to some desired sentencing disparities across regions.
- <sup>9</sup> One has to consider different offences and their subsections, different types and extents of sanctions, and combinations of more types of sanctions.
- <sup>10</sup> *Failure to pay alimony* can be considered a crime in other countries. In practice, however, other countries apply criminal procedure less often than the Czech Republic, and reserve it for extreme cases in which the defaulter neglects the mandatory support for a long time or with the intention of harming the beneficiary. For example, France and

Denmark are two countries in which the criminal procedure can be used, but it is applied only rarely (Beaumont and Mason 2014).

- <sup>11</sup> The prevailing opinion among stakeholders in the criminal justice system in the Czech Republic is that *failure to pay alimony* should be decriminalized. For example, Válková *et al.* (2016) conduct a survey among judges and state prosecutors, and document strong support for the (partial) decriminalization of *failure to pay alimony*.
- <sup>12</sup> If an offender is found guilty of a more serious subsection of the same section, then (s)he faces up to 5 years of incarceration.
- <sup>13</sup> Once respondents finished the experiment, Behavio sent them a debriefing letter that explains that the information presented represents only one regional court and the situation may differ in different courts. The debriefing letter can be found in the Online Appendix.
- <sup>14</sup> For example, the government (the Minister of Justice) plays a role in appointing new judges.
- <sup>15</sup> The respondents were informed that the petition would be filed once it collected at least 1000 signatures.
- <sup>16</sup> Eurobarometer 90 (2018) does not include institutional trust in the public broadcasting service.
- <sup>17</sup> A female respondent is characterized as a mother if she has at least one child, regardless of the child's age.
- <sup>18</sup> Since the overlap of the dropped samples differs across tasks, the number of observations does too.
- <sup>19</sup> The null effect on the interaction of the treatment status and the initial perception of sentencing inconsistency holds for all specifications run.
- <sup>20</sup> Note that the treatment heterogeneity corresponds to a mother status, not to gender.

## ORCID

Michal Šoltés  <https://orcid.org/0000-0003-4561-3516>

## REFERENCES

- Acemoglu, D., Cheema, A., Khwaja, A. I. and Robinson, J. A. (2020). Trust in state and nonstate actors: evidence from dispute resolution in Pakistan. *Journal of Political Economy*, **128**(8), 3090–147.
- Aizer, A. and Doyle, J. J. (2015). Juvenile incarceration, human capital, and future crime: evidence from randomly assigned judges. *Quarterly Journal of Economics*, **130**(2), 759–804.
- AP News (2020). China exonerates doctor reprimanded for warning of virus. AP News, 20 March; available online at <https://apnews.com/article/virus-outbreak-accidents-ap-top-news-international-news-arrests-6f2e666485e9abae4bb112251eca77be> (accessed 29 May 2023).
- Athey, S. and Imbens, G. W. (2017). The econometrics of randomized experiments. In A. V. Banerjee and E. Duflo (eds), *Handbook of Economic Field Experiments*. Amsterdam: Elsevier, pp. 73–140.
- Barrie, C. (2020). Searching Racism after George Floyd. *Socius*, **6**, 1–3. <https://doi.org/10.1177/2378023120971507>
- Beaumont, K. and Mason, P. (2014). *Child Maintenance Systems in EU Member States from a Gender Perspective*. Brussels: European Commission.
- Beyer, A., Cohen, D. A., Lys, T. Z. and Walther, B. R. (2010). The financial reporting environment: review of the recent literature. *Journal of Accounting and Economics*, **50**(2–3), 296–343.
- Blinder, A. S., Ehrmann, M., Fratzscher, M., De Haan, J. and Jansen, D.-J. (2008). Central bank communication and monetary policy: a survey of theory and evidence. *Journal of Economic Literature*, **46**(4), 910–45.
- Chapman, B., Mirrlees-Black, C. and Brawn, C. (2002). *Improving Public Attitudes to the Criminal Justice System: The Impact of Information*. London: Home Office.
- Cheema, A., Hameed, Z. and Shapiro, J. N. (2017). Victimization, citizen engagement, and policing in Lahore. Policy Report, Institute of Development and Economic Alternatives, Lahore, Pakistan.
- Coutts, A. (2019). Good news and bad news are still news: experimental evidence on belief updating. *Experimental Economics*, **22**(2), 369–95.
- Crabtree, S. (2020). *Most Americans say policing needs 'major changes'*. Gallup, 22 July. <https://news.gallup.com/poll/315962/americans-say-policing-needs-major-changes.aspx>
- Dahl, G. B., Kostøl, A. R. and Mogstad, M. (2014). Family welfare cultures. *Quarterly Journal of Economics*, **129**(4), 1711–52.
- Di Tella, R. and Schargrodsky, E. (2013). Criminal recidivism after prison and electronic monitoring. *Journal of Political Economy*, **121**(1), 28–73.
- Eil, D. and Rao, J. M. (2011). The good news–bad news effect: asymmetric processing of objective information about yourself. *American Economic Journal: Microeconomics*, **3**(2), 114–38.
- Eurobarometer 90 (2018). *Public opinion in the European Union*. Brussels, Belgium: European Commission.
- Gall, K. and Soffer, G. (2011). Good news, bad news and rating announcements: an empirical investigation. *Journal of Banking & Finance*, **35**(11), 3101–19.
- Grimmelikhuijsen, S. and Klijn, A. (2015). The effects of judicial transparency on public trust: evidence from a field experiment. *Public Administration*, **93**(4), 995–1011.



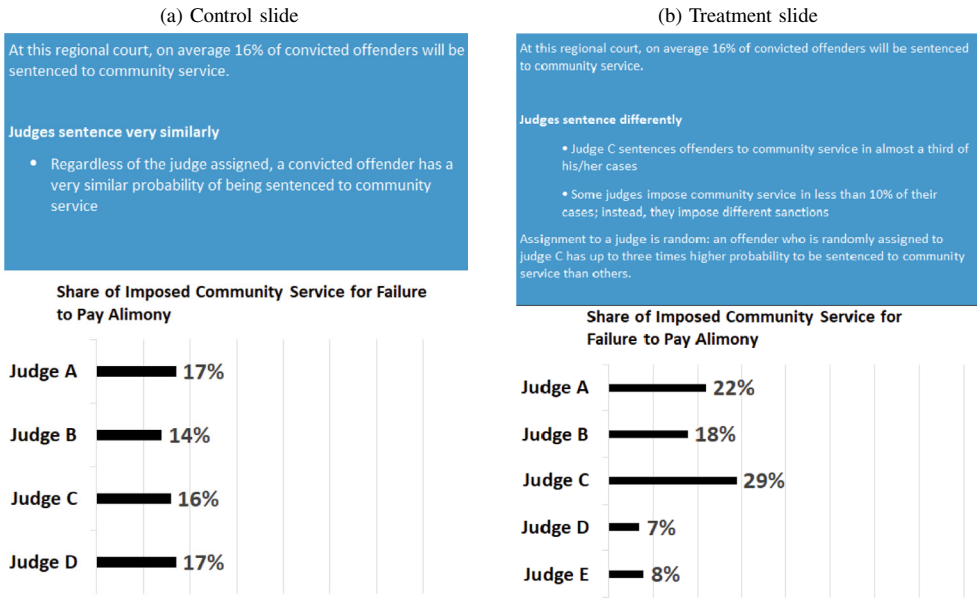
- Haaland, I., Roth, C. and Wohlfart, J. (2023). Designing information provision experiments. *Journal of Economic Literature*, **61**(1), 3–40.
- Hibbard, J. H., Stockard, J. and Tusler, M. (2005). Hospital performance reports: impact on quality, market share, and reputation. *Health Affairs*, **24**(4), 1150–60.
- Hibbing, J. R. and Theiss-Morse, E. (2002). *Stealth Democracy: Americans' Beliefs About How Government Should Work*. Cambridge: Cambridge University Press.
- Jackson, J., Asif, M., Bradford, B. and Zakria Zakar, M. (2014). Corruption and policelegitimacy in Lahore, *Pakistan. British Journal of Criminology*, **54**(6), 1067–88.
- Khan, A., Nasim, S., Shaukat, M. and Stegmann, A. (2021). Building trust in the state with information: evidence from urban Punjab. *Journal of Public Economics*, **202**, 104494.
- Kling, J. R. (2006). Incarceration length, employment, and earnings. *American Economic Review*, **96**(3), 863–76.
- Lee, Y. and Schachter, H. L. (2019). Exploring the relationship between trust in government and citizen participation. *International Journal of Public Administration*, **42**(5), 405–16.
- León-Ciliotta, G., Zejcirovic, D. and Fernandez, F. (2022). Policy-making, trust and the demand for public services: Evidence from a nationwide family planning program. Working Papers 1352, Barcelona School of Economics.
- MacQueen, S. and Bradford, B. (2015). Enhancing public trust and police legitimacy during road traffic encounters: results from a randomised controlled trial in Scotland. *Journal of Experimental Criminology*, **11**(3), 419–43.
- Morris, S. and Shin, H. S. (2002). Social value of public information. *American Economic Review*, **92**(5), 1521–34.
- Moutsiana, C., Garrett, N., Clarke, R. C., Lotto, R. B., Blakemore, S.-J. and Sharot, T. (2013). Human development of the ability to learn from bad news. *Proceedings of the National Academy of Sciences*, **110**(41), 16396–401.
- Murphy, K., Mazerolle, L. and Bennett, S. (2014). Promoting trust in police: findings from a randomised experimental field trial of procedural justice policing. *Policing and Society*, **24**(4), 405–24.
- Neblo, M. A., Esterling, K. M., Kennedy, R. P., Lazer, D. M. and Sokhey, A. E. (2010). Who wants to deliberate—and why? *American Political Science Review*, **104**(3), 566–83.
- Smith, P. C., Mossialos, E., Papanicolas, I. and Leatherman, S. (2009). *Performance Measurement for Health System Improvement: Experiences, Challenges and Prospects*. Cambridge: Cambridge University Press.
- Sporer, S. L. and Goodman-Delahunty, J. (2009). Disparities in sentencing decisions. In M. E. Oswald, S. Bieneck and J. Hupfeld-Heinemann (eds), *Social Psychology of Punishment of Crime*. Hoboken, NJ: Wiley-Blackwell, pp. 379–401.
- Válková, H., Scheinost, M., Šámal, P., Hulmáková, J., Rozum, J., Tomášek, J., Škvain, P., Vlach, J., Háková, L. and Kotulan, P. (2016). Teoretické a trestněpolitické aspekty reformy trestního práva v oblasti trestních sankcí [Theoretical and criminal policy aspects of criminal law reform of criminal sanctions]. *Fórum sociální práce*, **1**, 9–38.
- Vaughn, P., Peyton, K. and Huber, G. A. (2022). Mass support for proposals to reshape policing depends on the implications for crime and safety. *Criminology & Public Policy*, **21**(1), 125–46.
- Webb, P. (2013). Who is willing to participate? Dissatisfied Democrats, stealth Democrats and populists in the United Kingdom. *European Journal of Political Research*, **52**(6), 747–72.

## SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

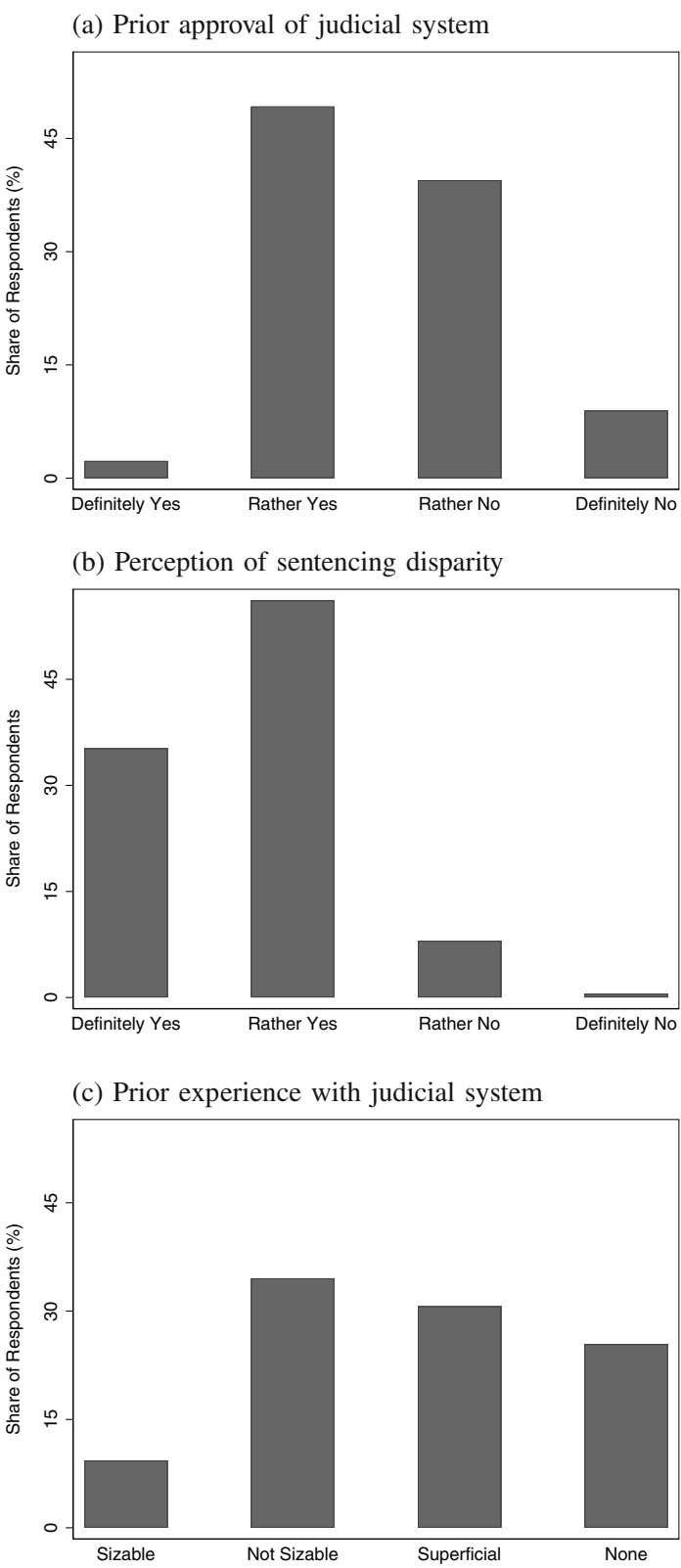
**How to cite this article:** Šoltés, M. (2023). Consequences of inconvenient information: Evidence from sentencing disparities. *Economica*, 1–28. <https://doi.org/10.1111/ecca.12483>

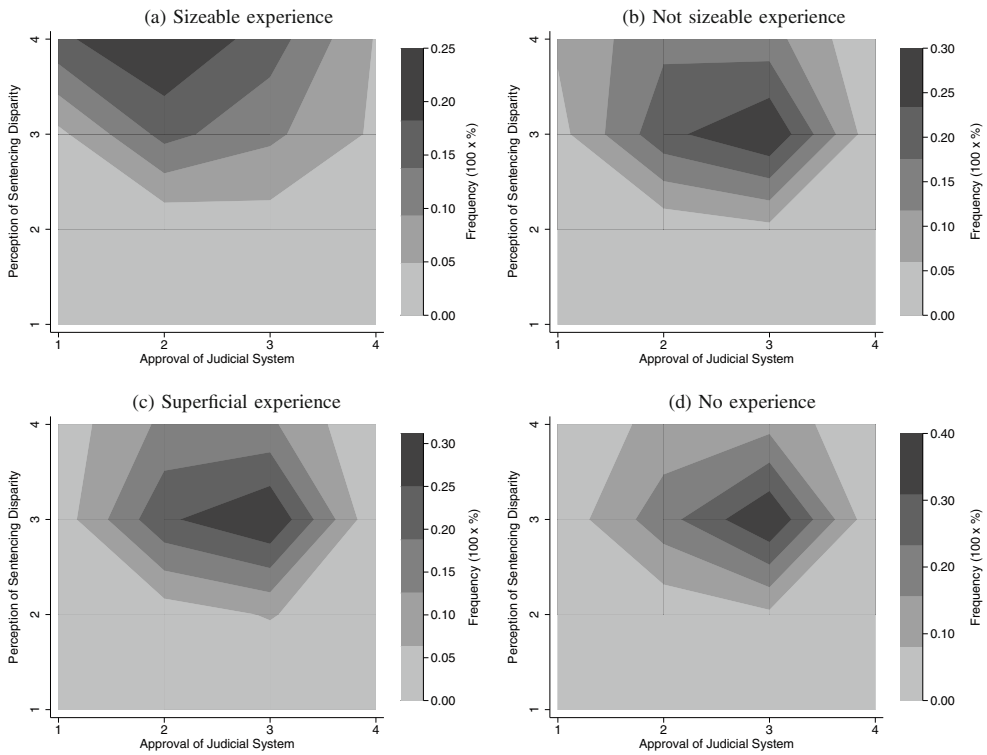
# APPENDIX



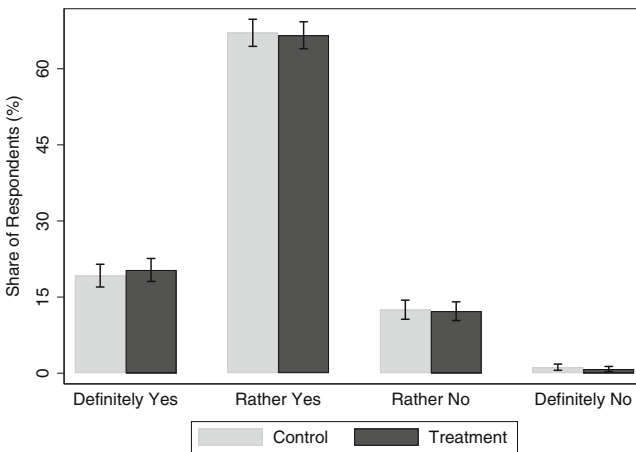
**FIGURE A1** Control and treatment slides. *Notes:* This figure shows the English versions of the control and treatment slides.

**FIGURE A2** Prior attitude towards the judicial system. *Notes:* This figure shows responses to the following three questions. (a) The judicial system in the Czech Republic works well. (b) Judges regularly differ in sentencing decisions in similar cases. (c) Considering how often you or people you know well come into contact with the judicial system, how experienced do you think you are?





**FIGURE A3** Attitude towards the judicial system, by experience. *Notes:* This figure shows levels of approval of the judicial system ( $x$ -axis) and perception of sentencing disparity ( $y$ -axis) by four groups of respondents with different levels of experience with the judicial system.



**FIGURE A4** Perception of credibility of information provided, by treatment status. *Notes:* The figure shows shares of respondents classified by how credible they perceive information provided by the experimenter to be. 95% confidence intervals are displayed.

**TABLE A1** Mean Characteristics by Treatment Status

Variable	Mean control	Mean treatment	<i>t</i> -test ( <i>p</i> -value)
<i>Measures of prior attitude</i>			
Approval of judicial system			
Definitely yes	0.031	0.027	0.560
Rather yes	0.489	0.502	0.511
Rather no	0.380	0.386	0.760
Definitely no	0.101	0.085	0.192
Perception of sentencing disparity			
Definitely yes	0.361	0.338	0.235
Rather yes	0.548	0.578	0.137
Rather no	0.084	0.077	0.537
Definitely no	0.006	0.006	0.965
Experience with the judicial system			
Sizeable	0.100	0.102	0.883
Not sizeable	0.351	0.347	0.838
Superficial	0.296	0.294	0.919
None	0.253	0.257	0.820
<i>Demographic characteristics</i>			
Education			
University	0.243	0.246	0.844
High school	0.702	0.691	0.550
Elementary	0.055	0.063	0.421
Marital status			
Single	0.221	0.187	0.116
Cohabitation	0.184	0.192	0.613
Married	0.427	0.422	0.808
Divorced	0.142	0.156	0.301
Widowed	0.028	0.041	0.030
Male	0.481	0.466	0.432
Age	43.71	44.45	0.188
At least one child	0.702	0.719	0.367
Number of children	1.395	1.464	0.155
<i>N</i>	1191	1219	

**TABLE A2** Treatment Effect on Declared Level of Institutional Trust (Full Results)

	Judicial system		Police		Government		Broadcasting	
Treatment	-0.007 (0.035)	-0.007 (0.038)	-0.025 (0.041)	-0.040 (0.046)	-0.031 (0.032)	-0.008 (0.035)	-0.044 (0.036)	-0.043 (0.039)
Treatment × Mother	-0.060* (0.035)	-0.057 (0.038)	-0.050 (0.040)	-0.042 (0.043)	-0.033 (0.033)	-0.053 (0.036)	0.011 (0.034)	0.021 (0.037)
Mother	0.034 (0.042)	0.010 (0.047)	0.007 (0.047)	-0.026 (0.053)	-0.027 (0.039)	-0.038 (0.043)	0.022 (0.045)	-0.014 (0.050)
Treatment × High experience	0.028 (0.034)	0.020 (0.037)	-0.037 (0.039)	-0.044 (0.043)	0.036 (0.033)	0.033 (0.036)	0.094*** (0.035)	0.107*** (0.038)
Treatment × High SD	0.003 (0.036)	0.004 (0.039)	0.023 (0.042)	0.043 (0.046)	0.042 (0.034)	0.008 (0.037)	0.032 (0.036)	0.009 (0.039)
Treatment × High approval	0.005 (0.035)	0.018 (0.038)	0.073* (0.040)	0.091** (0.044)	-0.000 (0.033)	-0.005 (0.036)	-0.028 (0.035)	-0.022 (0.038)
High SD	-0.075*** (0.025)	-0.059** (0.027)	-0.065** (0.030)	-0.069** (0.033)	-0.037 (0.024)	-0.023 (0.027)	-0.030 (0.025)	-0.011 (0.027)
High approval	0.464*** (0.025)	0.458*** (0.028)	0.263*** (0.028)	0.235*** (0.031)	0.130*** (0.023)	0.114*** (0.026)	0.114*** (0.025)	0.097*** (0.027)
High experience	-0.056** (0.025)	-0.058** (0.027)	-0.047* (0.028)	-0.035 (0.031)	-0.036 (0.024)	-0.035 (0.027)	-0.046* (0.025)	-0.076*** (0.027)
Male	0.044 (0.032)	0.023 (0.037)	0.064* (0.036)	0.036 (0.041)	0.027 (0.029)	0.012 (0.033)	0.088** (0.036)	0.045 (0.041)
Age	-0.011** (0.004)	-0.011** (0.005)	-0.011** (0.005)	-0.014** (0.006)	-0.011** (0.005)	-0.012** (0.005)	0.007 (0.005)	0.009* (0.005)
Age squared	0.000 (0.000)	0.000 (0.000)	0.000* (0.000)	0.000** (0.000)	0.000*** (0.000)	0.000*** (0.000)	-0.000** (0.000)	-0.000** (0.000)
University educated	0.094*** (0.020)	0.085*** (0.022)	-0.013 (0.023)	-0.020 (0.026)	-0.020 (0.019)	-0.019 (0.021)	0.098*** (0.022)	0.103*** (0.024)
Income (1000 CZK)	-0.000 (0.001)	-0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	-0.001** (0.001)	-0.002** (0.001)	0.002* (0.001)	0.002** (0.001)
Child dummy	0.014 (0.034)	-0.016 (0.037)	-0.013 (0.039)	-0.009 (0.043)	0.041 (0.033)	0.063* (0.035)	-0.027 (0.036)	-0.043 (0.039)
Number of children	0.016 (0.010)	0.020* (0.011)	0.020 (0.013)	0.022 (0.014)	0.005 (0.011)	-0.000 (0.012)	-0.023** (0.010)	-0.018* (0.010)
Constant	0.522*** (0.092)	0.561*** (0.103)	0.674*** (0.104)	0.777*** (0.118)	0.277*** (0.089)	0.291*** (0.101)	0.089 (0.096)	0.057 (0.107)
Observations	2407	2005	2407	2005	2407	2005	2407	2005
Restricted sample	No	Yes	No	Yes	No	Yes	No	Yes

Notes: Standard errors in parentheses.

\*, \*\*, \*\*\* indicate  $p < 0.1$ ,  $p < 0.05$ ,  $p < 0.01$ , respectively.



**TABLE A3** Treatment Effect on Reliance on Judicial System (Full Results)

	Court Apply		ADR Interest		ADR Mail	
Treatment	0.015 (0.022)	0.010 (0.022)	−0.012 (0.037)	−0.013 (0.039)	0.006 (0.037)	0.028 (0.041)
Treatment × Mother	−0.018 (0.021)	0.009 (0.021)	0.048 (0.035)	0.050 (0.037)	0.031 (0.035)	0.010 (0.039)
Mother	0.015 (0.025)	0.005 (0.026)	−0.017 (0.041)	−0.048 (0.043)	0.028 (0.045)	0.003 (0.050)
High SD	−0.011 (0.016)	−0.005 (0.016)	0.072*** (0.024)	0.049* (0.026)	0.025 (0.027)	0.029 (0.029)
High approval	0.040*** (0.015)	0.048*** (0.015)	0.017 (0.024)	0.020 (0.026)	−0.000 (0.025)	0.007 (0.027)
High experience	−0.010 (0.015)	−0.000 (0.015)	0.073*** (0.025)	0.072*** (0.026)	0.048* (0.026)	0.053* (0.028)
Treatment × High SD	0.015 (0.022)	−0.005 (0.022)	−0.048 (0.036)	−0.021 (0.038)	0.007 (0.038)	−0.001 (0.042)
Treatment × High approval	−0.018 (0.021)	−0.016 (0.021)	0.014 (0.035)	0.018 (0.037)	−0.046 (0.036)	−0.059 (0.039)
Treatment × High experience	−0.007 (0.021)	0.001 (0.021)	−0.010 (0.035)	−0.028 (0.037)	0.008 (0.036)	0.016 (0.039)
Male	−0.002 (0.019)	0.004 (0.020)	−0.019 (0.031)	−0.043 (0.033)	0.059* (0.035)	0.036 (0.040)
Age	−0.002 (0.003)	−0.002 (0.003)	−0.003 (0.005)	−0.006 (0.005)	−0.005 (0.005)	−0.004 (0.005)
Age squared	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
University educated	0.007 (0.012)	0.006 (0.011)	0.118*** (0.019)	0.102*** (0.020)	0.070*** (0.022)	0.075*** (0.025)
Income (1000 CZK)	0.001** (0.000)	0.001** (0.000)	0.003*** (0.001)	0.002*** (0.001)	0.001 (0.001)	0.001 (0.001)
Child dummy	0.003 (0.021)	0.018 (0.021)	−0.053 (0.035)	−0.034 (0.037)	−0.103*** (0.036)	−0.086** (0.041)
Number of children	−0.001 (0.007)	−0.004 (0.007)	−0.001 (0.011)	−0.001 (0.012)	0.024** (0.012)	0.021 (0.013)
Constant	0.929*** (0.057)	0.951*** (0.056)	0.722*** (0.098)	0.855*** (0.106)	0.278*** (0.092)	0.300*** (0.106)
Observations	2394	2010	2407	2020	2407	2020
Restricted sample	No	Yes	No	Yes	No	Yes

Notes: Robust standard errors in parentheses.

\*, \*\*, \*\*\* indicate  $p < 0.1$ ,  $p < 0.05$ ,  $p < 0.01$ , respectively.

TABLE A4 Treatment Effect on Policy Preferences (Full Results)

	Petition		Top priority judicial system	
Treatment	0.008 (0.042)	0.025 (0.045)	0.076* (0.041)	0.083* (0.044)
Treatment × Mother	0.079** (0.040)	0.101** (0.043)	−0.009 (0.039)	−0.006 (0.043)
Mother	0.007 (0.050)	−0.029 (0.054)	0.035 (0.048)	0.056 (0.053)
High SD	0.037 (0.030)	0.048 (0.032)	0.041 (0.029)	0.060* (0.031)
High approval	0.023 (0.029)	0.016 (0.031)	−0.054* (0.027)	−0.057* (0.030)
High experience	0.073** (0.029)	0.070** (0.031)	0.064** (0.028)	0.047 (0.030)
Treatment × High SD	0.058 (0.041)	0.039 (0.044)	−0.013 (0.041)	−0.038 (0.045)
Treatment × High approval	−0.048 (0.040)	−0.047 (0.043)	0.003 (0.039)	0.002 (0.043)
Treatment × High experience	−0.002 (0.040)	−0.018 (0.043)	−0.092** (0.039)	−0.074* (0.043)
Male	0.005 (0.039)	−0.007 (0.042)	−0.017 (0.037)	0.005 (0.042)
Age	0.000 (0.005)	0.000 (0.006)	−0.000 (0.005)	0.000 (0.006)
Age squared	0.000 (0.000)	0.000 (0.000)	−0.000 (0.000)	0.000 (0.000)
University educated	0.053** (0.024)	0.047* (0.026)	−0.017 (0.023)	−0.009 (0.025)
Income (1000 CZK)	0.000 (0.001)	0.000 (0.001)	0.001 (0.001)	0.001 (0.001)
Child dummy	−0.048 (0.040)	−0.006 (0.044)	−0.095** (0.039)	−0.077* (0.044)
Number of children	0.012 (0.012)	0.002 (0.013)	0.005 (0.013)	0.003 (0.014)
Constant	0.469*** (0.109)	0.535*** (0.122)	0.269** (0.104)	0.267** (0.117)
Observations	2407	2034	2407	2015
Restricted sample	No	Yes	No	Yes

Notes: Robust standard errors in parentheses.

\*, \*\*, \*\*\* indicate  $p < 0.1$ ,  $p < 0.05$ ,  $p < 0.01$ , respectively.