The Stability of Criminal Justice Policy Views: Evaluating the Effects of Factual Corrections and Appeals to Social Identity

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Abstract

Recent protests have brought criminal justice to the forefront of U.S. politics. Moving preferences on policies like mandatory minimums, however, remains a central challenge to widespread reform. Across six experiments ($N > 11,000$), we show that changing criminal justice policy preferences remains difficult. A common explanation for widespread support for punitive policy is that most Americans believe crime is rising even during periods of decline. However, we find while the public is willing to accept factual corrections about crime rates, this never prompts reconsideration of policy opinions. Additional experiments deploying common persuasive designs show co-partisan elite cues have no effect, but individuals update their opinions when factual corrections are combined with forced consideration of opposition views or when pressured by in-group members. These interventions are cognitively burdensome, logistically challenging to scale and produce only small effects. Policy preferences are movable, but simple information treatments are ineffective, complicating criminal justice reform.

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Decades of mass incarceration and continued high-profile police killings of unarmed men and women of color continue to prompt calls for systemic criminal justice reforms. However, as prior research on political persuasion has shown (Hopkins, Sides and Citrin, 2019; Green et al., 2011; Lawrence and Sides, 2014), convincing the mass public to support meaningful policy changes—let alone the wholesale revamping or abolition of institutions—can be extremely challenging. In the arena of criminal justice policy, the outlook is further complicated by widespread misperceptions on the closely related issue of crime: despite decades of overall declines in crime rates across the country, polls frequently show majorities of Americans reporting a belief that crime is rising (McCarthy, 2014). These rampant misperceptions have produced concern that support for punitive policy is an artifact of mistaken beliefs about public safety (Indermaur et al., 2012; Pfeiffer, Windzio and Kleinmann, 2005). More broadly, if voters so wildly misperceive important social conditions, theories of how public opinion affects the formation of polices meant to address those same social circumstances may break down, and disincentivize government officials from enacting policies to improve objective circumstances (Bartels, 2009; Downs, 1957; Ferejohn, 1986; Healy and Malhotra, 2010; Fiorina, 1981; Key, 1966; Lenz, 2013).

But such arguments rest on an important assumption: voters' views on policy matters are informed by their perceptions of related social conditions. Empirical evidence for this assertion is slim. With rare exceptions (Cobb and Kuklinski, 1997; Gilens, 2001), prior work shows that correcting mistaken beliefs about seemingly relevant facts does little to alter related policy preferences. For example, Hopkins, Sides and Citrin (2019) finds that telling Americans the size of the immigrant population does not change attitudes toward migrants. Lawrence and Sides (2014) shows that giving correct, politically-relevant statistics—about U.S. racial composition, median income, educational attainment, and the unemployment and poverty rates—does not affect attitudes on affirmative action and aid to the poor. And Green et al. (2011) shows introducing high school students to a civics curriculum emphasizing

constitutional rights led to knowledge gains, but did not increase support for civil liberties. Across issue areas, citizens appear ready and willing to correct their mistaken beliefs, but hardly ever use that new knowledge to update their policy preferences.

The considerable scholarly focus on factual corrections as a means of inducing policy opinion change has failed to incorporate increasing evidence from social psychology showing citizens orient their politics around group identities (Iyengar et al., 2019; Jardina, 2019; Jefferson, 2020; Mason, 2015; Rogowski and Sutherland, 2016; White, 2007; White, Laird and Allen, 2014). Beyond just explaining the attitudes citizens hold, group-based identity is consistently one of the largest sources of persuasion in the social-psychological research (Asch, 1951; Wood, 2000; Chaiken, Giner-Sorolla and Chen, 1996). While facts about the status of political issues might be insufficient to prompt reconsideration of policy positions, people will change their opinions to reduce perceived distance from groups (either partisan or demographic), to meet normative expectations of the groups to which they belong (Chen, Shechter and Chaiken, 1996; Petty and Wegener, 1998; White and Laird, 2020*a*) and when prompted to consider the perspective of an opposing group (Kirmani and Campbell, 2009; Galinsky et al., 2008; Todd, Bodenhausen and Galinsky., 2012). Group identity is not the only possible source of opinion change, but as one of the most effective sources of persuasion in prior empirical work (Wood, 2000; Chaiken, Giner-Sorolla and Chen, 1996), it represents a promising strategy for prompting individuals to rethink policy attitudes. Providing facts may in itself be insufficient to move attitudes, but group identity may offer a means to both correct misperceptions and shift policy opinion.

In this paper, we investigate the prospects of garnering mass support for criminal justice reform by evaluating the ability of factual misperceptions and appeals to group identity to alter policy views in the salient and normatively important arena of criminal justice policy (Soss and Weaver, 2017). The promotion of public safety is a central mandate of government. But the massive rate of misperceptions of crime in the population, discussed

in detail below, makes this issue area an important test case for the study of how factual corrections influence policy views. The potential to change so many minds about the true status of crime in America affords a high ceiling for downstream effects on the share of individuals who may subsequently update closely related policy opinions. By the same token, if effectively correcting such widespread misbeliefs fails to induce changes in closely related policy attitudes, we may be less confident that such corrections would alter policy views more generally.

Drawing on six experiments involving more than 11,000 individuals, we first show consistent evidence that correcting misperceptions of crime does not influence views on criminal justice policies. Contrary to accounts in which individuals are resistant to updating factual beliefs (Kuklinski and Hurley, 1994; Kuklinski et al., 1998; Nyhan and Reifler, 2010, 2016), citizens readily update beliefs about crime trends when supplied with official statistics. For example, we find that relative to respondents who received no factual information on crime—only roughly 20% of whom correctly described the direction of recent homicide trends—over 70% of respondents who received corrective information correctly perceived the status of crime later in the survey. We see similar patterns when including distractor tasks to increase temporal distance between factual interventions and measurement of perceptions, or financial incentives for truthful responses (Bullock et al., 2015). However, we also show that acquiring these facts in isolation has virtually no effect on attitudes toward criminal justice policies, patterns that hold when presenting facts in a range of information environments and across multiple types of factual interventions, including information on homicide rates and mass incarceration.

To investigate whether group identity affects policy views—and the role of information in strengthening this effect—we deploy several experimental designs from social psychology intended to prompt sufficient cognition to carefully reevaluate opinion in the face of new evidence (e.g., Cacioppo and Petty, 1984), to compel opinion change (e.g., Asch, 1951) or to

think about the logic underpinning positions held by the out-group (e.g., Himmelroos and Christensen, 2014; Galinsky et al., 2008). Our results show that it is remarkably difficult, but not impossible, to change policy preferences with group identity-based interventions. Providing an elite cue from an extremely popular copartisan U.S. Senator—a relatively subtle intervention meant to remind individuals of how their partisan group views an issue—fails to move attitudes. However, two more cognitively burdensome studies show that opinion change is possible. First, we show that combining corrective facts about crime alongside social pressure to conform to the attitudes of people who are similar to the participant on multiple demographic traits (race, gender and partisanship) induces opinion change. Relative to those receiving no corrective facts or social cues, approximately 6% of participants changed their opinion on criminal justice policy. In addition, a written perspective taking task wherein individuals are asked to argue for the position of the group with whom they disagree prompts approximately 14% of participants to update their policy opinions relative to control. This effect, however, is more or less constant whether or not we couple the exercise with corrective facts, and the magnitude of these opinion shifts is modest. Importantly, these effects were almost exclusively limited to the single issue mentioned explicitly in our prompts, mandatory minimum sentencing. In other words, effects generally failed to spill over to closely related issues (Hopkins et al., 2015), suggesting prompting opinion change on a suite of related measures would require interventions tailored to each separate policy. Moreover, corrective information appears to have only a tenuous role in bolstering group-based appeals. Finally, we find no evidence that group-based appeals—on their own—cause people to reassess the status of crime, casting doubt on the possibility that relevant facts play an intermediary role in the formation of related policy preferences.

These findings make an important contributions to the study of policy opinion change. Recent studies have reported a heretofore puzzling empirical regularity—the lack of policy opinion updating following the provision of corrective information that is directly related

to the social conditions policies are nominally aimed at improving (Hopkins, Sides and Citrin, 2019; Nyhan et al., N.d.; Green et al., 2011, e.g.). In light of our results, this pattern is far less mysterious. Correcting mistaken beliefs about the status of relevant social conditions fails to change opinion on closely related policies because individuals simply rely on other information when forming policy views, including the views of salient groups. These findings also offer a bittersweet consolation to political observers concerned that widespread misperceptions may distort the policymaking process (Allcott and Gentzkow, 2017; Prior, 2007; Pariser, 2011). Far from a world in which misperceptions of objective measures of social conditions lead voters to embrace policy views they would otherwise shun, our results suggest such factual knowledge is largely irrelevant.

At the same time, these findings highlight the difficulty of persuading individuals to rethink their policy preferences, results which suggest substantial challenges for advocates of systemic criminal justice reform. While interventions focused on the opinions of salient groups caused opinion change, thereby revealing an important mechanism in this process, these exercises required significant cognitive expenditure that are difficult to achieve in the mass public (Cacioppo and Petty, 1984). In addition, those individuals that did update their policy views generally did not exhibit opinion shifts that were large in magnitude. Taken together, our results describe a world in which facts alone are insufficient to move opinion and group-based interventions are effective but impractical—patterns that illuminate the extreme difficulty of political persuasion.

The tenuous link between misperceptions and policy views

A central reason for concern over factual misperceptions is the presumed effect they have on policy preferences: if citizens cannot correctly evaluate the political world, they may develop policy views based on faulty information or fail to reward (punish) politicians for improving (failing to improve) conditions. Believing crime is on the rise when it is falling, for example, could lead to more restrictive criminal justice policy preferences than conditions

demand. Discussing the role of fake news in the 2016 election, some have even claimed that "The informational underpinnings of democracy have eroded," (Madrigal, 2017).

But the empirical literature on misinformation, especially in recent years, suggests concerns over ignorance in the electorate are inflated, at least as they relate to policy attitudes. Studies show that while individuals will readily update mistaken beliefs when presented with facts, this factual knowledge rarely translates to shifts in attitudes toward related policies. For example, Hopkins, Sides and Citrin (2019) finds that providing Americans with information about the size of the immigrant population does not change attitudes toward migrants. Lawrence and Sides (2014) shows that giving correct, politically-relevant statistics — about U.S. racial composition, median income, educational attainment, and the unemployment and poverty rates — does not affect attitudes on related policies including affirmative action and aid to the poor. And Green et al. (2011) shows in a randomized controlled trial that introducing high school students to a civics curriculum emphasizing constitutional rights led subjects to have better knowledge of civil liberties, but did not increase support for civil liberties.

Focusing specifically on the area of crime, we see at best mixed evidence of the effect of information on policy attitudes. In work done concurrently with this study, Nyhan et al. (N.d.) shows corrective information on crime trends can improve the accuracy of perceptions but has little effect on candidate choice. Pfeiffer, Windzio and Kleinmann (2005) find a correlation between misperceptions of crime and support for harsher penalties, but the study provides no compelling evidence for a causal link. Another set of studies in criminology find evidence for only modest or fleeting effects. Indermaur et al. (2012) shows that providing information on sentencing options has little effect on attitudes towards sentencing, particularly over time. Singer and Cooper (2009) identify a small effect of providing crime statistics on opinion of the criminal justice system, but does not measure attitudes on specific policies. Two exceptions are noteworthy. Norris and Mullinix (2019) find that facts about wrongful

incarceration do reduce support for the directly related issue of capital punishment, but do not increase support for broader police reforms. And Gilens (2001) finds that providing information on the crime rate significantly affects support for prison spending. Studies showing stronger evidence for the effect of information on policy typically involve information treatments that discuss the relevant policy itself (Hopkins and Mummolo, 2017), relieving subjects of the cognitive burden of linking facts to related policy. For example, Howell and West (2009) shows that providing information on the amount being spent on schools and teacher pay alters support for spending on schools and teachers. Sides (2016) shows that informing individuals about who benefits from the estate tax changes support for that very tax.

In sum, there is at best mixed support for the notion that individuals update policy preferences based on the objective status of relevant social conditions. And when facts do move policy preferences, they typically center on the policy itself, not an outcome the policy is meant to address. When individuals are asked to make larger mental leaps—connecting, for example, information on the size of the immigrant population to border policy (Hopkins, Sides and Citrin, 2019)—they either fail or decline to do so. In the words of Lawrence and Sides (2014), these results raise the question: "Why did correct information matter so little?" (4). In what follows, we outline an alternative theoretical perspective on how policy preference change can occur.

If Not Facts, Then What? Group Identity and Persuasion

Normative models of political opinion are often premised on the rational consideration of factual information (e.g., Mill, 1895). As recent work suggests, and as we confirm below, citizens are unlikely to update policy positions based on newly acquired facts. Given the low marginal utility for using new knowledge to update one's policy beliefs, rational citizens may simply forgo the exercise for uses of time that pay greater dividends (Downs, 1957). But are policy opinions entirely immovable? In the second half of this paper we evaluate alternative

sources of opinion change derived from group identity models (Wood, 2000), and whether correcting widely-held misperceptions can bolster these effects.

We focus on three distinct group identity-based mechanisms to test for possible opinion change on criminal justice policy. These approaches vary in the amount of cognitive engagement (effort) required of citizens—from a follow-the-leader heuristic cue (Lenz, 2013) at the low end, to a task that requires participants to think deeply about the reasoning of those who hold an opposing view on a specific policy. The simplest group-based pressure comes from elite cues from co-partisan group members. Indeed, recent work shows that for many issues simply relying on party cues is often a particularly effective strategy for opinion formation and updating (Kim and LeVeck, 2013) and may have limited negative effects on democracy (Arceneaux and Wielen, 2017, however, see Achen and Bartels 2016). Some work has found that policy preferences are formed from the top-down, with individuals updating beliefs based on their broader affinity for elites (Carmines and Stimson, 1989; Layman et al., 2010; Layman and Carsey, 2002; Lenz, 2013). For more complex topics, citizens may require elite prompts to explicitly make the connection between fact and policy (Koçak, N.d.). If citizens rely on elites to process facts and come to policy positions based on these facts then treatments based on this mechanism should prompt participants to adopt the "corrected" position of a co-partisan leader with essentially no cognitive engagement.

A more complex mechanism relies on the well-established phenomenon of group conformity (Chen, Shechter and Chaiken, 1996; Petty and Wegener, 1998). Put simply, people are driven by a desire to conform to group opinion, even in situations when the group has taken a position that contradicts the direct observations of a given citizen (Asch, 1951). For a citizen to hold a contra-group position on a given policy it would have to be of such great importance to the individual to overrule the negative effects of deviating from the group (Abrams et al., 2000). If a desire to align with partisan and/or demographic groups drive policy positions, then highlighting deviation from a group should prompt citizens to realign

their preferences (Deutsch and Gerard, 1955; Johnson and Eagly, 1989). Outside of direct social-psych there is considerable evidence in political science showing that compliance with group norms affects political decision-making across a variety of issue areas, as well as voting (Gerber, Green and Larimer, 2008; Paluck, 2011; Panagopoulos, 2014; Tankard and Paluck, 2016, 2017; Viscusi, Huber and Bell, 2011; White, Forthcoming). The preconditions for this theoretical mechanism are stringent as citizens must: 1) recognize that they are deviant from group attitudes; 2) value group membership sufficiently to reconsider their positions, and finally 3) replace their prior position with the group's normative position. This is distinct from the elite cue mechanism outlined above, where we would expect people to trust the elite without consideration of their prior attitude or even recognize that the elite's opinion deviates from their own. It is important to note, however, that while the general social-psychology theories of group identity do not predict differential effects by race, it is possible that the racialized nature of criminal justice policy and the phenomenon of linked fate—cohesion among members of the African American community (Dawson, 1995)—may mean that group pressure might produce heterogenous results for African Americans relative to whites (Eckhouse, 2019; White and Laird, 2020*b*).

A yet more complex mechanism requires citizens to evaluate the evidence the opposition relies upon to support their policy position (Kirmani and Campbell, 2009). Such perception-taking experiments prompt individuals to consider why those in the out-group take specific positions and actions (Kirmani and Campbell, 2009; Galinsky et al., 2008), potentially leading to greater understanding of the out-group and thereby causing opinion shifts. Incentivizing evaluation of the opposition's thought process should, it is theorized, prompt respondents to engage in cognitive empathy whereby they deeply reflect on the logic and reasoning relied upon by the out-group (Smith, 2006). This design represents the high-point of required cognition in the experimental interventions we evaluate in this paper.

Because groups are increasingly defining how Americans think about politics (Mason,

2015; Iyengar, Sood and Lelkes, 2012; Westwood and Peterson, 2019), group identity-based interventions are perhaps among the most likely to prompt policy opinion change. By testing whether group-centric appeals can compel individuals to update policy views, we can shed light on the mutability of criminal justice policy positions.

Misperceptions of crime

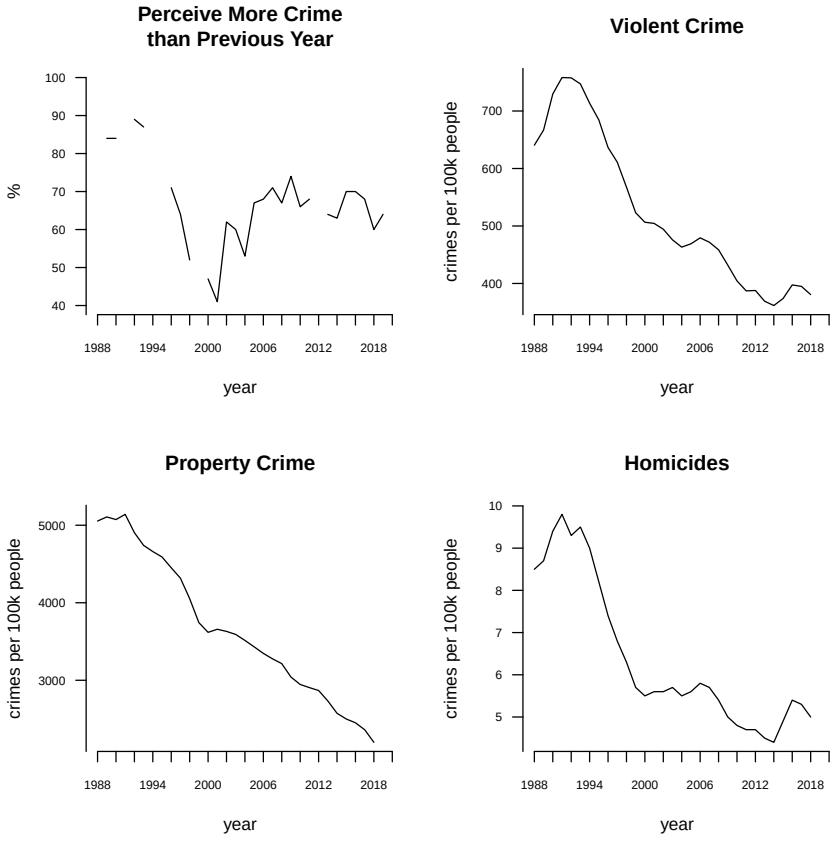
Beginning in the early 1990s, crime in the U.S. began a sharp and precipitous decline, both in the aggregate and within major cities nationwide. Though the causes of these improvements remain disputed (Levitt, 2012), their magnitudes are astounding. In one of the most striking examples, New York City, which saw more than 2,000 murders per year in the early 1990s, now regularly experiences roughly 300—a trend that has continued virtually uninterrupted despite wide variance in the implementation of aggressive policing tactics like "Stop, Question and Frisk" (Mummolo, 2018) and significant population growth over the same period.

Yet according to the average citizen, America continues to grow more violent and lawless year after year. For over a decade, Gallup has asked the following question:

> *Is there more crime in the U.S. than there was a year ago, or less?*

Average responses to this item appear in the top left panel of Figure 1, alongside national violent, property and homicide rates according to the FBI over the same period. As the figure shows, though crime has fallen dramatically across these various measures, the share of Americans who believe crime is rising has not aligned with these conditions. In many years, large majorities of Americans perceive that crime rose (more than 70% in 2015) even when it fell.

Figure 1: **Perceptions vs. Actual Crime.** The figure displays the share of American adults who told Gallup there was more crime in the United States than the previous year (top left panel) along with FBI measures of the national violent, property and homicide rates over the same period. Blank sections of top left time series series are years when the crime perception question was not fielded by Gallup.



In theory, there are two broad explanations for the trends in opinion displayed above. One is that Americans encounter information about crime trends, but for various reasons, fail to accept it as true. The other is that Americans simply do not encounter such information, on average. In the following section, we outline an experimental design to parse these two explanations, as well as test the ability of corrective information about national crime rates to influence criminal justice policy preferences.

Research design: correcting misperceptions

We first conduct a series of survey experiments to test whether corrections improve respondents' factual knowledge and change related policy preferences. We build on previous

studies of belief accuracy when measuring perceptions of crime. Ansolabehere, Meredith and Snowberg (2013) recommend asking for quantitative values of commonly known metrics or, for more complex political issues, benchmarking against specific values in the survey question itself. We draw on these lessons, but focus on perceptions of over-time national trends rather than point-in-time levels. This focus has several advantages. For one, because point-in-time measures give no purchase on whether a given policy is improving conditions, perceived changes are believed to be central to mechanisms behind retrospective voting (Bartels, 2002; Hopkins, 2011; Fiorina, 1981, 1978; Healy and Lenz, 2014). In addition, we focus on national crime trends both because these statistics are more often reported and discussed than local trends, and because evidence suggests that citizens increasingly focus on national issues even in local political contexts (Hopkins, 2018). In addition, asking individuals to judge the direction of changes in these metrics rather than the exact level at a point in time eliminates the need to establish a subjective accuracy bandwidth when coding responses. To measure perceptions of national crime trends, we included the following item[1] in our survey experiments:

> *A "homicide" is the willful (non-negligent) killing of one human being by another. The national homicide rate is the number of homicides per 100,000 people in the United States.*
>
> *Was the homicide rate in the U.S. in 2015 larger or smaller than it was in 2000?*

Measuring the accuracy of public perceptions requires the researcher to know the true

[1] We use as our definition of a homicide the Bureau of Justice Statistics definition: "Homicide, as defined here, includes murder and nonnegligent manslaughter, which is the willful killing of one human being by another." We provide this definition to all treatment groups, to avoid any confusion about the technical meaning of homicide. The order of the words "larger" and "smaller" was randomized across respondents, as was the order of the response options which were "larger," "smaller" and "I don't know."

state of the world.[2] In our first three experiments, conducted between March 2017 and May 2018, we ask respondents to consider the change in the homicide rate between 2000 and 2015 because there was clear movement in the rate during this time. The national homicide rate fell from 5.5 to 4.9 (-11%) according to FBI data, a sizable decrease.[3] These agency estimates surely contain some error, but because we have clearly identified the metric of interest in our survey items, we can code responses in terms of whether they align with the best estimates of those same metrics according to authoritative sources—our working definition of an "accurate" perception in this study. Further, this technique is robust to the presence of measurement error by the FBI at points in time. Because we are asking about perceptions of a change, measurement error could be present every year, but would have to change enough over time to flip the sign in the difference between 2000 and 2015 to invalidate our choice of benchmarks. The close correspondence between the FBI and CDC homicide data over time displayed in Appendix 1 Figure 1, as well as the magnitude of the estimated differences in the crime rates between these two years, make this unlikely.

In addition to asking respondents about a verifiable quantity, we also include in one survey a financial incentive for accurate responses for a randomly chosen set of participants to assess the prevalence of insincere responses (Bullock et al., 2015). In addition, we include a distractor task in between the provision of corrective information and measurement of belief accuracy, in order to ensure that recall of facts endures beyond a trivial length of time (i.e., the time elapsed since answering the question immediately prior). We provide more

[2] Confidence intervals are constructed using robust ("HC1") standard errors throughout. In generating all experimental results, we code responses of "I don't know" for the perception item as incorrect, since dropping responses in the experimental context risks post-treatment bias. Results are robust to this coding decision; see Appendix 5.5.

[3] To remain contemporary, we update these figures to consider the same change between 2007 and 2017—a 7% drop—in the second three experiments, conducted between March 2019 and February 2020).

information about these studies, including the use of human subjects research, in Appendix 2.[4]

The main objective of our first three survey experiments was to gauge whether individuals would update beliefs about crime trends when presented with accurate information. The first study was conducted on samples drawn from Amazon Mechanical Turk, while all other experiments use Qualtrics[5]. However, as the table shows, we also presented this information in a variety of ways to gauge the robustness of our findings to fluctuations in the information environment (Peterson, 2017). These variants included the presence of copartisan elites offering competing information, and situating crime facts within longer news articles documenting an episodic crime. These variants exerted detectable effects on the degree to which individuals updated their factual beliefs about crime, which we document in Appendix Figures 3, 5, and 7. However, because our overall conclusion is largely unaffected by these changes, we pool over all information treatments when presenting the effects of corrective information in our main analysis. In all three surveys, respondents were randomly assigned to either: (1) receive a brief report on a European soccer match (the control condition); or (2) receive information on the change in homicides between 2000 and 2015 according to the FBI data. This information treatment was worded as follows:

> "According to the Federal Bureau of Investigation (FBI), the homicide rate in the U.S. was 5.5 homicides per 100,000 people in 2000, but was down to 4.9 homicides per 100,000 people in 2015."

If individuals are resistant to such facts, we expect inaccurate beliefs to persist in the face of this information. If, however, respondents simply rarely encounter such information, supplying these facts may exert large effects. In the following section, we document the

[4] In all surveys, where minor deception was used, such as when presenting treatments as news articles, respondents were debriefed at the end of the survey.

[5] For all Qualtrics samples (studies 2-6) we utilize quota sampling on age, race and gender based on CPS benchmarks.

powerful corrective effect of this information treatment.

While focusing on correcting misbeliefs regarding changes in homicide rates centers our investigation on a highly salient crime metric, and has several advantages for measurement, we also test the influence of providing other relevant facts, namely, the U.S.'s outsize share of the world's prison population, in our elite cue-taking experiment below. This helps to ensure our results are not driven by a focus on a particular type of factual correction.

Results: correcting misperceptions

These first three studies confirm that, consistent with the Gallup figures reported in Figure 1, large shares of the public hold inaccurate beliefs about crime trends. We verify the prevalence of misperceptions by analyzing responses in the control conditions in our experiments. Pooling studies 2 and 3 We find that only 22% of participants responded correctly to the item asking about the direction of recent change in the national homicide rate—a strikingly low share, considering the dramatic reduction in homicides between 2000 and 2015.[6]

To ensure that this pattern is not driven by insincere responses, Study 3 includes a condition in which respondents are offered an additional financial incentive for responding correctly ($.25), which Bullock et al. (2015) found to reduce similar biases.[7] Comparing respondents within the control condition, financial incentives appear to lead to only a small decrease in rates of misperception compared to the non-incentive baseline, (the estimated difference is 5.13 on a scale that ranges between 0 and 100, 95% CI [0.1, 10.2]). We therefore

[6] Notably, this figure is comparable to the share of Americans who responded either "same" or "less" to the Gallup item asking about the previous year's crime rate in 2015, which was 26% (McCarthy, 2014).

[7] To avoid prompting respondents to look up answers online in order to obtain the extra $.25, all respondents were alerted prior to the perceived crime question that they would only have 30 seconds to respond to the item.

pool over the incentive and non-incentive conditions in remaining tests.

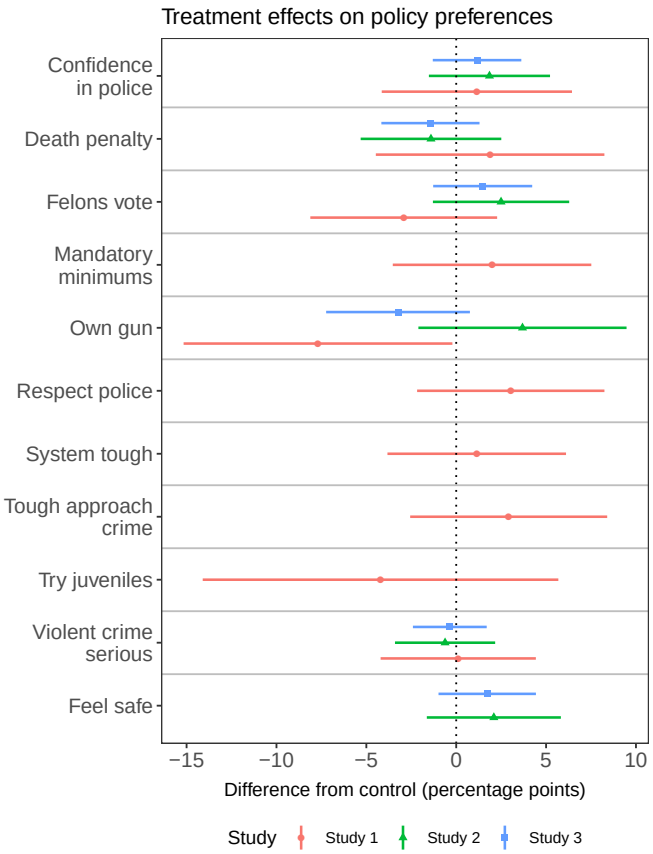
Table 1: Information Treatment Effects

	Study 1	Study 2	Study 3
Crime Statistics	0.455***	0.546***	0.424***
	(0.037)	(0.027)	(0.020)
Constant	0.437***	0.181***	0.234***
	(0.032)	(0.017)	(0.013)
Observations	1,571	1,942	4,242
Note:	*p<0.05; **p<0.01; ***p<0.001		
	Robust standard errors		

Table 1 displays the effects of the corrective information treatments across these three experiments. As the intercept estimates show, about 44% of respondents in the control condition in Study 1 (M-Turk sample) correctly indicated that homicide rates have fallen. This figure drops substantially in the more representative Qualtrics samples in Studies 2 and 3, which show that 18% and 23%, respectively, correctly signed the direction of homicide trends. While the base rate of correct perceptions varies across these studies, the effect of information treatments is more closely aligned. Across three iterations, supplying respondents with information about homicide trends improves accuracy by between 42 and 55 percentage points. Contrary to concerns that Americans may, for a variety of reasons, be resistant to factual information, respondents across all three studies readily updated their beliefs when supplied with facts. These large increases persist in the face of competing information by elites (48.2, 95% CI [42.7, 53.6]) and coverage of episodic crimes (27.5, 95% CI [23.5, 31.3], see Appendix Figures 3, 5, and 7 for additional information).[8]

[8] See the Appendix for treatment effects within subgroups of the data, including political parties and racial and ethnic categories.

Figure 2



Policy variables measured on seven-point scale. Figures show average percentage-point differences in responses between the information treatment and control condition. Bars denote 95% confidence intervals.

Given the clear increase in the share of respondents who correctly perceived trends in conditions as a result of our experimental interventions, we might expect an associated change in closely related policy stances. For example, if people come to learn that the national homicide rate has been falling, they may be less likely to support "tough on crime" initiatives (Gilens, 2001). Conversely, they may also conclude that existing policies are working, and support for them may intensify. If factual beliefs inform policy stances, we should expect to see changes of some kind following corrections that exerted such large effects on beliefs.

Figure 2 displays the effect of each homicide rate treatment on support for various criminal

justice policies, as well as related attitudes (e.g. confidence that police will keep one safe and whether the respondent plans to purchase a gun). But across a host of policies and attitudes, we rarely see discernible effects. Receiving information on the falling homicide rate appears to reduce the probability of the respondent indicating they plan to buy a gun in Study 1, perhaps because they come to believe they are safer than they had previously thought. But these effect estimates are imprecise (-7.69, 95% CIs [-15.17 -0.21]), and the result failed to replicate in Studies 2 and 3. In general, we find virtually no evidence that corrective information about crime trends alters related policy attitudes.

Testing the influence of group identity-based appeals

As outlined above, research in social psychology suggest that prompting individuals to consider the opinions of salient groups—both opponents and allies—can lead to persuasion. It is also possible that such appeals interact with the provision of corrective information to produce even larger opinion shifts. To test this, we conducted three additional experiments.

Study 4: Co-partisan elite cue mechanism

We start with the simplest means to prompt a connection between facts and policy positions—exposure to an elite making the direct logical connection. We conducted a survey experiment via Qualtrics on 1,098 respondents. In this study we included five treatment cells: (1) a control (a brief description of a European soccer match); (2) an information treatment, where respondents read FBI statistics on violent crime trends; (3) an elite statement treatment, where a co-partisan Senator stated that they do not support certain criminal justice measures; (4) an elite statement and statistics treatment, which included the FBI statistics on violent crime and a co-partisan Senator stating they do not support certain criminal justice measures without referencing statistics; and (5) a reasoned elite explanation and statistics treatment, which included the FBI statistics coupled with a statement by a co-partisan Senator arguing that falling crime reduces the need for certain criminal justice measures.

Importantly, conditions with elite cues also featured co-partisan Senators providing an additional type of factual intervention apart from homicide rates, stating: "The U.S. now has about 30% more people in prison than China, despite having just 23% of Chinaâs population. It is time to relax—or eliminate entirely—many of these tough-on-crime policies." This feature helps to insure that our previous results are not limited to the provision of homicide rates in particular. If citizens simply rely on elite partisan cues to form policy preferences, any of the conditions in which the co-partisan Senator states their position should be sufficient to induce opinion change. However, our design also allows for the possibility that relevant facts may show enhanced persuasive power when marshalled by an elite to make an argument.

We selected two elites—Elizabeth Warren (D-MA) and Mitch McConnell (R-KY)—following a pretest on Amazon Mechanical Turk assessing the likability and perceived partisanship of Senate leadership . Following these interventions, participants completed a battery of questions measuring views on criminal justice policies. (See Appendix 6.1 for details on pretest and Appendix 6.3 for full stimuli.)

First, as with the prior three studies, participants learned the corrective fact about crime trends in the US. Relative to control, the accuracy of beliefs about crime trends improved by approximately 55 percentage points in conditions providing corrective information ($p<.001$ in all conditions). On the contrary, providing an elite cue without any corrective information has no effect on perceptions of crime ($\beta = 0.02$, 95% CI [-0.06, 0.07]). This is noteworthy, because it conflicts with the notion that individuals may use elite cues to update their views of the facts, which we find no evidence for in this setting (Achen and Bartels, 2016) (see Appendix Table 10 for full results).

As Figure 5 shows, there is no significant effect of any of the treatments on attitudes toward a wide range of criminal justice policies once we correct for multiple testing[9], including those explicitly mentioned by the trusted co-partisan U.S. Senators ("three strikes" laws and

[9] Because we did not make specific predictions about effects on policy outcomes in this experiment, we employed standard multiple testing corrections after conducting the tests

extending voting rights to convicted felons) and a host of substantively related policies like mandatory minimum sentencing. Simply offering an elite endorsement of a policy—even when supported with factual information—is insufficient to drive opinion change. When co-partisan elites make assertive arguments about criminal justice policy, or use facts to buttress those positions, we see virtually no policy preference updating.

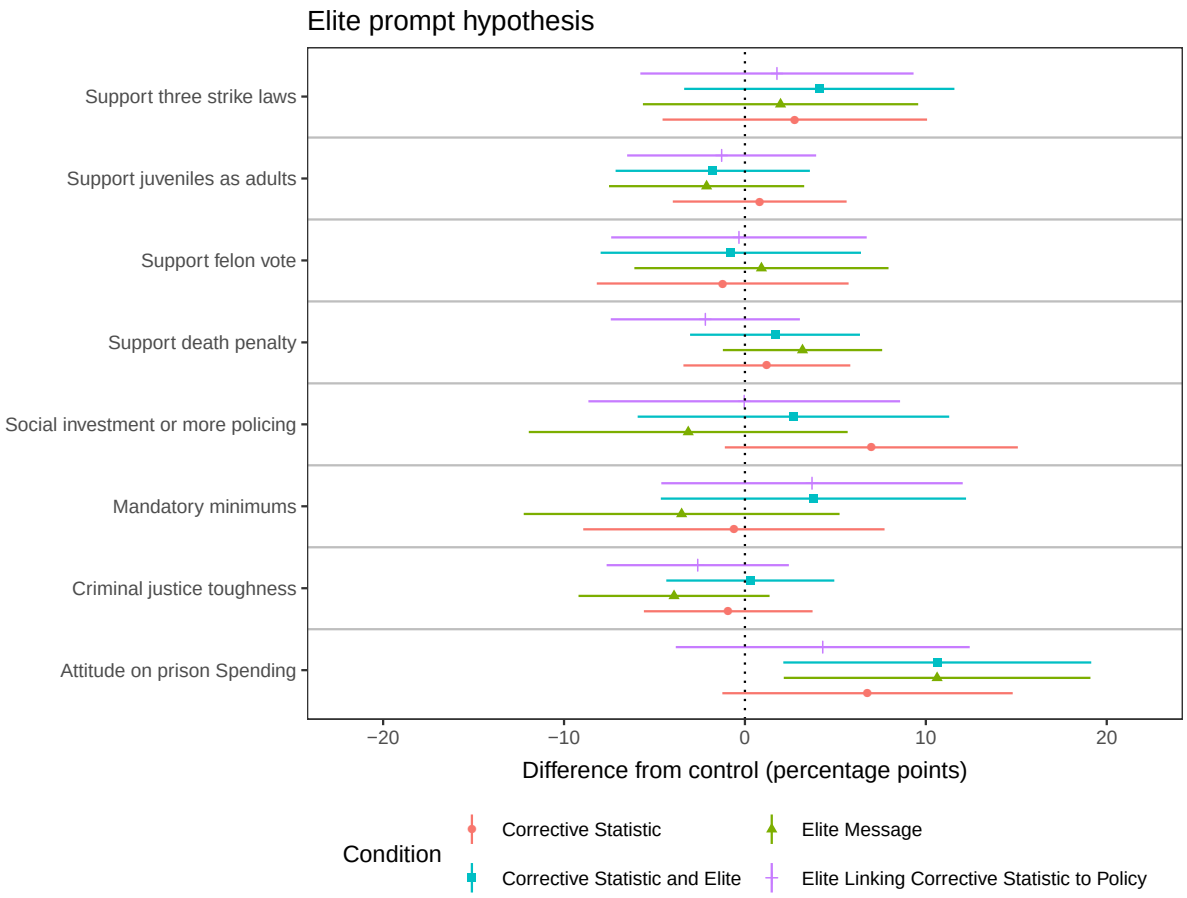
Study 5: Group pressure mechanism

We now proceed to test designs that involve more cognitive engagement from respondents than merely following an elite heuristic cue. Although the task in this and the following study are unlikely to occur in the natural world, they offer an informative test of the significant amount of work required to prompt participants to update their policy positions. Given the observed difficulty of changing policy views in our previous experiments, we also narrowed the focus in studies 5 and 6 to a single issue—mandatory minimum sentencing—which has received considerable focus from criminal justice reform advocates (Free Jr., 1997). By prompting individuals to engage in more rigorous contemplation with all focus on a single issue, we are providing theoretically optimal conditions for opinion change to occur.

In study 5, we test the group pressure mechanism, which holds that awareness of deviation from group opinion prompts citizens to alter their position in order to conform to the group and to minimize social distance (e.g., Asch, 1951). Our sample was randomly split between four conditions: a pure control (no information), an information condition where participants learned a corrective fact; a social pressure condition where participants received information stating that a majority of participants with the demographic profile of the respondent (participants with the same race, gender and political party) held a view on

summarized in Figure 5. Significant effects on prison spending attitudes for the elite cue and corrective statistics with elite cue conditions did not survive corrections: Bonferroni corrected p-values for those tests are both roughly 0.45. The less conservative Benjamini-Hochberg method yields revised p-values of roughly 0.23.

Figure 3: Elite Cue-Taking mechanism



Policy variables measured on seven-point scale. Figures show average percentage-point differences in responses between the information treatment and control condition. Bars denote 95% confidence intervals. Statistically significant results on attitudes on prison spending do not survive multiple testing corrections.

mandatory minimum sentencing that was contrary to the respondent's view; and the same social pressure cue coupled with a corrective fact.[10] Attitudes toward a slate of criminal justice policies were captured before and after treatment. See Appendix Section 7.2 for full stimuli.

This design not only presents corrective information, but shows how others from a similar background responded to the information. This prompts respondents to evaluate why their

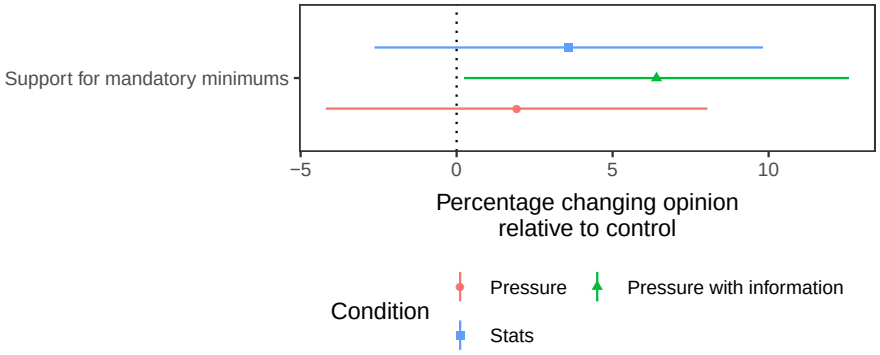
[10] This intervention involved a minor deception; information about in-group member views was contrived. Respondents were debriefed at the end of the survey.

policy position is deviant from "typical" individuals through cognitive introspection. The purpose of this study is to test whether pressure to conform to an in-group prototype can prompt individual-level policy opinion change. We did not push respondents in a uniform direction. Rather, we pushed respondents to take the counter position to what they reported in a pre-treatment battery of opinion questions. In other words, our test was designed to measure whether opinion change occurs at all, and not to assess its direction or magnitude. In our main analysis we therefore use a dichotomous measure of change as our dependent measure.[11]

Consistent with our prior results, respondents in both the corrective statistic and social pressure with the corrective statistic conditions were significantly more likely to correctly answer the factual question on the crime trend relative to control—33 percentage points (95% CI [0.27, 0.38]) and 46 percentage points (95% CI [0.41, 0.52]) respectively. Again, no such effect was observed in the social pressure condition where corrective information was not presented, with correct responding increasing by .5 percentage points (95% CI [-0.04, 0.05]; see Appendix Table 18 for full results.) However, Figure 4 shows that similar to Study 4, offering corrective information alone has no effect on attitude change, with 3.59% changing opinion in this arm relative to control (95% CI [-2.63, 9.81]). Social pressure on its own also has no effect on attitude change relative to control, with 1.92% changing opinion on mandatory minimums (95% CI [-4.19, 8.04]). However, supplying respondents with both corrective information and the social pressure stimuli prompted a statistically significant reevaluation of mandatory minimums, with 6.40% of respondents changing opinion relative to the pure

[11] While it was not our intended focus, we report results when analyzing the absolute magnitude of policy opinion change in Appendix Table 20. Overall we see a similar pattern across conditions, though the magnitude of opinion shifts is generally small and the significant effect we observe—social pressure with information—is no longer significant ($\beta = .02$, 95% CI [-0.01, 0.05]).

Figure 4: Group pressure mechanism



Policy variables measured on seven-point scale. Figure shows average percentage-point differences in absolute opinion change between the treatments and the control condition. Bars denote 95% confidence intervals.

control (95% CI [0.23, 12.57]), though we cannot distinguish the latter two effects from one another (p-value on the difference = .14). As we noted social pressure is a generic phenomenon that should work across kinds of groups (Chen, Shechter and Chaiken, 1996; Petty and Wegener, 1998), but criminal justice policy is deeply racialized in the United States. Consistent with recent work (see White and Laird, 2020*a*; Eckhouse, 2019), we find that African American respondents appear less responsive to our treatment, though we are under-powered to test for differences between African American and white respondents (see Appendix Table 21. Of the respondents in the social pressure and information condition, 31.57% moved their opinion in the assigned direction (against their pre-treatment position), 57.30% maintained their pre-treatment opinion and 11.11% moved to adopt a stronger position consistent with their pre-treatment opinion, overall this movement is marginally significant relative to pure control ($\chi^2 = 4.71, p = .09$).[12]

[12] Unlike Study 4, we do not employ multiple testing corrections when analyzing results for studies 5 and 6 since both were explicitly designed to move opinion on mandatory minimum sentencing, the policy discussed explicitly in the intervention.

Study 6: Out-group Perspective-Taking

This final study evaluates whether prompting individuals to consider the views of an opposing group can cause opinion change. We tasked respondents with generating evidence against their position on mandatory minimum sentences in the structure of a persuasive writing assignment. Considering the reasoning and state of those who disagree should, theory argues, prompt reevaluation of attitudes (e.g., Kirmani and Campbell, 2009). This task is the most burdensome cognitively of the set we test as it requires participants to spend considerable time (enough to draft a paragraph) pondering the oppositions' argument.

Prior to the perspective-taking task, all respondents completed a battery assessing attitudes toward a slate of criminal justice policies. The sample was split such that participants were randomly assigned to one of four treatment conditions: pure control, a condition where a corrective fact was offered, a task designed to encourage the construction of a high-quality argument against their previously disclosed position on mandatory minimum sentences, and the same perspective-taking task coupled with corrective information. In the last two conditions, participants who initially supported mandatory minimums were asked to try to convince someone who supports mandatory minimums to oppose them, while someone who opposes mandatory minimums was tasked with convincing respondents who oppose them to support them. To incentivize participants to make high quality arguments, those assigned to the perspective-taking task were offered a chance to win a $20 cash bonus prize based on the quality of their work in the task. (See Appendix Section 8.2 for full stimuli.)

Compliance with the perspective-taking task assignment was high, with 81.7% of respondents providing a valid response to the prompt (to compute this metric we counted responses that made an argument about mandatory minimums, and excluded individuals who objected to the task or provided irrelevant text; see Appendix Table 28 for examples). To present the most conservative result we include non-compliers and estimate an intent-to-treat effect

(ITT); however, results are substantively similar when we account for non-compliance.[13] The average response was several sentences and included 41.6 words. We again find that the provision of corrective facts substantially increases the accuracy of crime perceptions by 46 points when corrective facts are given on their own (95% CI [0.41, 0.52]); and 30 points when facts are coupled with the perceptive-taking task (95% CI [0.24, 0.35]). The stand-alone perceptive-taking condition did not alter crime perceptions, with movement of 3 points (95% CI [-0.01, 0.08]; see Appendix Table 29).

To evaluate effects on policy preferences, as with the prior experiment, we use a binary measure of whether opinion changed at all as the dependent measure in our models.[14]

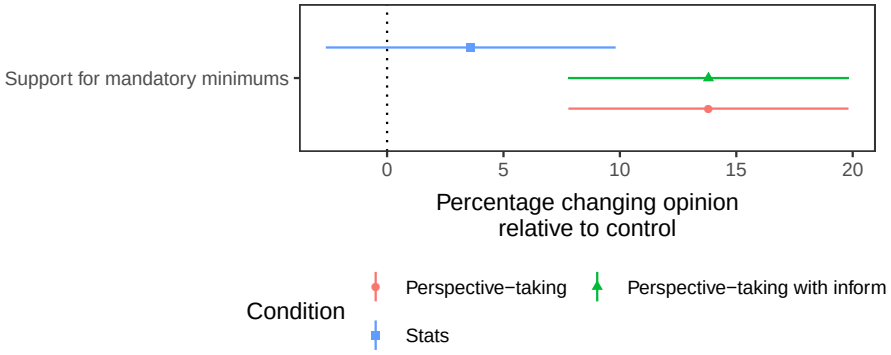
Figure 5 shows that consistent with the prior two studies, merely offering corrective information has no effect on opinion change, with an estimated 3.59% of respondents changing their opinion relative to pure control (95% CI [-2.63, 9.82]). However, the perspective-taking task, both on its own and when combined with corrective information, changed attitudes relative to pure control. Of those assigned to the perspective-taking condition 13.80% (95% CI [7.79, 19.82]) changed their opinion on mandatory minimums, while 13.80% (95% CI [7.77, 19.84]) of those assigned to the reflection with information condition changed their opinion. Of those assigned to either the reflection condition or the reflection with information condition 36.01% moved their opinion in the assigned direction (contrary to their pre-treatment position), 49.91% maintained the same position and 14.08% adopted a more hard-line position.

Taken together, experiments 4-6 show that merely consuming facts or receiving elite messages is not sufficient to drive opinion change on criminal justice policy. However, our

[13] The largest source of non-compliance was an explicit refusal from participants to argue against their own views.

[14] Using amount of opinion change as the dependent measure produces comparable results with both perspective-taking treatments delivering significant opinion revision. See Appendix Table 31.

Figure 5: Out-group perspective-taking mechanism



Policy variables measured on seven-point scale. Figure shows average percentage-point differences in absolute opinion change between the treatments and the control condition. Bars denote 95% confidence intervals.

results provide evidence that social pressure related to salient in-groups, and engaging in the construction of reasoned arguments related to policy preferences, both generate significant changes in the attitudes of respondents. While our results are too imprecise to distinguish the effects of the group-based appeals with and without the addition of corrective information, we show conclusively that corrective information on its own does not alter policy views in this issue area. Only in the presence of strong group-based appeals do we see any evidence of opinion change, and the added effect of correcting misperceptions is ambiguous at best. In addition, though we highlight effects pertaining to mandatory minimum sentencing for studies 5 and 6 since that was the focus of our interventions, additional tests show that opinion remained stable across a range of closely related policy issues, with a spillover only occurring on two of six issues in and in only one condition (from a full set of 32 additional combinations of issues and conditions; see Appendix Tables 19 and 30). Moreover, these spillovers do not survive multiple testing corrections. This lack of spillover underscores the difficulty of political persuasion, suggesting those wishing to compel citizens to update their views must craft numerous appeals tailored to specific policy proposals.

Discussion and Conclusion

As with all calls for meaningful policy change, the road to systemic criminal justice reform faces myriad obstacles, including but not limited to the challenge of garnering support in the mass public. This task is complicated in the case of criminal justice by Americans' widespread mistaken beliefs about the closely related issue of crime. Although crime rates have fallen dramatically in recent decades, most Americans believe they are rising. This trend has potentially important political implications: by many prominent accounts, effective retrospective voting requires accurately evaluating social conditions, "law and order" platforms may remain popular due to faulty perceptions of crime, and research suggests that security threats make individuals more willing to relinquish civil liberties (Davis and Silver, 2004). It is therefore critical to evaluate whether misperceptions can be corrected, and whether these corrections have meaningful impacts on related policies.

Our results suggest that the prevalence of misperceptions of national crime is largely a byproduct of the lack of exposure to factual information about crime. Contrary to several prior studies which find it difficult to correct misperceptions (Kuklinski and Hurley, 1994; Kuklinski et al., 1998; Nyhan and Reifler, 2010, 2016), we find that citizens readily update their beliefs in response to crime statistics attributed to authoritative sources. However, informing individuals about broad improvements in crime rates does not affect theoretically proximal criminal justice policy preferences. Even when trusted copartisan elites make explicit links between changes in crime rates and policy positions, the provision of corrective information fails to trigger movement in policy preferences. Given the widespread nature of misperceptions of crime, and the ease with which these mistaken beliefs are corrected, the inability of corrective information to alter related policy views suggests citizens do not rely on perceptions of the objective status of social conditions when evaluating policies. To be clear, our experiments cannot rule out the influence of other sources of information, such as personal experiences with crime. But our results do strongly suggest that misperceptions of

objective measures of social conditions do not influence policy views.

We find consistent evidence that opinion change is possible, however, when encouraged through interventions derived from an alternative theory of policy preference formation centering on group identity. Alerting individuals that their views are out of step with other members of their race, party and gender causes roughly 31.57% of individuals to rethink their position on mandatory minimums in the assigned direction. And by compelling participants to think deeply about the arguments of the opposition, we see modest shifts in opinion among close to 36.01% of respondents. Despite widely held misperceptions about crime trends, learning accurate facts does little to bolster this affect. In addition, group-based appeals show virtually no effect on perceptions of crime, which clashes with assertions that such appeals distort people's views of relevant facts. Interventions focused on salient group's opinions led to measurable levels of persuasion, but perceptions of crime appear largely irrelevant to criminal justice policy preferences.

Our analysis comes with an important caveat: all of these experiments were conducted prior to the killing of George Floyd and subsequent social unrest, which prompted considerable discussion of criminal justice policy reform. It is difficult to theorize whether these events, however, hardened preexisting opinions among most Americans or made interventions that involve factual corrections more or less effective. Criminal justice is a rapidly evolving issue space, one that began to receive renewed, intense scrutiny following the 2014 killing of Michael Brown in Ferguson, MO and ensuing protests, which occurred prior to our surveys. Future work should continue to evaluate the effectiveness of the interventions we explore here as the context around these policy issues continues to evolve.

Nevertheless, the patterns we observe, which remain consistent across multiple samples, have important implications, both for scholarly understanding of how citizens evaluate policies, and the prospects of campaigns and interest groups to garner support for their issue positions. For one, our results offer a simple explanation for the previously puzzling set

of results that found citizens were both willing to update beliefs about the status of social conditions, but unwilling to rethink their stances on the very policies meant to address those conditions (e.g. Green et al., 2011; Hopkins, Sides and Citrin, 2019; Lawrence and Sides, 2014). As our experiments make clear, no such updating occurred because individuals rely on different informational cues and cognitive processes when forming their views on policy, among them deep consideration of the policy views of groups salient to them. But while we show persuasion is possible, we also demonstrate that it remains a daunting task, as the interventions which moved policy views required substantial focus and cognitive effort, and caused small amounts of opinion change for a minority of respondents on only one explicitly mentioned issue.

Political observers concerned about widespread misperceptions have long asserted they could serve to distort the policymaking process. On the contrary, our results suggest that in the area of criminal justice policy, such facts, at least when presented in isolation, are often irrelevant for the updating of policy preferences in the mass public. At the same time, the types of interventions capable of compelling citizens to rethink their policy views are complex, costly, and effective only at the margins, suggesting a difficult road for advocates of system-wide criminal justice reform.

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Supporting Materials: The Stability of Criminal Justice Policy Views: Evaluating the Effects of Factual Corrections and Appeals to Social Identity

August 3, 2020

Contents

1 Observational Data

1.1 Crime Data

National murder rates were obtained directly from the FBI's web site here: https://ucr.fbi.gov/crime-in-the-u.s/2015/crime-in-the-u.s.-2015/tables/table-1. FBI county crime data used was used in the local conditions analysis (DOJ, 2000, 2014).

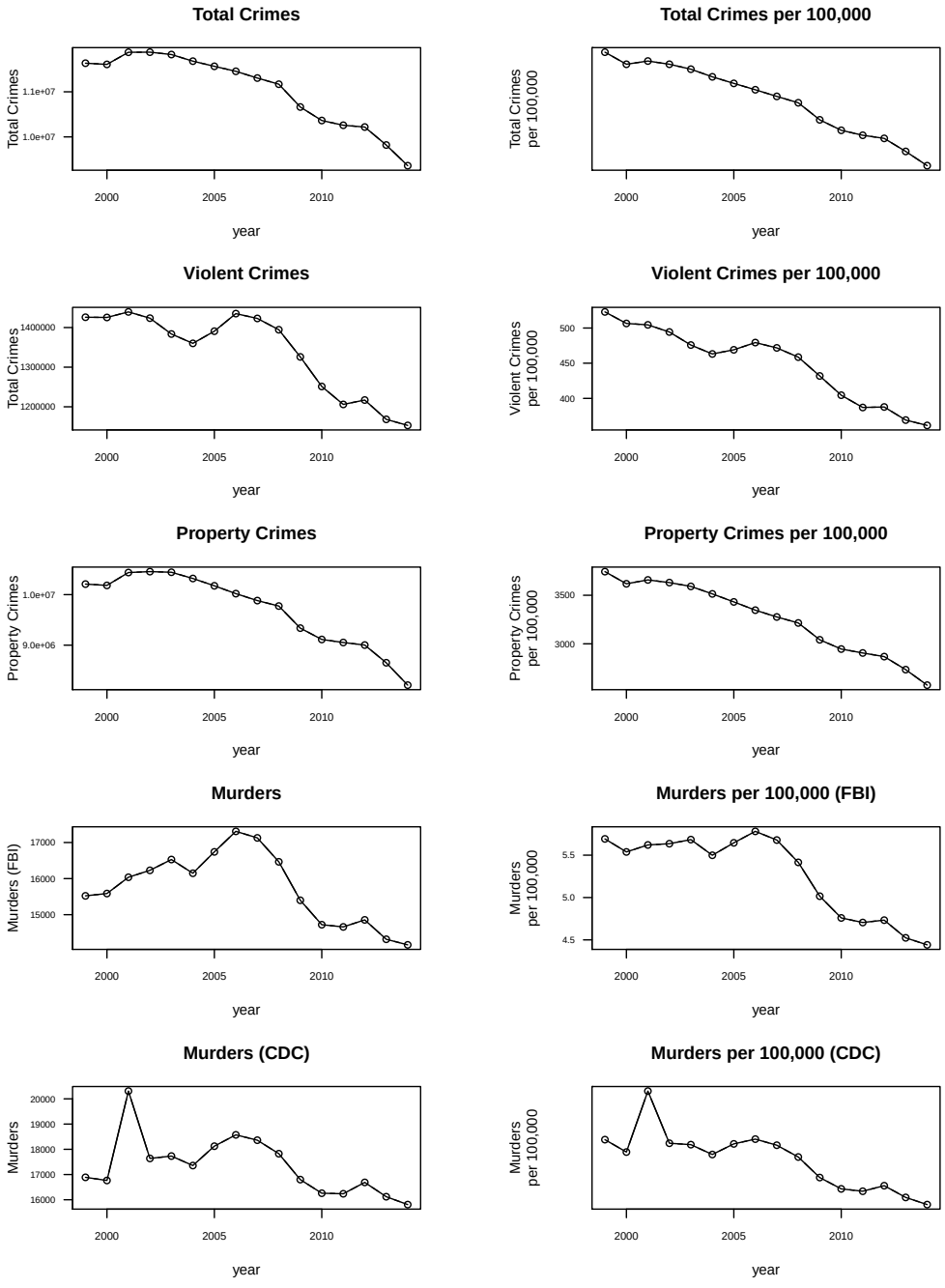
As an alternative measure of homicides, the Centers for Disease Control tracks homicides via coroner's reports from local agencies. We use the data contained in their annual reports as an alternative measure of homicides to the FBI data when characterizing national crime trends(Hoyert et al., 2001; Miniño et al., 2002; Arias et al., 2003; Kochanek et al., 2004, 2006; Miniño et al., 2007; Kung et al., 2008; Heron et al., 2009; Xu et al., 2010; Miniño et al., 2011; Kochanek et al., 2011; Murphy, Xu and Kochanek, 2013; Kochanek, Murphy and Xu, 2015; Murphy et al., 2015; Xu et al., 2015; Kochanek et al., 2016).

Because the item neglects to specify which type of crime is being asked about, the analyst scoring responses for accuracy must accurately infer the type of crime respondents imagined. To measure the accuracy of responses to this item, we consider 10 plausible crime benchmarks rather than a single measure. Using the FBI's UCR data, we computed year-to-year changes in: total crimes,[1] violent crimes, property crimes and homicides in both absolute and per-capita terms. We also use an alternative measure for homicides supplied by the National Vital Statistics Reports produced annually by the Centers for Disease Control (see Appendix for details), which provides its own independent estimate of homicides in the U.S.[2]

[1] We sum the major violent and property crimes listed in the FBI's UCR reports from a given year: murder, rape, robbery, assault, burglary, larceny, motor vehicle theft and arson.

[2] Note: respondents who answered "I don't know" are omitted from this descriptive analyses, since lack of knowledge is qualitatively different than holding mistaken beliefs. We also omit respondents who volunteered the response "same" since, when comparing year-to-year continuous measures such as crimes per capita, such a response is almost guaranteed to

Figure 1: Recent crime trends by various government metrics



Sources: FBI, CDC

Figure 1 displays annual crime statistics according to these measures during the period covered by the Gallup data. In most cases, a downward trend is apparent across these metrics. But though most other measures fell in near-monotonic fashion in the early 2000s, the absolute count of murders according to the FBI rose in four consecutive years during the same period, and in six years total prior to 2007. Similar discrepancies between metrics can be seen when comparing violent crimes—which increase for several years in the mid 2000s—to total crimes and property crimes, which fell nearly every year.

2 Dependent Variables (Across Studies)

1. A "homicide" is the willful (non-negligent) killing of one human being by another. The national homicide rate is the number of homicides per 100,000 people in the United States.

   Was the homicide rate in the U.S. in 2015 larger (smaller) or smaller (larger) than it was in 2000?

   - Larger
   - Smaller

2. How confident are you in your response to the previous question about the change in the national homicide rate between 2000 and 2015?

   - 7-point scale, 1=Not at all confident, 4=Moderately confident, 7=Extremely confident

3. How confident are you that the Federal Bureau of Investigation (FBI) provides accurate estimates of the national homicide rate?

be incorrect.

- 7-point scale, 1=Not at all confident, 4=Moderately confident, 7=Extremely confident

4. When you think about the national homicide rate, do you think of the number of homicides per 100,000 people, or do you think of some other definition? If you think of another definition, please describe it in the text field below.

   - Yes, that is the definition I think of
   - No, I think of some other definition:

5. Based on your own personal definition of the homicide rate, was the homicide rate in the U.S. in 2015 larger (smaller) or smaller (larger) than it was in 2000?

   - Larger
   - Smaller

6. In a few sentences or less, please briefly describe why you think that the homicide rate in the U.S. in 2015 was larger (smaller) or smaller (larger) than it was in 2000.

1. Do you favor or oppose the death penalty for a person convicted of murder?

   - 7-point scale, 1=Strongly oppose, 4=Neither support nor oppose, 7=Strongly in favor

2. Do you favor or oppose allowing nonviolent drug offenders who have served their sentences to vote?

   - 7-point scale, 1=Strongly oppose, 4=Neither support nor oppose, 7=Strongly in favor

3. Please indicate how serious a problem you think violent crime is in the US today?

   - 7-point scale, 1=Not at all serious, 4=Moderately serious, 7=Extremely serious

4. How safe do you feel walking alone at night within a mile of where you live?

    - 7-point scale, 1=Not at all safe, 4=Moderately safe, 7=Extremely safe

5. Which of the following best describes you?

    - I own a firearm
    - I don't own a firearm but I plan on purchasing one
    - I do not own a firearm

6. How much confidence do you have in the police to protect you from violent crime?

    - 7-point scale, 1=Very little confidence, 4=A moderate amount of confidence, 7=Quite a lot of confidence

3 Study 1

3.1 Sample Demographics

	Study 1	Census/ CCES
Median Age	34	37
%Latino	8	16
%Non-Hisp White	76	72
%Non-Hisp Black	8	13
%Non-Hisp Asian	9	5
% w/ B.A.	53	28
Median HH Income	55	49
%Democrat	57	44
%Republican	32	39
N	912	

3.2 Design

Control

Zlatan Ibrahimovic scored his first hat-trick for the European football squad Manchester United and the 17th of his career in a win over Saint-Etienne last week.

Ibrahimovic's deflected free-kick wrong-footed goalkeeper Stephane Ruffier and dribbled over the line for the opener, and he tapped home from close range after good work from Marcus Rashford, as well as adding a late penalty – his 23rd goal of the season.

Crime Information

According to the Federal Bureau of Investigation (FBI), the homicide rate in the U.S. was 5.5 homicides per 100,000 people in 2000, but was down to 4.9 homicides per 100,000 people in 2015.

Crime Information and Undermining

According to the Federal Bureau of Investigation (FBI), the homicide rate in the U.S. was 5.5 homicides per 100,000 people in 2000, but was down to 4.9 homicides per 100,000 people in 2015.

However, (Republican/Democratic) officials in Washington have recently called these statistics into question.

"You can throw around all the numbers you want, but sometimes it's better to rely on com-

mon sense than a bunch of statisticians," said one (Republican/Democratic) U.S. Senator. "Local agencies often fail to report all their crime data to the FBI, so these statistics aren't much use."

Crime Information and Competing Claim

According to the Federal Bureau of Investigation (FBI), the homicide rate in the U.S. was 5.5 homicides per 100,000 people in 2000, but was down to 4.9 homicides per 100,000 people in 2015.

However, (Republican/Democratic) officials in Washington have recently called these statistics into question.

"You can throw around all the numbers you want, but sometimes it's better to rely on common sense than a bunch of statisticians," said one (Republican/Democratic) U.S. Senator. "Local agencies often fail to report all their crime data to the FBI, so these statistics aren't much use. The homicide rate has been climbing."

Unemployment Information

According to the Bureau of Labor Statistics (BLS), the unemployment rate in the U.S.—the percent of the labor force that was out of work, looking for a job and available for work—was 4% on average in 2000, but was up to 5.3% on average in 2015.

Unemployment Information and Undermining

According to the Bureau of Labor Statistics (BLS), the unemployment rate in the U.S.—the percent of the labor force that was out of work, looking for a job and available for work—was 4% on average in 2000, but was up to 5.3% on average in 2015.

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Unemployment Information and Competing Claim

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"You can throw around all the numbers you want, but sometimes it's better to rely on common sense than a bunch of statisticians," said one (Republican/Democratic) U.S. Senator. "These numbers are based on surveys that many people refuse to take, so these statistics aren't much use. The unemployment rate has been falling."

3.3 Main tabular results

Table 1: Study 1 (M-Turk) Treatment Effects

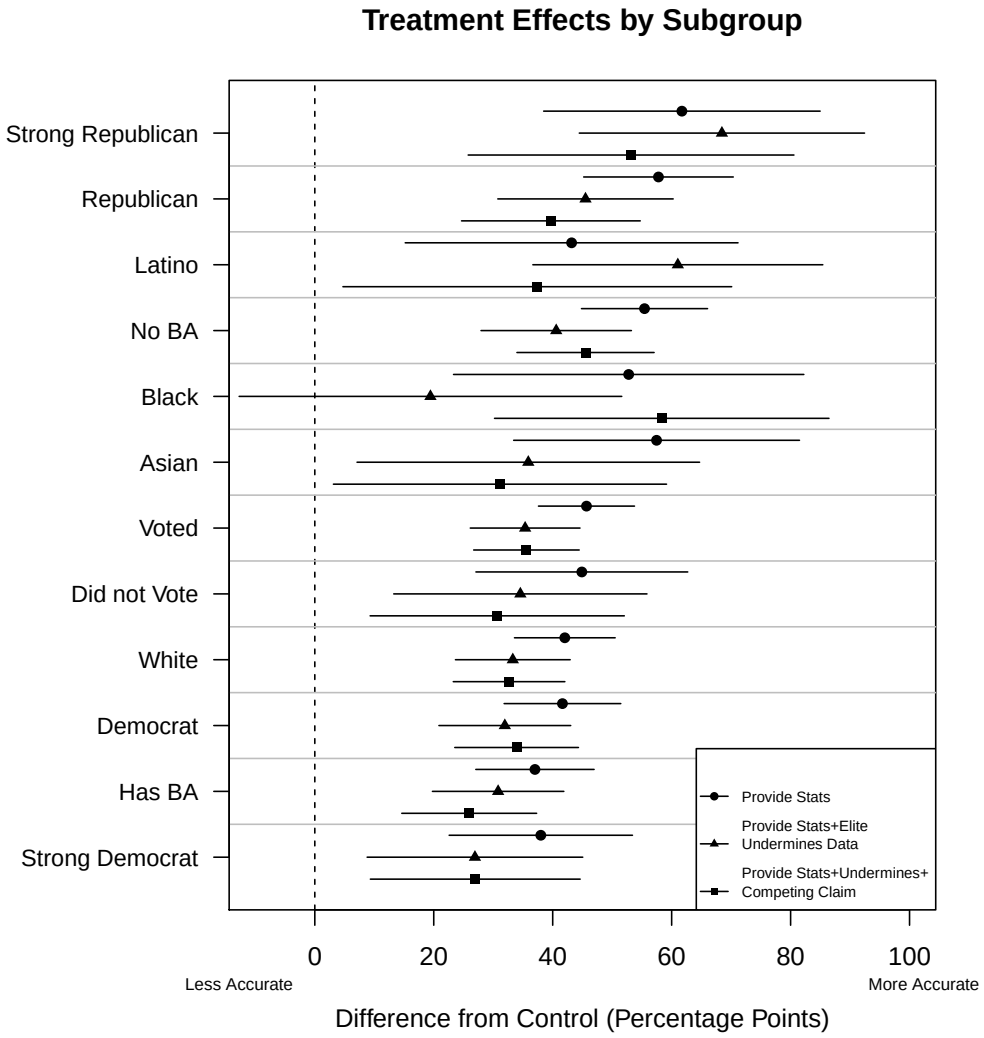
	Control Comparison	Info Comparison
(Intercept)	0.44^{***}	0.89^{***}
	(0.03)	(0.02)
Provide Stats	0.45^{***}	
	(0.04)	
Elite Undermines Data	0.35^{***}	-0.10^{**}
	(0.04)	(0.04)
Elite Competing Claim	0.35^{***}	-0.11^{**}
	(0.04)	(0.03)
Control		-0.45^{***}
		(0.04)
N	912	912
R^2	0.16	0.16
adj. R^2	0.15	0.15
Resid. sd	0.41	0.41

Robust ("HC1") standard errors. M-Turk sample.

† significant at $p < .10$; $^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$

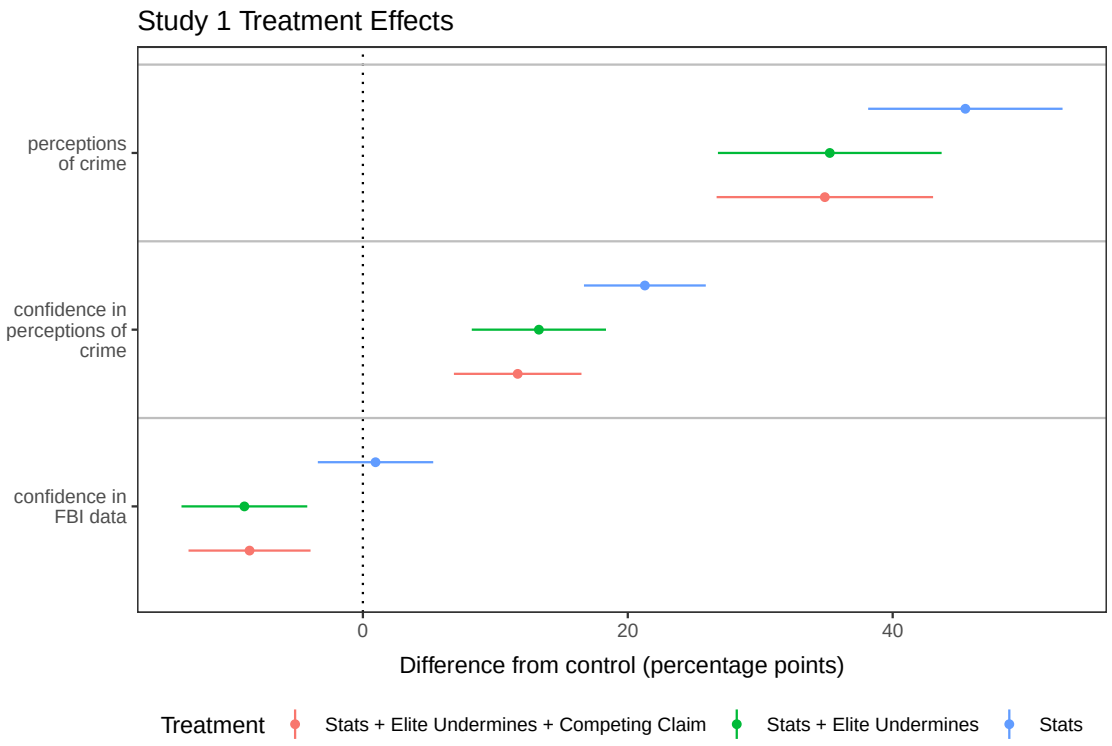
3.4 Heterogeneous Effects

Figure 2: Treatment effects on information uptake by subgroup, Study 1.



3.5 Additional Results

Figure 3



Bars denote 95% confidence intervals.

4 Study 2

4.1 Sample Demographics

	Study 2	Census/ CCES
Median Age	46	37
%Latino	11	16
%Non-Hisp White	69	72
%Non-Hisp Black	11	13
%Non-Hisp Asian	6	5
% w/ B.A.	40	28
Median HH Income	55	49
%Democrat	48	44
%Republican	38	39
N	1,942	

4.2 Design

Respondents in the Qualtrics studies were given the following instructions before seeing one of the blocks of text listed below:

> You will now be asked to read an excerpt from a brief news report. Please read the text on the following screen carefully.
>
> The report will be displayed for about 15 seconds before you are allowed to advance in the survey.

Note that all respondents were debriefed at the end of the survey with the following text:

Please note that the purpose of the survey was to gauge how information on social conditions affects perceptions, policy preferences and political opinions. Though the information concerning recent social conditions provided in the news item was accurate, the news item itself and the quotes within it were constructed for this survey. The news items we asked you to consider were hypothetical (not real), though some news items were based on real online news content.

Control

Zlatan Ibrahimovic scored his first hat-trick for the European football squad Manchester United and the 17th of his career in a win over Saint-Etienne last week.

Ibrahimovic's deflected free-kick wrong-footed goalkeeper Stephane Ruffier and dribbled over the line for the opener, and he tapped home from close range after good work from Marcus Rashford, as well as adding a late penalty – his 23rd goal of the season (Hafez, 2017).

Crime Information

According to the Federal Bureau of Investigation (FBI), the homicide rate in the U.S. was 5.5 homicides per 100,000 people in 2000, but was down to 4.9 homicides per 100,000 people in 2015.

Elite Cue

(Republican/Democratic) officials in Washington have recently called official crime statistics into question.

"Local agencies often fail to report all their crime data to the FBI, so federal crime statistics aren't much use," said one (Republican/Democratic) U.S. Senator. "The vast majority of Americans today do not feel safe. They fear for their children and they fear for themselves."

Crime Information and Elite Cue

According to the Federal Bureau of Investigation (FBI), the homicide rate in the U.S. was 5.5 homicides per 100,000 people in 2000, but was down to 4.9 homicides per 100,000 people in 2015.

(Republican/Democratic) officials in Washington have recently called official crime statistics into question.

"Local agencies often fail to report all their crime data to the FBI, so federal crime statistics aren't much use," said one (Republican/Democratic) U.S. Senator. "The vast majority of Americans today do not feel safe. They fear for their children and they fear for themselves."

4.3 Main tabular results

Table 2: Study 2 (Qualtrics) Treatment Effects

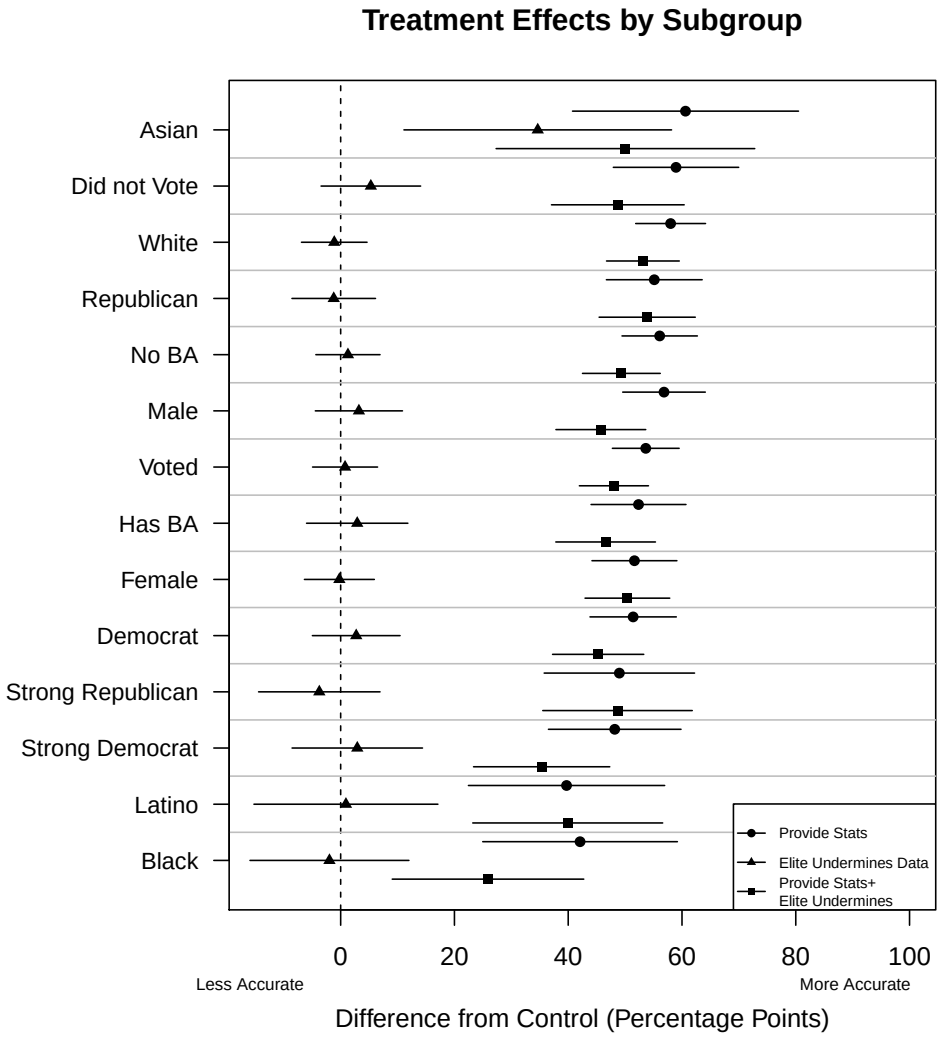
	Control Comparison	Info Comparison
(Intercept)	0.18^{***}	0.73^{***}
	(0.02)	(0.02)
Provide Stats	0.55^{***}	
	(0.03)	
Elite Undermines Data	0.01	-0.53^{***}
	(0.03)	(0.03)
Stats+Elite Undermines	0.48^{***}	-0.06^{*}
	(0.03)	(0.03)
Control		-0.55^{***}
		(0.03)
N	1942	1942
R^2	0.26	0.26
adj. R^2	0.26	0.26
Resid. sd	0.43	0.43

Robust ("HC1") standard errors. Qualtrics sample.

† significant at $p < .10$; $^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$

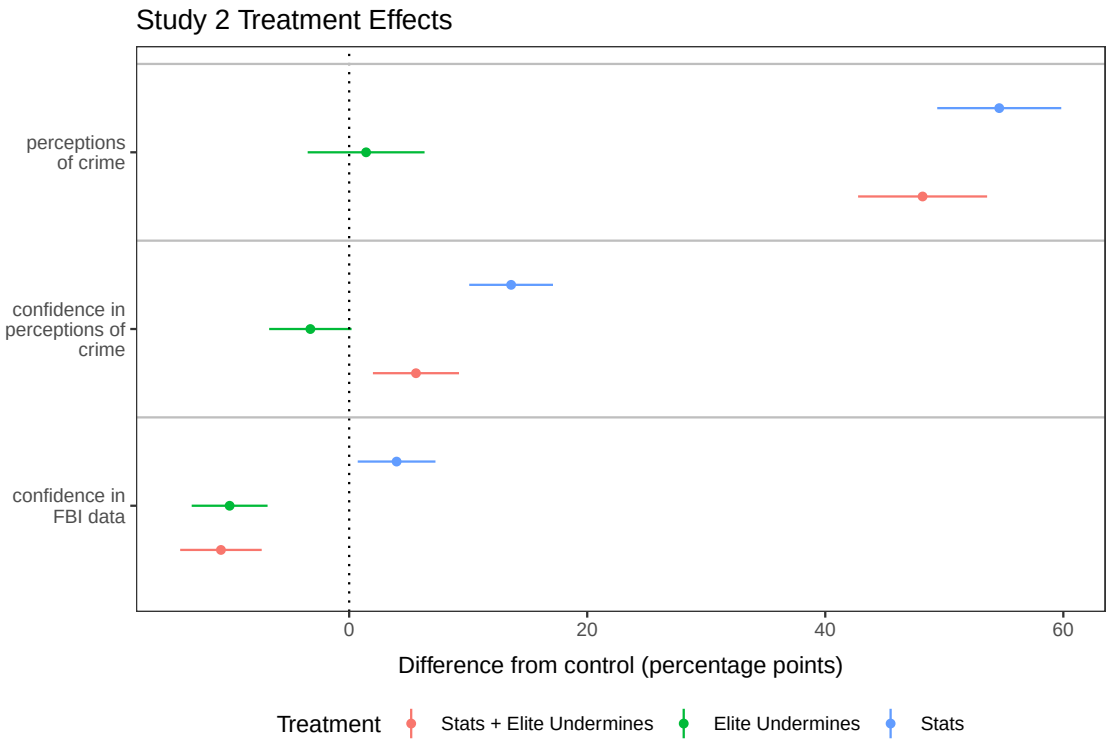
4.4 Heterogeneous Effects

Figure 4: Treatment effects on information uptake by subgroup, Study 2.



4.5 Additional Results

Figure 5



Bars denote 95% confidence intervals.

5 Study 3

5.1 Sample Demographics

	Study 3	Census/ CCES
Median Age	46	37
%Latino	12	16
%Non-Hisp White	72	72
%Non-Hisp Black	9	13
%Non-Hisp Asian	5	5
% w/ B.A.	35	28
Median HH Income	45	49
%Democrat	45	44
%Republican	38	39
N	4,242	

5.2 Design

Financial Incentives

Prior to being assigned to one of the four main treatments, respondents were randomly assigned to a financial incentives treatment. Half of respondents were told: "You will now be asked to answer some factual questions about social conditions in the United States." The other half saw the following additional prompt:

> You will now be asked to answer some factual questions about social conditions in the United States.

Note: If you answer accurately, you will earn a $0.25 bonus payment!

Control

Zlatan Ibrahimovic scored his first hat-trick for the European football squad Manchester United and the 17th of his career in a win over Saint-Etienne last week.

Ibrahimovic's deflected free-kick wrong-footed goalkeeper Stephane Ruffier and dribbled over the line for the opener, and he tapped home from close range after good work from Marcus Rashford, as well as adding a late penalty – his 23rd goal of the season (Hafez, 2017).

Crime Information

According to the Federal Bureau of Investigation (FBI), the homicide rate in the U.S. was 5.5 homicides per 100,000 people in 2000, but was down to 4.9 homicides per 100,000 people in 2015.

News Article

Two suspects on the run since Jan. 12 when the bodies of two men were found downtown have been located and arrested, police officials said.

According to police officials, the two victims were found shot to death by local police on Jan. 31.

Both suspects have been charged with two counts of first degree murder. Robbery is being

considered as a possible motive, the department said today during a 1:30 p.m. press conference.

Information and News Article

Two suspects on the run since Jan. 12 when the bodies of two men were found downtown have been located and arrested, police officials said.

According to police officials, the two victims were found shot to death by local police on Jan. 31.

Both suspects have been charged with two counts of first degree murder. Robbery is being considered as a possible motive, the department said today during a 1:30 p.m. press conference.

According to the Federal Bureau of Investigation (FBI), the homicide rate in the U.S. was 5.5 homicides per 100,000 people in 2000, but was down to 4.9 homicides per 100,000 people in 2015.

Distractor Task

Following treatment, half of respondents were funneled to a distractor task, in order to test whether the effects of information persist. Respondents were told: "We are interested in learning more about your preferences as a consumer. In the next section, we will display a series of brand names and ask you to indicate how you feel about each one." The task then asked respondents to give their impression of well-known brands, like Google and Lego.

5.3 Main tabular results

Table 3: Study 3 (Qualtrics) Treatment Effects

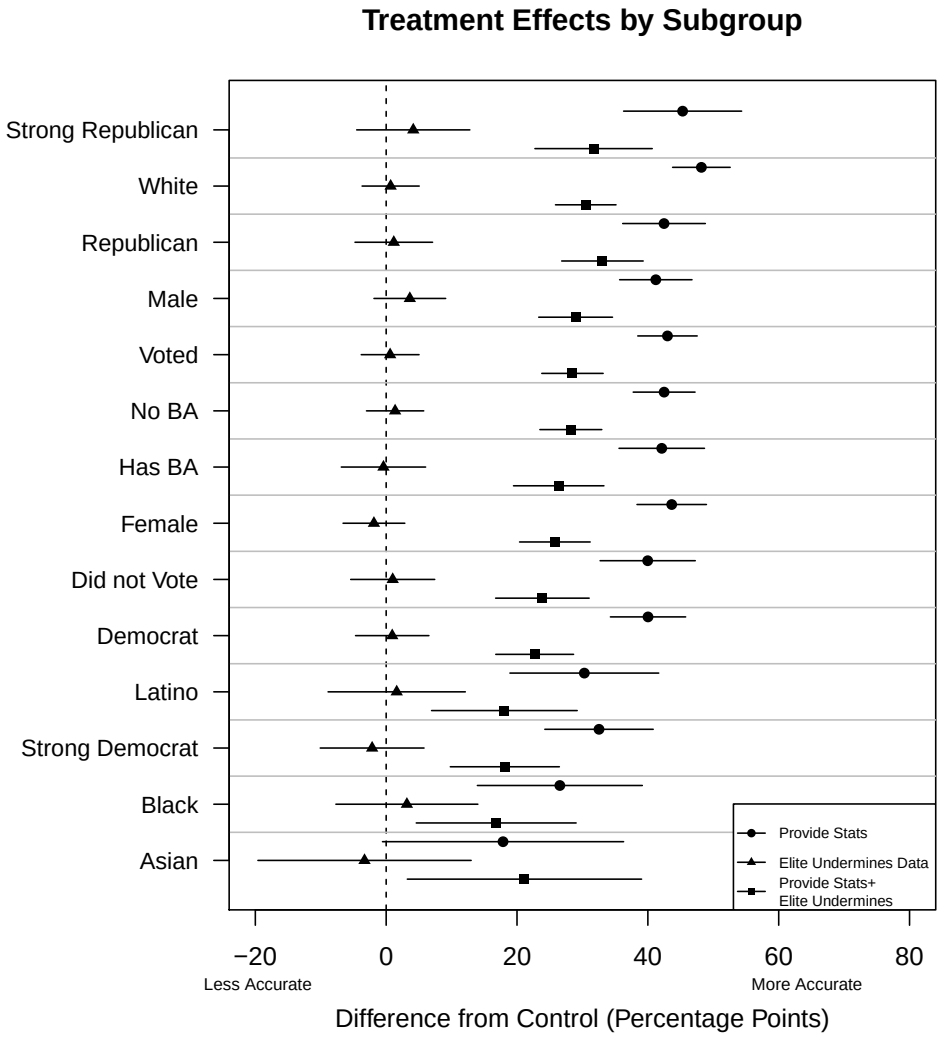
	Control Comparison	Info Comparison
(Intercept)	0.18***	0.68***
	(0.02)	(0.03)
Crime Article	0.07*	−0.50***
	(0.04)	(0.04)
Stats+Crime Article	0.31***	
	(0.04)	
Stats	0.50***	
	(0.04)	
Incentive	0.07†	−0.04
	(0.04)	(0.04)
Distractor	0.05	−0.07
	(0.04)	(0.04)
Crime Article x Incentive	−0.06	0.10†
	(0.05)	(0.05)
Stats+Crime Article x Incentive	0.00	
	(0.06)	
Stats x Incentive	−0.10†	
	(0.05)	
Crime Article x Distractor	−0.07	0.12*
	(0.05)	(0.06)
Stats+Crime Article x Distractor	−0.10†	
	(0.06)	
Stats x Distractor	−0.12*	
	(0.06)	
Crime Article x Incentive x Distractor	−0.03	0.11†
	(0.05)	(0.06)
Stats+Crime Article x Incentive x Distractor	0.00	
	(0.07)	
Stats x Incentive x Distractor	0.06	−0.14†
	(0.08)	(0.08)
Control+Crime Article		−0.43***
		(0.04)
Control		−0.19***
		(0.04)
Control+Crime Article x Incentive		0.04
		(0.05)
Control x Incentive		0.11†
		(0.06)
Control+Crime Article x Distractor		0.06
		(0.06)
Control x Distractor		0.02
		(0.06)
Control+Crime Article x Incentive x Distractor		−0.14†
		(0.08)
N	4242	4242
R^2	0.14	0.14
adj. R^2	0.14	0.14
Resid. sd	0.46	0.46

Robust ("HC1") standard errors. Qualtrics sample.

† significant at $p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$

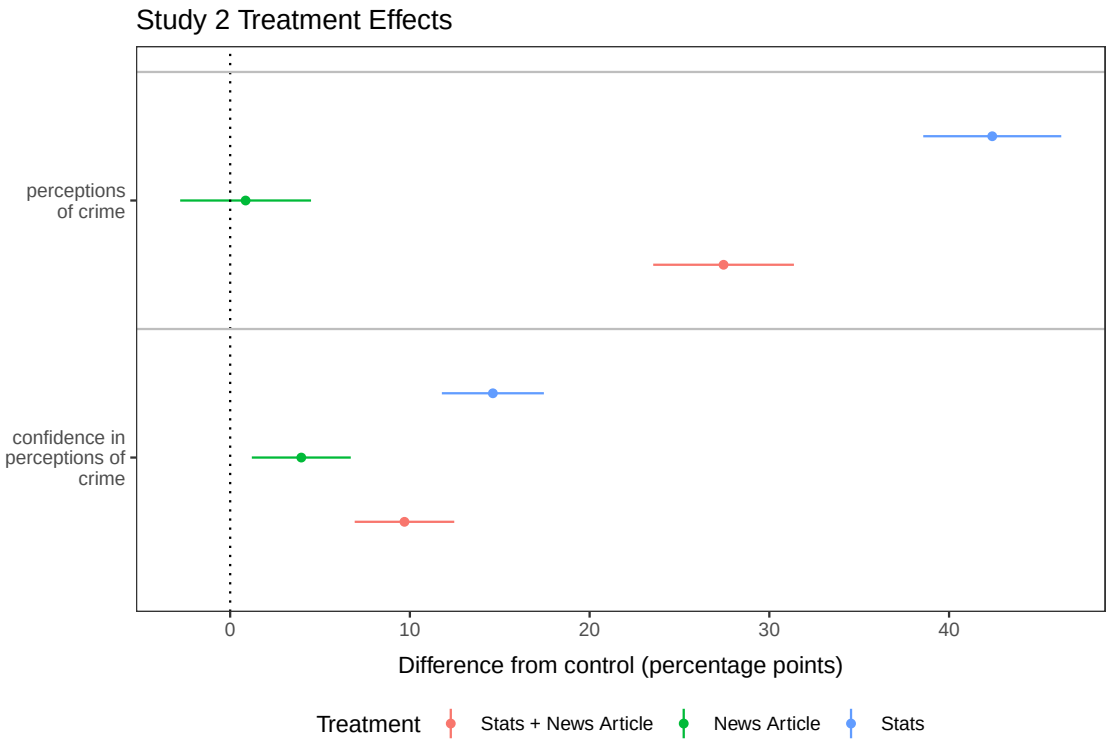
5.4 Heterogeneous Effects

Figure 6: Treatment effects on information uptake by subgroup, Study 3.



5.5 Additional Results

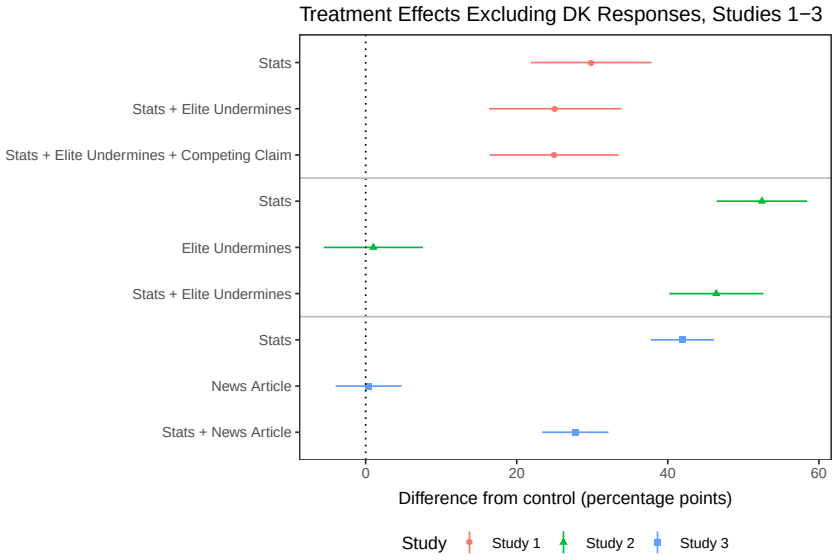
Figure 7



Bars denote 95% confidence intervals.

In the analysis in the main text, we code responses of "I don't know" to the perception questions as incorrect in studies 1 through 3. We do this because dropping these responses may induce post-treatment bias, since different treatment arms could differentially affect the probability of answering in this way. However, we realize this coding choice comes with a trade: not knowing the answer to these questions and holding a mistaken belief are qualitatively different, and our coding scheme conflates the two. We therefore display all results below after dropping respondents who answered "I don't know" to assess whether this coding choice is consequential. We recover highly similar results when using this alternative coding scheme.

Figure 8: Treatment effects on perceptions of crime, excluding 'don't know' responses.



Bars denote 95% confidence intervals.

6 Study 4

6.1 Leader Selection Pre-test

Several conditions in this study present a co-partisan group leader to respondents. We conducted a pretest of attitudes toward co-partisan members of leadership in the US Senate.[3] We selected the reported members of leadership from both parties and asked 397 Mechanical Turk users to rank the member of leadership on general trust and specifically on crime. We groups leaners with partisans and excluded pure independents from our sample. There were 255 Democrats/Democrat leaners and 142 Republicans/Republican leaners.

For the Democrats the most trusted Senator was Elizabeth Warren (D-MA) with a mean

[3]Note that although Bernie Sanders (I-VT) is included in official Democratic leadership we exclude him from analysis as he does not consistently identify as a Democrat and our purpose is to select an in-party leader.

rank of 4.72. She was also the must trusted on the issue of crime with a mean rank of 4.88. For Republicans the most trusted Senator was Mitch McConnell (R-KY) with an average rank of 2.94. He was the second most trusted on crime average rank of 4.89, with Roy Blunt (R-MO) taking the top spot with a mean rank of 4.88. We selected McConnell for our treatments because of his level of general trust and because his rank on crime was indistinguishable from Blunt.

6.2 Sample Demographics

Table 4: Gender

	%
Female	0.57
Male	0.43

Table 5: Race/Ethnicity

	%
African American	0.11
Asian	0.03
Hispanic	0.07
Native American	0.01
Other	0.00
Pacific Islander	0.00
White/Caucasian	0.77

Table 6: Partisanship

	%
Democrat	0.35
Independent	0.29
Other	0.06
Republican	0.30

Table 7: Income

	%
100,000 or more	0.12
30,000 - 39,999	0.12
40,000 - 49,999	0.09
50,000 - 59,999	0.09
60,000 - 69,999	0.06
70,000 - 79,999	0.07
80,000 - 89,999	0.04
90,000 - 99,999	0.05
Less than 30,000	0.36

Table 8: Education

	%
2-year College Degree	0.13
4-year College Degree	0.20
Doctoral Degree	0.01
High School / GED	0.25
Less than High School	0.03
Masters Degree	0.10
Professional Degree (JD, MD)	0.01
Some College	0.28

Table 9: Age

Mean 45.63

6.3 Design

Control

[Soccer article from prior studies]

Corrective Statistic

According to the Federal Bureau of Investigation (FBI), the homicide rate in the U.S. was 5.7 homicides per 100,000 people in 2007, but was down to 5.3 homicides per 100,000 people in 2017, a drop of 7%. Violent crime and property crime rates have also fallen over the same period.

Elite Cue

[Democratic/Republican] officials in Washington have recently argued for eliminating tough-on-crime policies, such as 'three-strikes' rules and preventing felons from voting. "These policies have helped make the U.S. the world leader in mass incarceration," said Senator [Elizabeth Warren (D-MA)/Mitch McConnell (R-KY)]. "The U.S. now has about 30% more people in prison than China, despite having just 23% of China's population. It is time to relax–or eliminate entirely–many of these tough-on-crime policies."

Corrective Statistic and Elite Cue

According to the Federal Bureau of Investigation (FBI), the homicide rate in the U.S. was 5.7 homicides per 100,000 people in 2007, but was down to 5.3 homicides per 100,000 people in 2017, a drop of 7%. Violent crime and property crime rates have also fallen over the same period. [Democratic/Republican] officials in Washington have recently argued for eliminating tough-on-crime policies, such as 'three-strikes' rules and preventing felons from voting. "These policies have helped make the U.S. the world leader in mass incarceration," said Senator [Elizabeth Warren (D-MA)/Mitch McConnell (R-KY)]. "The U.S. now has about 30% more people in prison than China, despite having just 23% of China's population. It is time to relax–or eliminate entirely–many of these tough-on-crime policies."

Elite Linking Information to Policy

According to the Federal Bureau of Investigation (FBI), the homicide rate in the U.S. was 5.7 homicides per 100,000 people in 2007, but was down to 5.3 homicides per 100,000 people in 2017, a drop of 7%. Violent crime and property crime rates have also fallen over the same period. [Democratic/Republican] officials in Washington have recently argued that because crime rates have been falling for years, we no longer need tough-on-crime policies, such as 'three-strikes' rules and preventing felons from voting. "Many of these tough-on-crime policies were put in place to fight rising crime rates, but crime has been falling for years in cities across the country whether they imposed these policies or not," said Senator [Elizabeth Warren (D-MA)/Mitch McConnell (R-KY)].,"Not only is there no evidence these policies are effective, they are no longer needed, and they have helped make the U.S. the world leader in mass incarceration. The U.S. now has about 30% more people in prison than China, despite having just 23% of China's population. It is time to relax–or eliminate entirely–many of these tough-on-crime policies."

6.4 Learning corrective fact

Table 10: Respondents learn corrective information

	Dependent variable:
	Learned Corrective Fact
Intercept	0.13***
	(0.02)
Corrective statistic	0.54***
	(0.04)
Corrective Statistic and Elite	0.54***
	(0.04)
Elite Linking Corrective Statistic to Policy	0.55***
	(0.04)
Elite Message	0.002
	(0.03)
Observations	1,098
R^2	0.28
Note:	*p<0.05; **p<0.01; ***p<0.001

6.5 Tabular results for all dependent measures

Table 11: Tabular results for all dependent measures

	Dependent variable:							
	change							
	Social investment or more policing	Support death penalty	Support felon vote	Mandatory minimums	Attitude on prison Spending	Support three strike laws	Criminal justice toughness	Support juveniles as adults
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Intercept	0.69***	0.93***	0.83***	0.70***	0.23**	0.78***	0.93***	0.92***
	(0.03)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.02)
Corrective statistic	0.07	0.01	−0.01	−0.01	0.07	0.03	−0.01	0.01
	(0.04)	(0.02)	(0.04)	(0.04)	(0.04)	(0.04)	(0.02)	(0.02)
Corrective Statistic and Elite	0.03	0.02	−0.01	0.04	0.11*	0.04	0.003	−0.02
	(0.04)	(0.02)	(0.04)	(0.04)	(0.04)	(0.04)	(0.02)	(0.03)
Elite Linking Corrective Statistic to Policy	−0.0004	−0.02	−0.003	0.04	0.04	0.02	−0.03	−0.01
	(0.04)	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.03)	(0.03)
Elite Message	−0.03	0.03	0.01	−0.03	0.11*	0.02	−0.04	−0.02
	(0.04)	(0.02)	(0.04)	(0.04)	(0.04)	(0.04)	(0.03)	(0.03)
Observations	1,098	1,098	1,098	1,098	1,098	1,098	1,098	1,098
R^2	0.01	0.01	0.0004	0.004	0.01	0.001	0.003	0.002

Note: *p<0.05; **p<0.01; ***p<0.001

7 Study 5

7.1 Sample Demographics

Table 12: Gender

	%
Female	0.51
Male	0.49

Table 13: Race/Ethnicity

	%
African American	0.12
Asian	0.05
Hispanic	0.17
Native American	0.01
Other	0.03
Pacific Islander	0.00
White/Caucasian	0.62

Table 14: Partisanship

	%
Democrat	0.38
Independent	0.25
Other	0.05
Republican	0.32

Table 15: Income

	%
100,000 or more	0.20
30,000 - 39,999	0.11
40,000 - 49,999	0.10
50,000 - 59,999	0.09
60,000 - 69,999	0.07
70,000 - 79,999	0.08
80,000 - 89,999	0.05
90,000 - 99,999	0.06
Less than 30,000	0.25

Table 16: Education

	%
2-year College Degree	0.12
4-year College Degree	0.26
Doctoral Degree	0.02
High School / GED	0.20
Less than High School	0.03
Masters Degree	0.12
Professional Degree (JD, MD)	0.02
Some College	0.23

Table 17: Age

Mean 47.58

7.2 Design

We utilized a pure control design where no information was offered in the control

The text of the group pressure treatment:

> Many people have already completed this survey. Of these people, about 71% of those who belong to the three following groups reported [supported/opposed] "mandatory minimum" prison sentences [/after learning that, according to the Federal Bureau of Investigation (FBI), the homicide rate in the U.S. was 5.7 homicides per 100,000 people in 2007, but was down to 5.3 homicides per 100,000 people in 2017, a drop of 7%. Violent crime and property crime rates have also fallen over the same period].
>
> - Race: [the race of the respondent]
> - Gender: [the gender of the respondent]
> - Political party: [the political party of the respondent]

7.3 Learning corrective fact

Table 18: Respondents learn corrective information

	Dependent variable:
	Learned Corrective Fact
Intercept	0.15***
	(0.02)
Corrective statistic	0.46***
	(0.03)
Social pressure	0.005
	(0.02)
Social pressure w/ corrective statistic	0.33***
	(0.03)
Observations	1,962
R^2	0.18
Note:	*p<0.05; **p<0.01; ***p<0.001

7.4 Tabular results for all dependent measures (Dichotomous Opinion Change Coding)

Table 19: Tabular results for all dependent measures

	Dependent variable:						
	change						
	Support for mandatory minimums	Support death penalty	Support felon vote	Support juveniles as adults	Social investment or more policing	Support three strike laws	Attitude on prison Spending
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Intercept	0.36***	0.28***	0.30***	0.07***	0.04***	0.42***	0.26***
	(0.02)	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)
Corrective statistic	0.04	−0.03	−0.03	0.02	0.004	0.01	0.06
	(0.03)	(0.03)	(0.03)	(0.02)	(0.01)	(0.03)	(0.03)
Social pressure	0.02	−0.05	−0.03	−0.003	0.01	−0.01	−0.02
	(0.03)	(0.03)	(0.03)	(0.02)	(0.01)	(0.03)	(0.03)
Social pressure w/ corrective statistic	0.06*	−0.03	−0.02	0.01	0.02	0.03	−0.01
	(0.03)	(0.03)	(0.03)	(0.02)	(0.01)	(0.03)	(0.03)
Observations	1,962	1,962	1,962	1,962	1,962	1,962	1,962
R^2	0.002	0.002	0.001	0.001	0.001	0.001	0.004
Note:							*p<0.05; **p<0.01; ***p<0.001

7.5 Tabular results for all dependent measures (Amount of Opinion Change Coding)

Table 20: Tabular results for all dependent measures

	Dependent variable:						
	change						
	Support for mandatory minimums	Support death penalty	Support felon vote	Support juveniles as adults	Social investment or more policing	Support three strike laws	Attitude on prison Spending
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Intercept	0.13***	0.08***	0.09***	0.07***	0.04***	0.17***	0.08***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Corrective statistic	0.01	−0.01	−0.02	0.02	0.01	0.001	0.01
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)
Social pressure	0.002	−0.02*	−0.01	−0.003	0.01	−0.003	−0.01
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)
Social pressure w/ corrective statistic	0.02	−0.01	−0.01	0.01	0.02	0.02	−0.01
	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.01)
Observations	1,962	1,962	1,962	1,962	1,664	1,962	1,962
R^2	0.001	0.003	0.001	0.001	0.001	0.001	0.004
Note:							*p<0.05; **p<0.01; ***p<0.001

7.6 Subgroup Analysis

Table 21: Tabular results by subgroup

	Dependent variable:							
	Manditory Minimum Sentence							
	Males	Females	White	Black	Democrat	Republican	White Democrat	Black Democrat
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Intercept	0.38***	0.35***	0.34***	0.45***	0.40***	0.33***	0.38***	0.52***
	(0.03)	(0.03)	(0.03)	(0.07)	(0.04)	(0.04)	(0.05)	(0.09)
Corrective statistic	0.004	0.07	0.04	0.02	−0.004	0.11	−0.04	−0.03
	(0.05)	(0.04)	(0.04)	(0.09)	(0.05)	(0.06)	(0.07)	(0.12)
Social Pressure	−0.03	0.06	0.03	0.05	−0.06	0.11*	−0.07	−0.08
	(0.04)	(0.04)	(0.04)	(0.09)	(0.05)	(0.05)	(0.07)	(0.12)
Social Pressure w/ corrective statistic	0.07	0.06	0.08*	−0.11	0.05	0.09	0.08	−0.16
	(0.04)	(0.04)	(0.04)	(0.09)	(0.05)	(0.06)	(0.07)	(0.12)
Observations	953	1,009	1,220	229	755	620	359	154
R^2	0.01	0.003	0.003	0.01	0.01	0.01	0.01	0.02
Note:								*p<0.05; **p<0.01; ***p<0.001

8 Study 6

8.1 Sample Demographics

Table 22: Gender

	%
Female	0.48
Male	0.52

Table 23: Race/Ethnicity

	%
African American	0.13
Asian	0.05
Hispanic	0.17
Native American	0.01
Other	0.03
Pacific Islander	0.01
White/Caucasian	0.61

Table 24: Partisanship

	%
Democrat	0.40
Independent	0.24
Other	0.05
Republican	0.31

Table 25: Income

	%
100,000 or more	0.22
30,000 - 39,999	0.11
40,000 - 49,999	0.10
50,000 - 59,999	0.09
60,000 - 69,999	0.07
70,000 - 79,999	0.07
80,000 - 89,999	0.04
90,000 - 99,999	0.07
Less than 30,000	0.22

Table 26: Education

	%
2-year College Degree	0.11
4-year College Degree	0.26
Doctoral Degree	0.02
High School / GED	0.20
Less than High School	0.03
Masters Degree	0.13
Professional Degree (JD, MD)	0.03
Some College	0.22

Table 27: Age

Mean 46.30

8.2 Design

Specifically, participants saw the following prompt:

> "Mandatory minimum sentence laws require automatic minimum sentences for certain crimes. Some argue that such laws have contributed unnecessarily to the rise of mass incarceration in the U.S., while others argue that they are necessary to deter crime.
>
> [/According to the Federal Bureau of Investigation (FBI), the homicide rate in the U.S. was 5.7 homicides per 100,000 people in 2007, but was down to 5.3 homicides per 100,000 people in 2017, a drop of 7%. Violent crime and property crime rates have also fallen over the same period.]
>
> Your task:
>
> Imagine your are trying to convince someone who is similar to you. This person [supports/opposes] mandatory minimum sentences. Your goal is to change his or her mind to [oppose/support] mandatory minimum sentences.
>
> Please write a few sentences making the most persuasive case you can.
>
> It is important to take this task seriously. The most persuasive responses to this question will be entered to win one of five $20 cash prizes."

8.3 Example responses

Table 28: Example Persuasive Arguments

"Each case should stand on its own and be judged according to the circumstances surrounding the case."
"Jails are not rehabilitation centers and fail to do anything. Mandatory sentences do nothing but clog up [t]he system"
"Mandatory minimum sentences are important for eliminating bias in judges and ensuring that crimes are judged fairly and consistently across the country. With mandatory minimums in place, we have had a statistical fall in overall crime rates, which proves that they are beneficial. It is important that these mandatory minimums stay in place to maintain some order in our already muddled justice system."
"Mandatory minimum sentences are a too-broad, one-size-does-not-fit-all mandate that will never take into account all possible factors which would justify a non-mandatory minimum sentence: intentionally or unintentionally, it can unjustly incarcerate an alleged offender with no possibility of legal mercy possibly warranted for a crime in justified contexts. For example, if someone drives one mile over the speed limit and is convicted of a misdemeanor over such, they could be incarcerated for an unjust amount of time should a particular statute or judicial mandate impose a required sentence for a mild infraction triggering such after previous convictions for more serious crimes."

8.4 Learning corrective fact

Table 29: Respondents learn corrective information

	Dependent variable:
	Learned Corrective Fact
Intercept	0.15***
	(0.02)
Corrective statistic	0.46***
	(0.03)
Perspective-taking	0.03
	(0.02)
Perspective-taking w/ corrective statistic	0.30***
	(0.03)
Observations	2,094
R^2	0.15
Note:	*p<0.05; **p<0.01; ***p<0.001

8.5 Tabular results for all dependent measures (Dichotomous Opinion Change Coding)

Table 30: Tabular results for all dependent measures

	Dependent variable:						
	change						
	Support for mandatory minimums	Support death penalty	Support felon vote	Support juveniles as adults	Social investment or more policing	Support three strike laws	Attitude on prison Spending
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Intercept	0.36***	0.28***	0.30***	0.07***	0.04***	0.42***	0.26***
	(0.02)	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)
Corrective statistic	0.04	−0.03	−0.03	0.02	0.004	0.01	0.06
	(0.03)	(0.03)	(0.03)	(0.02)	(0.01)	(0.03)	(0.03)
Perspective-taking	0.14***	0.001	0.04	−0.004	0.01	0.03	0.02
	(0.03)	(0.03)	(0.03)	(0.02)	(0.01)	(0.03)	(0.03)
Perspective-taking w/ corrective statistic	0.14***	−0.002	0.02	0.03	0.02	0.07*	0.07*
	(0.03)	(0.03)	(0.03)	(0.02)	(0.01)	(0.03)	(0.03)
Observations	2,094	2,094	2,094	2,094	2,094	2,094	2,094
R^2	0.01	0.001	0.003	0.002	0.001	0.003	0.004
Note:							*p<0.05; **p<0.01; ***p<0.001

8.6 Tabular results for all dependent measures (Amount of Opinion Change Coding)

Table 31: Tabular results for all dependent measures

	Dependent variable:						
	change						
	Support for mandatory minimums	Support death penalty	Support felon vote	Support juveniles as adults	Social investment or more policing	Support three strike laws	Attitude on prison Spending
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Intercept	0.13***	0.08***	0.09***	0.07***	0.04***	0.17***	0.08***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Corrective statistic	0.01	−0.01	−0.02	0.02	0.01	0.001	0.01
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)
Perspective-taking	0.06***	−0.002	0.001	−0.004	0.01	0.01	0.01
	(0.02)	(0.01)	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)
Perspective-taking w/ corrective statistic	0.05**	−0.003	0.005	0.03	0.02	0.04*	0.01
	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.01)
Observations	2,094	2,094	2,094	2,094	1,792	2,094	2,094
R^2	0.01	0.001	0.002	0.002	0.002	0.003	0.001
Note:							*p<0.05; **p<0.01; ***p<0.001

8.7 Subgroup Analysis

Table 32: Tabular results by subgroup

	Dependent variable:							
	Manditory Minimum Sentence							
	Males	Females	White	Black	Democrat	Republcian	White Democrat	Black Democrat
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Intercept	0.38***	0.35***	0.34***	0.45***	0.40***	0.33***	0.38***	0.52***
	(0.03)	(0.03)	(0.03)	(0.07)	(0.04)	(0.04)	(0.05)	(0.09)
Corrective statistic	0.004	0.07	0.04	0.02	−0.004	0.11	−0.04	−0.03
	(0.05)	(0.04)	(0.04)	(0.09)	(0.05)	(0.06)	(0.07)	(0.12)
Perspective-taking	0.12**	0.16***	0.14***	0.03	0.07	0.24***	0.05	−0.02
	(0.04)	(0.04)	(0.04)	(0.09)	(0.05)	(0.05)	(0.07)	(0.11)
Perspective-taking w/ corrective statistic	0.12**	0.16***	0.15***	−0.004	0.14**	0.15**	0.18**	−0.10
	(0.04)	(0.05)	(0.04)	(0.09)	(0.05)	(0.05)	(0.07)	(0.11)
Observations	1,087	1,007	1,285	267	845	645	399	190
R^2	0.01	0.02	0.02	0.001	0.01	0.03	0.03	0.01
Note:								*p<0.05; **p<0.01; ***p<0.001

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