

The Hostile Mediator Phenomenon: When Threatened, Rival Partisans Perceive Various Mediators as Biased Against Their Group

Omer Yair*

Abstract

Rival partisans tend to perceive ostensibly balanced news coverage as biased against their respective sides; this is known as the "hostile media phenomenon" (HMP). Yet complaints of hostile bias are common in many other contexts besides the media (e.g., law enforcement and academia). Can something like the HMP occur outside the context of news coverage? And do perceptions of political bias in different contexts share certain similarities? This paper proposes that the HMP should be understood as a specific case of a more general *hostile mediator phenomenon*, where rival partisans perceive various public institutions and organizations that are expected to be neutral as biased against their respective sides. The paper starts by presenting a theoretical framework according to which partisans' bias perceptions are affected by the threat to the power and status of their ingroup posed by a mediator's actions. Evidence from three studies ($N=4,164$) shows that members of rival ideological camps in Israel perceived the Israeli Attorney General and the Israeli police to be biased against their respective camps. An additional study ($N=2,172$) shows that both Democrats and Republicans perceived the social network Facebook to be biased against their side. Moreover, an embedded, pre-registered survey experiment buttresses the causal claim that ingroup-threatening information increases perceptions of hostile bias. The implications of these findings for our understanding of people's bias perceptions, as well as for citizens' trust in public institutions and democratic stability more generally, are then discussed.

Keywords: Bias perceptions, hostile media phenomenon, group threat, survey experiment

Word count: 6,573

Forthcoming, Public Opinion Quarterly

* The Federmann School of Public Policy, Hebrew University of Jerusalem (email: omer.yair@mail.huji.ac.il). I wish to thank Yoav Dotan, Matt Graham, Leonie Huddy, Lilach Nir, Ben Tappin, Yariv Tsfati, Chagai Weiss, three anonymous reviewers, the editors of *Public Opinion Quarterly*, and seminar participants at the Hebrew University of Jerusalem and Tel Aviv University for their helpful comments and suggestions. I also thank Noam Gidron, Guy Grossman, Liran Harsgor, Brian Schaffner, Lior Sheffer, and Alon Yaker for their help, and especially Mark Peffley and Raanan Sulitzeanu-Kenan, for their helpful suggestions and enormous help.

Rival partisans tend to perceive ostensibly balanced news coverage as biased against their respective sides; this is known as the "hostile media phenomenon" (HMP) (Vallone, Ross, and Lepper 1985). Yet, notably, partisans routinely complain of hostile bias in many contexts besides the media, claiming that *various* public institutions and organizations, e.g., law enforcement agencies or the judiciary, are biased against their side. This begs the questions: Does the HMP apply beyond the context of news coverage? And do perceptions of political bias in different contexts and institutions share certain similarities? If so, this could improve our understanding of the HMP and, more generally, of people's bias perceptions.

This paper proposes that the HMP can be understood as a specific case of a more general *hostile mediator phenomenon*, with rival partisans perceiving actions of various entities and public institutions that are expected to be politically neutral, termed here "mediators," as biased against their respective sides. Importantly, it is theorized that the hostile mediator phenomenon is likely to occur when partisans of rival groups believe that the actions of a specific mediator pose a threat to the social standing and/or hold on power of the partisans' ingroup.

The paper starts by briefly presenting the HMP literature. A theoretical framework is then outlined according to which potential threats to one's political ingroup from "neutrality-bound" mediators affect partisans' perceptions of bias vis-à-vis those mediators—the Threat Theory of Bias Perceptions. Next, evidence from two studies conducted in Israel is provided. These studies show that members of two rival ideological camps in Israel considered the Israeli Attorney General to be biased against their respective camps. An embedded, pre-registered survey experiment provides novel support for the causal claim that threats to a partisan's ingroup affect perceptions of hostile bias. In addition, a third study offers evidence that these two rival ideological camps in Israel also perceived the Israeli police as biased

against their side, and a fourth study shows that in the US both Democrats and Republicans perceived Facebook as hostilely biased.

The main contributions of this paper are twofold. First, the paper replicates the HMP in new contexts, thereby suggesting that, despite clear differences, different "neutrality-bound" mediators also share important similarities. Second, the paper advances a new theoretical account for people's bias perceptions, one that suggests that threats to one's ingroup from the actions of *various* mediators affect perceptions of hostile bias. The discussion concludes by suggesting that these contributions have important implications, not only for our understanding of people's perceptions of bias, but also for the legitimacy of various institutions and gatekeepers of democracy in various polities.

Does the hostile media phenomenon apply to other contexts?

In 1982, Vallone and his colleagues (1985) showed pro-Israeli and pro-Arab Stanford University students nationally televised news coverage of a massacre carried out in two Palestinian refugee camps in Beirut during the Israeli invasion of Lebanon earlier that year. The news coverage was ostensibly neutral, yet the pro-Israeli and pro-Arab students diverged considerably in their evaluations of it: The former considered it strongly biased against Israel, whereas the latter viewed it as strongly biased in favor of Israel. This was the first empirical demonstration of the HMP, whereby partisans from rival sides tend to perceive "ostensibly neutral, even-handed media coverage" as "biased against their side and in favor of their antagonists' point of view" (Perloff 2015, 707).

Since then, many studies have replicated and extended these findings, prompting scholars to suggest that "partisan perceptions of hostile bias appear to be a robust finding across a wide range of issues, partisan groups, and media channels" (Gunther et al. 2012, 441). This literature has also offered several mechanisms for, and moderators of, this

phenomenon (Perloff 2015). Importantly, perceptions of hostile media bias are said to have important consequences, such as reducing trust in the media and political efficacy (Tsfati and Cohen 2005; Perloff 2015), as well as triggering demands for corrections of media content and calls for media regulation (Yair and Sulitzeanu-Kenan 2018).

Nevertheless, it is notable that party supporters and members of various political and ideological groups frequently complain of hostile bias in many contexts besides the media. Indeed, in various countries accusations of political bias have been leveled in recent years against governmental agencies such as the IRS and FBI (Ohlemacher 2013; Clifford 2016); the police and state prosecution (Kubovich and Lis 2017; Halbfinger 2019); international organizations (Wilkinson 2017); judicial bodies (Ynet, 2015); academia (Yair and Sulitzeanu-Kenan 2015); and social media platforms and internet companies such as Facebook, Twitter, and Google (Herrman and Isaac 2016; Nix 2018). Perceptions of political bias in these organizations and institutions are also said to have negative consequences (Yair and Sulitzeanu-Kenan 2015; 2018).

Are there commonalities between the HMP and hostile bias claims in other contexts? And does the HMP apply beyond the context of news coverage? Some scholars have suggested that a phenomenon like the HMP "may be unique to mass media" (Gunther and Schmitt 2004, 66). Yet it is still possible that, under certain conditions, partisans from both rival groups would consider *various* public institutions to be biased against their respective sides. Interestingly, other scholars have also suggested this. In fact, Vallone et al. (1985, 584) themselves noted that "our analysis and the questions it raises may also apply to perceptions of other types of mediation." And Richardson and his colleagues (2008, 1625) suggested that "the same cognitive processes that induce partisans on both sides to perceive bias in the news might impact their attitudes in many other mediation contexts as well," and that "future study is needed to elucidate this issue."

No published work, however, has documented anything similar to the HMP outside the media context. If the HMP indeed extends beyond the media context, such documentation could provide important insights, improving our understanding of people's perceptions of bias in various contexts.

The Threat Theory of Bias Perceptions

To begin with, it is posited that partisans' perceptions of political bias should be understood as part of an ongoing intergroup conflict. In many countries and settings, political groups vie for resources, power, and status. These rival groups compete in environments in which public institutions and entities that are expected to be politically neutral, such as the media, law enforcement agencies, or the judiciary, operate. The *prima facie* social role of these "neutrality-bound" institutions, termed here "mediators," is usually unrelated to this political competition; yet in some cases these mediators become entangled in the political competition, such as when the media cover election campaigns or when the Supreme Court rules on issues with political implications.

Importantly, although these mediators, like sports referees, are expected to be neutral, their actions could affect the fortunes of the political groups involved (e.g., through [un]favorable media coverage or a court ruling).¹ This paper suggests that in such settings,

¹ Granted, some institutions and entities, e.g., partisan media outlets, make little attempt to be politically neutral. And some people might disagree as to whether certain media outlets or the US Supreme Court should be considered neutrality-bound mediators. Such debates are outside the purview of this paper. Plainly, this theory pertains to those institutions and entities that people *expect* to act as neutrality-bound mediators—regardless of whether these institutions act as such in practice—as their neutrality plays a vital role in democratic theory.

partisans are sensitive to *threats*² supposedly posed to their political ingroup by the actions of these mediators.

Specifically, when partisans believe that their ingroup is threatened by such actions they are more likely to claim that the mediator is biased against their group. This is part of "defensive processing" (Gunther et al. 2012), as partisans try to cope with a threat to the ingroup—be that a more "realistic" threat to the ingroup's hold on power or ability to implement desired policies (in line with realist group conflict theory), a more "symbolic" threat to the ingroup's social status and partisans' own self-esteem (in line with social identity theory), or both³—by questioning the conduct, credibility, and neutrality of the mediator (relatedly, see Hartmann and Tanis 2013). And this sense of threat, which could also be bolstered by political elites' messages emphasizing the threat to the ingroup, renders partisans more likely to claim that the mediator is hostilely biased.

One important implication of this Threat Theory of Bias Perceptions is that when both rival partisans consider certain mediators and their actions to be threatening to their respective sides, it is more likely that members of both rival political groups will perceive those mediators as hostilely biased. Such a phenomenon of rival partisans perceiving hostile bias in a neutrality-bound mediator, termed here the *hostile mediator phenomenon*, may occur in a media context, as manifested in the HMP, but it can also occur in various non-media contexts in which mediators operate.

This Threat Theory is buttressed by findings showing that when there is a clear winner in the political competition, such as when one political group enjoys overwhelming public support (Hartmann and Tanis 2013) or when a party is very likely to win an upcoming

² Following Stephan, Ybarra, and Morrison (2009, 43), in this paper "threat" means something that can cause harm.

³ For a review of various types of group threats, see Riek, Mania, and Gaertner (2006).

election (Duck, Terry, and Hogg 1998; Huge and Glynn 2010), partisans of the popular/winning group are much less likely than those in the unpopular/losing group to perceive media coverage as hostilely biased. That is, when partisans feel less threatened by the actions of neutrality-bound mediators, they are less likely to perceive hostile bias. In contrast, when there is a lot on the line for partisans—e.g., when no political camp can be assured of victory in an upcoming election for in war (Vallone, Ross, and Lepper 1985)—we are more likely to see the HMP and the hostile mediator phenomenon more generally.

Additional, indirect support for the purported Threat Theory account comes from studies that show that the "reach," or level of exposure, of an ostensibly balanced news article affects bias perceptions: The more exposure an article is expected to have, and consequently the greater its potential influence, the more that article is considered by rival partisans to be biased against their ingroup (e.g., Gunther and Schmitt 2004; Gunther et al. 2012). These findings are congruent with the Threat Theory in that an ostensibly balanced news article can pose a greater threat to partisans' ingroup when it is expected to reach a large audience than when its audience is small. Indeed, when an article is clearly favorable to the partisans' ingroup, its "reach" does not affect perceptions of bias (Gunther et al. 2012), arguably since a clearly favorable article is not threatening.

Importantly, the Threat Theory suggests that outside the media context, actions of neutrality-bound mediators that have substantial influence are likely to cause more hostile bias accusations than actions without major consequences. For example, opening and closing a criminal investigation against a presidential candidate two weeks before the election (Clifford 2016) will likely result in more bias accusations than similar actions against, say, an

unknown campaign staff member.⁴ The same goes for actions when one political group is almost certain to win the election compared to actions when there is no clear favorite.

Granted, in many cases the actions of neutrality-bound mediators will be clearly favorable to one political group and unfavorable—and potentially threatening—to the rival group. In these cases, such as when rival partisans encounter a clearly one-sided news article (e.g., Gunther et al. 2001) or, say, when a law enforcement agency investigates only politicians from a certain political camp, we are likely to see only one side accusing the mediator of hostile bias. Following the Threat Theory, it is when *both sides* feel threatened by the actions of the neutrality-bound mediators that we are likely to witness a hostile mediator phenomenon.

To be clear, this is not to suggest that the Threat Theory account is the only explanation of people's perceptions of political bias. Various other factors could affect these perceptions, including the mediator's political affiliation (Turner 2007), cues from elites (Smith 2010), and partisan-motivated reasoning (Yair and Sulitzeanu-Kenan 2015). The argument is merely that ingroup threats increase perceptions of hostile bias.

Following the Threat Theory of Bias Perceptions, this paper offers one testable hypothesis:

H1: Exposure to ingroup-threatening information will increase partisans' perceptions that a neutrality-bound mediator is biased against the ingroup.

As a more general research question, the paper also asks whether the hostile mediator phenomenon applies outside the media context:

⁴ In the case of the Israeli Attorney General reported below, investigating a little-known right-wing politician for corruption would likely have resulted in fewer bias accusations than investigating Prime Minister Netanyahu.

ROI: Do rival partisans perceive neutrality-bound mediators as biased against their respective camps outside the media context?

In what follows, evidence that both supports the hypothesis and answers the research question is presented. Observational data from four studies is used to answer the research question, and a survey experiment is utilized to support *H1*. Specifically, two studies of Israelis' attitudes toward the Israeli Attorney General (IAG) and his decisions in connection with the investigation of Prime Minister (PM) Benjamin Netanyahu show that members of two rival ideological camps perceived the IAG as hostilely biased. An embedded survey experiment in the second study provides support for *H1*, and evidence of a hostile mediator phenomenon in two additional case studies in the US and Israel is provided in the online appendix.

The Israeli Attorney General and the Netanyahu investigation

In Israel, the Attorney General, who heads the prosecution and serves as the chief legal advisor to the Government, has the sole authority to open criminal investigations of politicians, and it is he/she who ultimately decides whether to indict them. The IAG, who is appointed by the ruling Government for a single six-year term—on the recommendation of an independent committee headed by a former Supreme Court justice—is considered an important gatekeeper of democracy and is expected to employ impartial and nonpartisan judgment in his/her decisions (Dotan 2018, 717–718). Importantly, such decisions can have significant political implications. A case in point is the current IAG, Avichai Mandelblit, and his decisions regarding the criminal investigation of PM Netanyahu.

Starting in late 2016, with Mandelblit's approval, Netanyahu, the head of the Likud party and of the ruling right-wing coalition, was investigated on charges of corruption. The

investigation, which was reported extensively in the media, soon became a highly important (and polarizing) political issue in Israel. Eventually, in November 2019, Mandelblit, who had been appointed by the Government headed by Netanyahu in early 2016, decided to formally indict Netanyahu on three corruption charges (Bob 2019).

Importantly, the Netanyahu investigation and indictments were considered to have grave political implications: Many rightists feared that the investigation, and later the indictments, would hurt the right-wing coalition's chances of staying in power, while many leftists believed the investigations and indictments would force Netanyahu to step down, enabling a change of government (e.g., Globes 2017). Accordingly, the IAG's decisions were considered to have important implications for both rival camps.

Overall, some of Mandelblit's decisions were considered unfavorable to Netanyahu, including his initial approval of the investigation against Netanyahu and his decision to indict Netanyahu, subject to a hearing, just weeks before the April 2019 national election (Azulay and Zimuki 2019). In contrast, some of Mandelblit's actions were considered favorable to Netanyahu, such as Mandelblit's initial unwillingness to formally investigate Netanyahu for corruption and his decisions not to investigate Netanyahu's conduct in two other possible cases of corruption (Misgav 2019).

Accordingly, it was expected that in a context in which some of the IAG's decisions had hurt Netanyahu and some had helped him, and where Israelis from rival ideological camps feared that some of these decisions had hurt their chances of winning the next election, both rightists and leftists would perceive the IAG as hostilely biased—a hostile mediator phenomenon. Indeed, between 2016 and 2019 many leftists, laypeople and political elites alike, accused Mandelblit of covering up for Netanyahu and dragging his feet with regard to the investigation (Hakmon 2017; Misgav 2019), while many laypeople and political elites on

the right accused Mandelblit of politically motivated persecution of Netanyahu (Hovel 2019; Levi 2019).

Overview of the two Israeli Attorney General studies

Two studies ($N=3,133$) were conducted with the intention of documenting a hostile mediator phenomenon in Israelis' attitudes toward the IAG. In both studies only Jewish Israelis, members of the ethnic majority group in Israel, are included in the analyses.⁵ Study 1 served as a preliminary test of the main expectation—intended to answer *RQ1*—while Study 2 sought to replicate the results of Study 1 and provide causal evidence supporting the Threat Theory.

Study 1

A total of 1,932 Jewish Israelis answered an online survey. They were recruited by Midgam Panel, a company that operates a large opt-in internet panel in Israel, with panelists receiving gift coupons in exchange for answering surveys. The sample is not representative of the Jewish Israeli population, as it contains more young people, college-educated individuals, and right-wing voters than the population at large. Nonetheless, the sample is diverse with regard to various demographic and political variables: The average age is 41.6 ($SD=13.3$) and the percentage of women is 49.8. Those who identified as ideologically right (6–10 on a 0–10 ideological self-placement item) comprise 65.3% of the sample; centrists (5 on that item) comprise 15.6%; and leftists (0–4 on that item) comprise 20.1%. The survey was fielded on April 4–8, 2019, shortly before the April 9 national election.

In the survey, respondents reported their vote choice and ideological self-placement, as well as various unrelated items. They were then asked about the IAG's bias. The vote

⁵ For more information on the samples, see online appendix section A.

intention item was used to create three voting blocs: voters for left-wing parties (11.8% of the sample), center parties (26.4%), and right-wing parties (47.1%). A fourth group (*Other*) included undecided voters and respondents who did not intend to vote (14.8%).⁶

The dependent variable, designed to examine the existence of a hostile mediator phenomenon, asked whether Attorney General Mandelblit was biased in favor of PM Netanyahu, biased against Netanyahu, or unbiased (neutral). The item was followed by a nine-point scale anchored by 1=*Biased in favor of Netanyahu*; 5=*Neutral*; and 9=*Biased against Netanyahu*.⁷ This item is similar to bias items used in previous HMP studies (e.g., Vallone et al. 1985; Gunther and Schmitt 2004). The mean result for the entire sample was 5.37 ($SD=2.00$), i.e., slightly biased against Netanyahu.

With Netanyahu heading the right-wing coalition and considered the leader of the right, it was expected that leftists would consider the IAG biased in favor of Netanyahu, and rightists, biased against Netanyahu. There were no clear expectations regarding centrists, other than that their bias evaluations would be somewhere between those of leftists and rightists.

Results of Study 1

As expected, rightists and leftists diverged considerably in their evaluations of the IAG's bias, with both groups considering him biased against their respective camps.⁸ Rightists considered the IAG biased against Netanyahu ($M=6.19$; $SD=2.13$), whereas leftists considered him

⁶ Online appendix section C details the party bloc classification in Studies 1–2.

⁷ A "don't know" option was also available. Those who chose it (14.7%) were removed from the analyses.

⁸ As in many previous HMP papers, all results (observational and experimental) are unweighted.

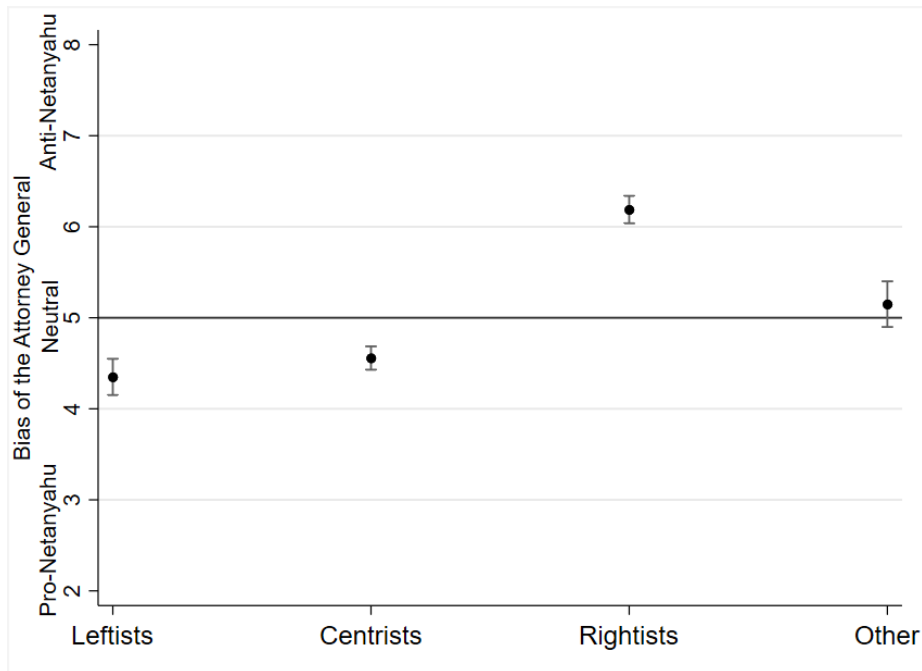
biased in favor of Netanyahu ($M=4.35$; $SD=1.44$). Both of these estimates are significantly different from the neutral score of 5: rightists: $t(770)=15.51$; leftists: $t(202)=-6.44$; $ps<.001$ (two-tailed tests throughout, unless noted otherwise). Interestingly, centrists also considered the IAG biased in favor of Netanyahu ($M=4.56$; $SD=1.40$), arguably since the main contest before the April 2019 elections was between the right-wing bloc and the center-left bloc. The centrists' evaluations also differed significantly from the neutral score: $t(460)=-6.77$; $p<.001$. Respondents in the *Other* group considered the IAG unbiased ($M=5.15$; $SD=1.86$), with this estimate insignificantly different from the neutral score: $t(213)=1.18$; $p=.241$. Figure 1A shows these results graphically.

An ANOVA test confirmed that the three voting blocs (excluding the *Other* group) differed significantly in their IAG bias evaluations ($F(2,1434)=153.5$; $p<.001$; $\eta^2=.177$). A Scheffe post-hoc test showed that the differences between rightists and leftists and between rightists and centrists were statistically significant at $p<.001$. The leftists-centrists difference was insignificant ($p=.404$). These results are arguably the first demonstration of the hostile mediator phenomenon outside of the media context.

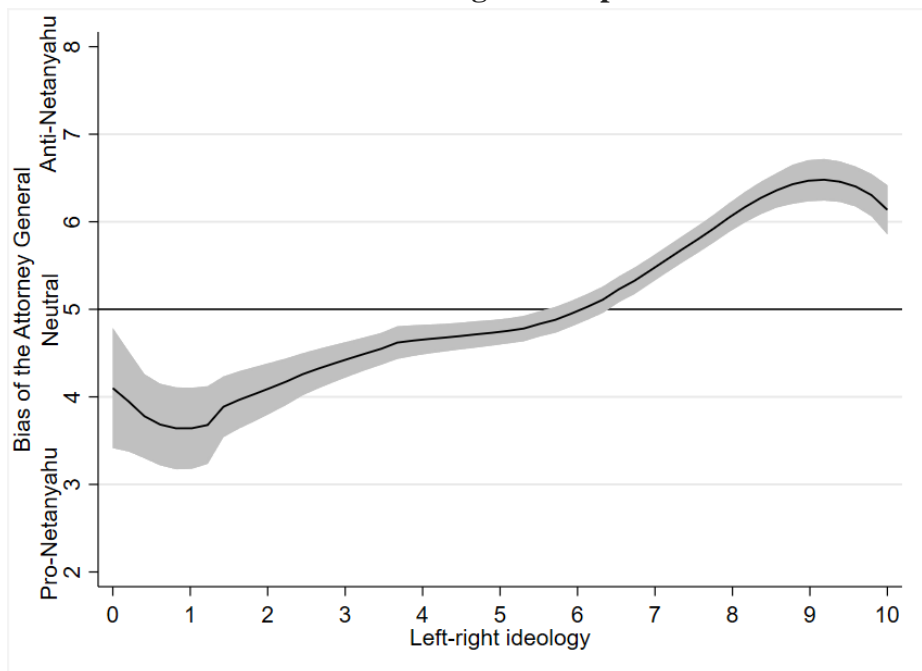
Previous HMP studies have shown that those who are politically involved and those who feel a strong attachment to their political group are more likely to exhibit the HMP (e.g., Eveland and Shah 2003). As a partial test of this idea, this study examined whether respondents' ideological extremity predicts IAG bias evaluations. Figure 1B shows bias evaluations across the 11-point ideological self-placement item, using a cubic local polynomial smoothing curve. Although the trend is not entirely linear,⁹ it is clear that ideological extremity among both leftists and rightists positively correlates with hostile bias perceptions.

⁹ Note that only 20 respondents who self-categorized as 0 (extreme left) answered the IAG bias item.

Figure 1. Study 1: Perceptions of bias of the Attorney General
Panel A: Across voting blocs



Panel B: Across continuous ideological self-placement



Note: Whiskers (Panel A) and gray shades (Panel B) denote 95% confidence intervals. The solid line on the y-axis denotes a neutral score of 5. In Panel A the x-axis shows the three voting blocs (and the *Other* group); in Panel B it shows respondents' ideological self-placement (cubic local polynomial smoothing curve employed).

Overall, these results provide evidence of a hostile mediator phenomenon in Israelis' evaluations of the IAG. Nevertheless, this study has several limitations. First, unlike many

previous HMP studies, in which respondents were exposed to the same news article before evaluating the article, here it is unclear what respondents had been exposed to regarding the IAG's decisions in the Netanyahu investigation. In 2019, political elites from both sides were vocal in their critique of the IAG (Levi 2019; Misgav 2019); and given that various news outlets in Israel cater to different political constituencies (e.g., Shultziner and Stukalin 2019; Grossman, Margalit, and Mitts 2020), respondents from different ideological groups may have had different considerations in mind when answering the IAG bias item. This issue was addressed in Study 2. Second, the findings from Study 1 are entirely observational. Study 2 thus attempted to buttress the causal claim suggested by the Threat Theory with an experimental manipulation of ingroup threat.

Study 2

A total of 1,201 Jewish Israelis respondents, again recruited by Midgam Panel, participated in an online survey. This sample is not representative and skews similarly to the sample in Study 1, but it is diverse with regard to various demographic and political variables: $M_{age}=42.4$; $SD_{age}=15.5$; 51.7% female. Rightists (5–7 on a 1–7 ideological self-placement item) comprise 55.3% of the sample; centrists (4 on that item) comprise 22.3%; and leftists (1–3 on that item) comprise 22.4%. The survey was fielded on September 4–9, 2019, shortly before the September 17 (repeat) national election.

Respondents first answered questions about their ideological self-placement and vote intention. They were then randomly assigned to one of three experimental conditions. In the two treatment conditions, respondents read a short (~140-word) news article and answered several questions about it. The articles (described below) presented respondents with either ingroup-threatening or ingroup-reassuring information, in order to test the effect of ingroup-threatening information on bias evaluations. Respondents in the control group did not read an

article. All respondents then answered the IAG bias item, answered several demographic questions, and finally were debriefed.

Respondents' vote intention was used to create three voting blocs: voters for left-wing parties (12.9% of the sample), center parties (25.4%), and right-wing parties (46.1%). A fourth group (*Other*) included undecided voters and respondents who did not intend to vote (15.6%).

The IAG bias question was changed in this study. Just as respondents in many HMP studies read the same news article, all respondents were exposed to the same four decisions made by the IAG during the previous twelve months in connection with the Netanyahu investigation. Respondents then answered the same nine-point IAG bias item used in Study 1.¹⁰ To avoid deception, respondents were presented with what the author believed were the four most important decisions by the IAG in the previous year. Two of these decisions clearly hurt Netanyahu, one was clearly favorable to him, and the fourth was somewhere in the middle. Thus, respondents were exposed to more decisions that had hurt Netanyahu. Nonetheless, in this study, unlike in Study 1, respondents considered the IAG slightly biased in favor of Netanyahu ($M=4.68$; $SD=2.10$).

The aggregate observational results across all experimental conditions are presented first, followed by a description of the experimental manipulation and the experimental results.

Observational results of Study 2

Rightists and leftists again perceived the IAG as biased against their respective camps:

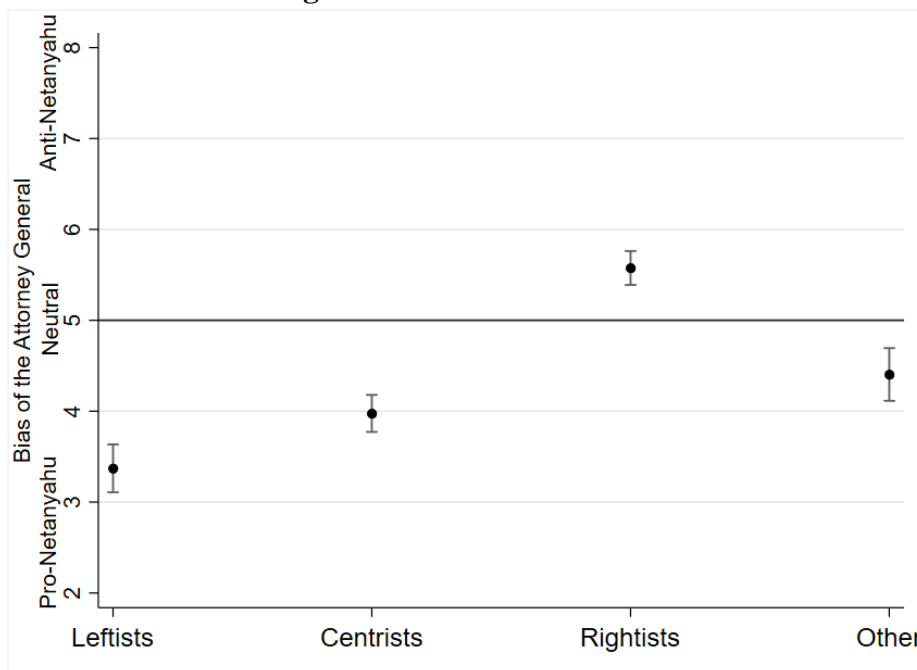
Rightists considered him biased against Netanyahu ($M=5.58$; $SD=2.11$), whereas leftists

¹⁰ See full wording in online appendix section B. Those who chose the "don't know" option (9.9%) were left out of the analyses. "Don't know" rates were not significantly different across the experimental conditions ($\chi^2(2)=2.04$; $p=.361$).

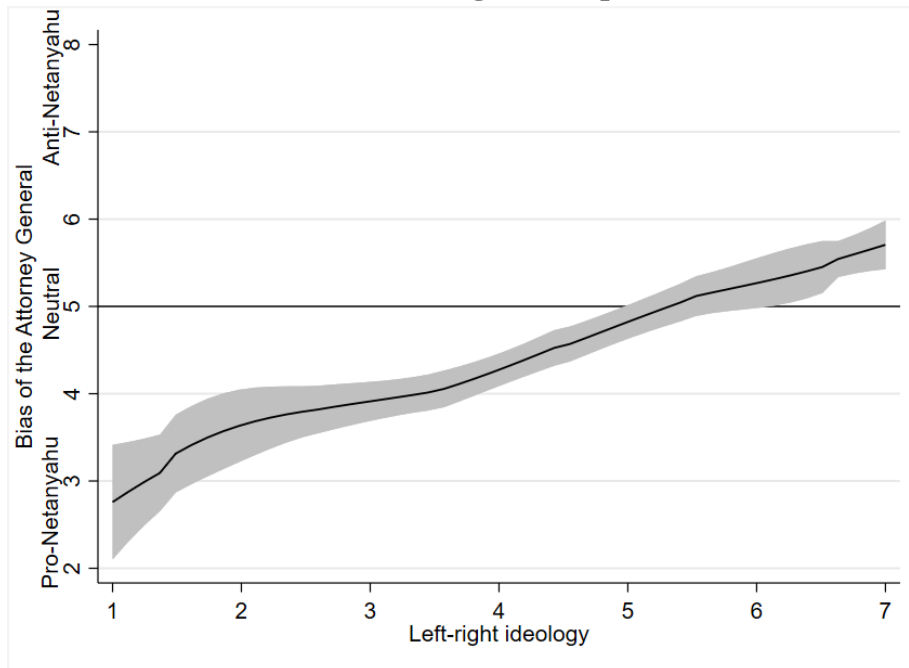
($M=3.37$; $SD=1.62$) and centrists ($M=3.98$; $SD=1.76$) considered him biased in favor of Netanyahu. These three estimates all differ significantly from the neutral score of 5: rightists: $t(494)=6.06$; leftists: $t(147)=-12.22$; centrists: $t(287)=-9.90$; $p<.001$. Respondents in the *Other* group also considered the IAG biased in favor of Netanyahu ($M=4.40$; $SD=1.80$), an estimate significantly different from the neutral score: $t(150)=-4.06$; $p<.001$. Figure 2A shows these results graphically.

An ANOVA test confirmed that the three voting blocs (excluding the *Other* group) differed significantly in their bias evaluations ($F(2,928)=105.6$; $p<.001$; $\eta^2=.185$). A Scheffe post-hoc test further showed the rightists-leftists and rightists-centrists differences to be statistically significant at $p<.001$ (the leftists-centrists difference was significant at $p=.009$).

Figure 2. Study 2: Perceptions of bias of the Attorney General
Panel A: Across voting blocs



Panel B: Across continuous ideological self-placement



Note: Whiskers (Panel A) and gray shades (Panel B) denote 95% confidence intervals. The solid line on the y-axis denotes a neutral score of 5. In Panel A the x-axis shows the three voting blocs (and the *Other* group); in Panel B it shows respondents' ideological self-placement (cubic local polynomial smoothing curve employed).

Bias evaluations across the seven-point ideological self-placement item, using a cubic local polynomial smoothing curve, are shown in Figure 2b. The trend line is almost linear, making it clear that ideological extremity positively correlates with perceptions of hostile bias.

The survey experiment

The pre-registered experiment sought to provide novel support for *HI* and the Threat Theory by exposing respondents to either an ingroup-threatening news article, an ingroup-reassuring article, or no article (control).¹¹

With less than two weeks to go until Election Day—and since elections pose a threat to both a political group's power and "group members' collective social standing" (Huddy,

¹¹ The pre-registration can be found at <http://aspredicted.org/blind.php?x=d8ke35>. Two minor changes from the pre-registration are detailed in online appendix section G.

Mason, and Aarøe 2015, 3)—the two treatment conditions presented results of election polls. In the first condition, *right-wing wins*, respondents read a mock article detailing a recent election poll in which the right-wing bloc, which supported Netanyahu's bid to remain prime minister, was expected to win the election and form a coalition with a majority of Knesset seats (62 out of 120). Although it was a mock article, the results differed only slightly from those predicted by actual polls released at the time.¹² In the second condition, *center-left wins*, a mock article reported a poll showing that the center and left-wing parties were expected to win a total of 61 seats and form the next coalition. Again, the mock poll resembled actual polls.¹³ (For complete wording, see online appendix section B.) Respondents in the control condition did not read any article.

To test *H1*, three variables were created: an *ingroup threat* dummy variable, taking the value 1 if a respondent was assigned to an article with ingroup-threatening information (e.g., rightists assigned to the *center-left wins* condition) and 0 otherwise; an *ingroup reassurance* dummy variable, taking the value 1 if a respondent was assigned to an article with ingroup-reassuring information (e.g., rightists assigned to the *right-wing wins* condition) and 0 otherwise; and a *control* dummy variable, with respondents from all three voting blocs assigned to the control condition. (For balance tests, see online appendix section D.)

Importantly, the treatments did not mention the IAG or any of his decisions in connection with the Netanyahu investigation. Presenting respondents with mock articles informing them that the IAG was expected to either formally indict Netanyahu on several charges or drop all charges against Netanyahu would have made it possible to test the effects

¹² For example, while the survey was in progress a poll showed the right-wing bloc was expected to win 60 seats (<https://www.maariv.co.il/elections2019/news/Article-717467>).

¹³ For example, early in the campaign, a poll showed the center-left bloc was expected to win 61 seats (<https://www.maariv.co.il/elections2019/news/Article-705537>).

of such information. But it would have entailed a blunt deception, as well as exposing different respondents to different IAG decisions regarding the investigations, likely altering respondents' knowledge and confounding the effects of ingroup threat/reassurance. And with the treatments not mentioning the IAG, one can be more confident that it is ingroup threat that affects hostile bias perceptions.

Several pre-registered manipulation checks were conducted. First, after reading the article, respondents in the two treatment conditions answered a factual question, namely, which voting bloc was likely to form the next Government according to the article. Overall, 91.4% answered this item correctly. Respondents were then asked about their emotional reaction while reading the article, with respect to four emotions (cf. Huddy, Mason, and Aarøe 2015): anger, concern, enthusiasm, and satisfaction. These emotional reactions only indirectly tap a sense of ingroup threat (or reassurance), but they nonetheless serve as the substantive manipulation check, aiming at capturing a sense of ingroup threat (or reassurance). Respondents were asked to indicate their reaction, on a five-point scale, from "I did not feel any [emotion]" to "I felt a very great degree of [emotion]." As expected, respondents in the *ingroup threat* condition reported feeling more anger and concern and less enthusiasm and satisfaction than those in the *ingroup reassurance* condition ($ps < .001$; $\eta^2s > .21$) (for complete results, see online appendix section E).

A *hostile bias* measure—the main dependent variable in the experimental results—was created by transforming the original nine-point IAG bias item. In this *hostile bias* measure, higher values (closer to 9) indicate more hostile bias by the IAG against one's ingroup, lower values (closer to 1) indicate more favorable bias, and 5 indicates neutrality. Overall, respondents considered the IAG to have a slight hostile bias ($M=5.88$; $SD=1.97$).

The pre-registered hypothesis predicted that respondents in the *ingroup threat* condition would consider the IAG more hostilely biased than respondents in the *ingroup*

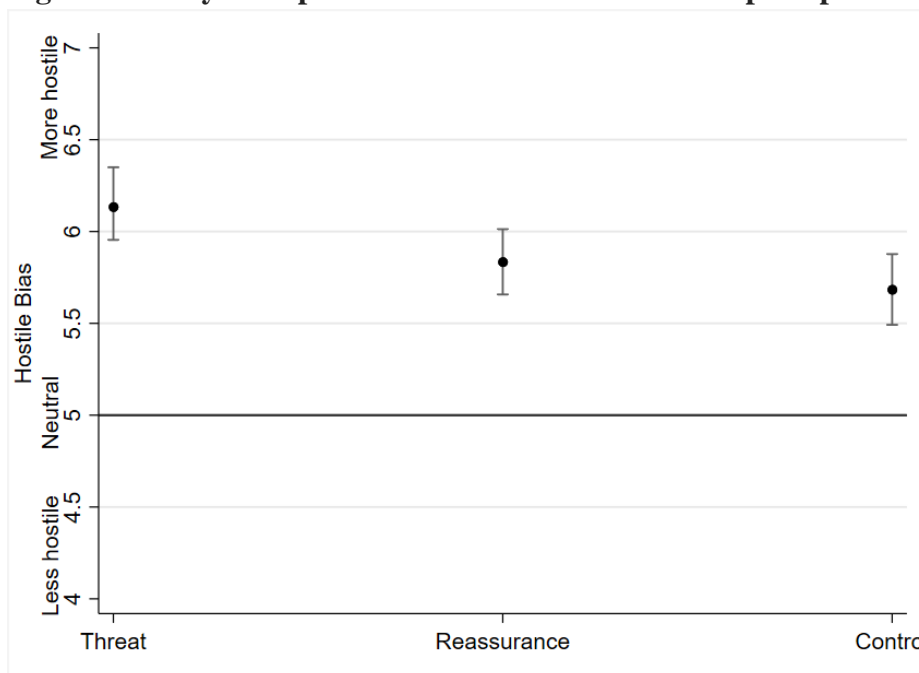
reassurance condition. The only expectation regarding respondents in the control condition was that their hostile bias evaluations would be somewhere between those of the respondents in the two treatment groups.

Experimental results of Study 2

As expected, respondents exposed to ingroup threat ($M=6.13$; $SD=1.89$) considered the IAG more hostilely biased than respondents exposed to ingroup reassurance ($M=5.83$; $SD=1.97$) (diff=.30; $t(628)=1.94$; $p=.026$, one-tailed test).¹⁴ Figure 3 shows these results graphically.

The results of two OLS regression models predicting the *hostile bias* item, including the pre-registered model (Model 2), are shown in Table 1 (in both models *ingroup reassurance* is the reference category). The results show that ingroup threat causally affects perceptions of hostile bias.

Figure 3. Study 2: Experimental results—Hostile bias perceptions



Note: Whiskers denote 90% confidence intervals. The y-axis ranges from 1 to 9; higher values denote more hostile bias perceptions. The solid line on the y-axis denotes a neutral score of 5.

¹⁴ In keeping with the pre-registration, one-tailed tests were used to analyze the experimental results.

Table 1 also shows the results of non-parametric permutation tests (not pre-registered), with 50,000 re-randomizations. The main results are robust to the presence of influential observations in the data (Young 2019) and are unlikely to be due to pure chance. Online appendix section F gives the results of several robustness tests; overall, the substantive results remain unchanged. That section also shows that the treatment effect is similar in the two rival camps.

Table 1. Study 2: Experimental results—Hostile bias perceptions

Dependent variable	(1) Hostile bias perceptions	(2) Hostile bias perceptions
Ingroup threat	0.30 (0.15)*	0.29 (0.15)*
Control	−0.15 (0.16)	−0.16 (0.16)
Vote for a right-wing party		−0.76 (0.17)***
Age		0.64 (0.25)**
Female		−0.17 (0.13)+
Religiosity		0.66 (0.25)**
Level of education		0.30 (0.20)+
Constant	5.83 (0.11)***	5.57 (0.25)***
One-tailed permutation test <i>p</i> -value [<i>SE</i>] of the <i>ingroup threat</i> coefficient	0.0237 [0.0007]	0.0240 [0.0007]
Observations	931	928
R-squared	0.01	0.05

Note: Robust standard errors in parentheses; ****p*<0.001, ***p*<0.01, **p*<0.05, +*p*<0.1 (one-tailed test). The *ingroup reassurance* group is the reference category. All regressors vary from 0 to 1. The *religiosity* and *level of education* variables are four-category items (for more information on the control variables, see online appendix section B). The permutation test *p*-value and standard errors were obtained with 50,000 re-randomizations, using the "ritest" Stata package (Heß 2017).

The effect of ingroup threat compared to ingroup reassurance is rather small, about 15% of a standard deviation ($\eta^2=.006$). Such an effect, however, is not unreasonable given

that the treatment did not mention the IAG and given the prominence of the controversy surrounding the IAG and the Netanyahu investigation. Still, the probability of an *S-type* error, i.e., the probability of an estimate being statistically significant in the wrong direction (Gelman and Carlin 2014) with regard to the *ingroup threat* coefficients in Table 1 is very low—0.03 percent.¹⁵

Respondents in the control condition averaged the lowest level of hostile bias ($M=5.68$; $SD=2.03$). As expected, this estimate is significantly lower than in the *ingroup threat* condition ($p<.003$; $\eta^2=.013$); unexpectedly, it is slightly lower than in the *ingroup reassurance* condition, although this difference is statistically insignificant ($p=.172$; $\eta^2=.001$).

To sum up, Study 2 replicates a hostile mediator phenomenon in Israelis' attitudes toward the IAG, and the experimental manipulation provides novel causal evidence supporting the Threat Theory: ingroup-threatening information increases perceptions of hostile bias.

Additional evidence of a hostile mediator phenomenon

Two studies found additional evidence of a hostile mediator phenomenon outside the media context: (i) rival partisans in the US perceived Facebook to be biased against their party; (ii) the rival ideological camps in Israel perceived the Israeli police to be hostilely biased. These studies are reported in online appendix sections H and I, respectively.

Discussion

The results of three studies show that supporters of two rival ideological camps in Israel considered the Israeli Attorney General (IAG) and the Israeli police to be biased against their respective camps. A fourth study showed that Democrats and Republicans in the US both

¹⁵ Estimates obtained using the "retrodesign" Stata package.

perceived Facebook as hostilely biased. These results are arguably the first demonstration of a phenomenon similar to the hostile media phenomenon (HMP) (Vallone, Ross, and Lepper 1985) outside the media context. In this *hostile mediator phenomenon*, rival partisans consider the actions of various public institutions and organizations, including but not restricted to the mass media, to be biased against their respective sides.

This paper contends that partisans' evaluations of various neutrality-bound mediators, such as the media, the judiciary, and law enforcement agencies, are likely to be affected by the actions of these mediators in a context of political rivalry. Moreover, the paper advances a novel Threat Theory of Bias Perceptions according to which bias perceptions are at least partially explained by threats to the power and social standing of one's political ingroup. The results of a pre-registered survey experiment in Study 2 provide novel support for this theoretical account.

The literature has generally not considered the possibility that group threats contribute to the HMP (but see Duck, Terry, and Hogg 1998; Hartmann and Tanis 2013). The current paper suggests that the demonstrated effects of the "reach" of a news article (e.g., Gunther and Schmitt 2004) may be due in part to partisans' concern that an article with more readers could cause more harm to the ingroup than an article with fewer readers. Furthermore, while several mechanisms underlying the HMP have been proposed, such as recalling more incongenial than congenial information in news items (selective recall) and the categorization of more news content as incongenial than congenial (selective categorization) (Perloff 2015), this paper suggests that ingroup threats might also underlie the HMP. These suggestions certainly await further research.

More generally, this paper offers a more comprehensive understanding of people's perceptions of political bias by suggesting that bias perceptions in different contexts (e.g., the media, law enforcement, and academia) share important commonalities. Granted, each

context is unique and has its peculiarities; yet importantly, neutrality-bound mediators in different contexts can affect the competition between rival political groups, and thus can threaten the groups' social standing and their hold on power. This, in turn, affects partisans' evaluations of these mediators and their actions.

An interesting question for future research is whether partisan elites are as affected by a sense of ingroup threat in their bias perceptions as laypeople. Related research has shown that politicians are as prone to decision-making biases as laypeople (Sheffer et al. 2018)—yet elites might feel they have more to lose from the actions of neutrality-bound mediators than the public, resulting in more hostile bias perceptions among elites. And subsequent bias claims from elites might then increase perceptions of hostile bias among laypeople (Smith 2010). This issue awaits further research.

Perhaps the most important implication of these findings concerns citizens' attitudes toward public institutions and entities that are indispensable for maintaining democracy and the rule of law (see also Peffley and Hurwitz 2010; Levitsky and Ziblatt 2018). In recent years, various gatekeepers of democracy in many countries have become entangled in issues with clear political implications (e.g., Levitsky and Ziblatt 2018). Previous studies have suggested that perceptions of bias reduce trust in public institutions (e.g., Tsfati and Cohen 2005). If so, this paper's findings suggest that citizens' trust in these gatekeepers and the latter's perceived legitimacy are likely to decline when the institutions are involved in political controversies (see also Gibson and Nelson 2017; Strother and Gadarian 2019), especially in times of extreme political and social polarization (e.g., McCoy and Somer 2019). Such a decline might lead to public indifference to—or even support for—attempts to curb and weaken these institutions, which could embolden populist leaders to try to make such attempts, resulting in the erosion and destabilization of democracy (see Levitsky and Ziblatt 2018, especially chapter 8).

Public officials working for these neutrality-bound mediators must therefore bear in mind that when they become entangled in political competition, they might pose a threat to certain political groups, likely resulting in criticism, accusations of bias, and subsequently a decline in trust among political group members. These officials should consider ways of mitigating perceptions and concerns of bias in advance, such as increased transparency and public accountability (Yair and Sulitzeanu-Kenan 2015, 503).

This paper is not without limitations. First, all four studies used one item to tap perceptions of bias. While doing so is not uncommon in the literature (e.g., Eveland and Shah 2003), HMP studies have usually used several items to tap perceptions of bias in media coverage, thereby examining various dimensions of bias (e.g., Gunther and Schmitt 2004). Future studies could thus utilize additional bias items.

Second, the survey experiment did not directly examine the effects of exposing respondents to the IAG's decisions regarding the Netanyahu investigation; rather, it manipulated an ingroup threat or reassurance to respondents' political ingroup. Examining the direct effects of a neutrality-bound mediator's actions is an important task for future research, and panel studies tapping respondents' perceptions of neutrality-bound mediators before and after they act could provide important insights (relatedly, see Christenson and Glick 2019).

Third, the paper's factual manipulation check was successful. While the paper stressed the importance of ingroup threat, however, the experiment's substantive manipulation checks (self-reported emotional reactions) might not have accurately tapped a sense of ingroup threat (or reassurance) among respondents assigned to the treatment conditions, but only a "generalized positive and negative affect" (Rhodes-Purdy, Navarre, and Utych 2020). More importantly, the experimental treatment may have manipulated factors related to but distinct from threat, such as anger, sadness, or disappointment, and those factors, rather than threat, might have affected bias perceptions.

Although that is possible, previous studies have shown that (i) exposure to information concerning an ingroup loss in an election—as in the experiment in the present paper—increased respondents' levels of the stress hormone cortisol (Blanton, Strauts, and Perez 2012); and (ii) exposure to a threat to the ingroup's status increased respondents' blood pressure (Scheepers and Ellemers 2005). Since these physiological indicators are reliable proxies for reactions to threatening scenarios, much more than for feelings of anger or sadness, it seems safe to suggest that this paper's experimental treatment indeed increased the sense of threat, even if it also triggered related factors. That said, future studies, possibly using physiological indicators rather than merely self-reported survey responses, are needed to validate the impact of ingroup threats on bias perceptions.

These limitations notwithstanding, the results provide strong evidence for the existence of a hostile mediator phenomenon. Future studies of this phenomenon could help us better understand people's bias perceptions in various contexts.

References

- Azulay, Moran, and Tova Zimuki. 2019. "Netanyahu Attacks Mandelblit Following an Interview: 'Unprecedented in the History of the Israeli Legal System.'" Ynet. <https://www.ynet.co.il/articles/0,7340,L-5449538,00.html>.
- Blanton, Hart, Erin Strauts, and Marisol Perez. 2012. "Partisan Identification as a Predictor of Cortisol Response to Election News." *Political Communication* 29 (4): 447–60.
- Bob, Yonah Jeremy. 2019. "Benjamin Netanyahu Charged with Bribery, Fraud, Breach of Trust." The Jerusalem Post. <https://www.jpost.com/Israel-News/Benjamin-Netanyahu-charged-with-bribery-fraud-breach-of-trust-608647>.
- Christenson, Dino P., and David M. Glick. 2019. "Reassessing the Supreme Court: How Decisions and Negativity Bias Affect Legitimacy." *Political Research Quarterly* 72 (3): 637–52.
- Clifford, Michelle. 2016. "Charge of Partisanship Is a Dangerous One for FBI Director Comey." SkyNews. <http://news.sky.com/story/charge-of-partisanship-is-a-dangerous-one-for-fbi-director-comey-10638021>.
- Dotan, Yoav. 2018. "Impeachment by Judicial Review: Israel's Odd System of Checks and Balances." *Theoretical Inquiries in Law* 19 (2): 705–44.
- Duck, Julie M., Deborah J. Terry, and Michael A. Hogg. 1998. "Perceptions of a Media Campaign: The Role of Social Identity and the Changing Intergroup Context." *Personality and Social Psychology Bulletin* 24 (1): 3–16.
- Eveland, William P. Jr., and Dhavan V. Shah. 2003. "Factors The Impact of Individual and Interpersonal on Perceived News Media Bias." *Political Psychology* 24 (1): 101–17.
- Gelman, Andrew, and John Carlin. 2014. "Beyond Power Calculations: Assessing Type S (Sign) and Type M (Magnitude) Errors." *Perspectives on Psychological Science* 96 (6): 641–51.

- Globes. 2017. "Netanyahu to Channel 20: There Is a Campaign of the Left and the Media to Oust Me." Globes. <https://www.globes.co.il/news/article.aspx?did=1001197217>.
- Grossman, Guy, Yotam Margalit, and Tamar Mitts. 2020. "Media Ownership as Political Investment: The Case of Israel Hayom." https://cpb-us-w2.wpmucdn.com/web.sas.upenn.edu/dist/7/228/files/2020/09/GMM_Sept2020.pdf.
- Gunther, Albert C., Cindy T. Christen, Janice L. Liebhart, and Stella Chia-Yun Chia. 2001. "Congenial Public, Contrary Press, and Biased Estimates of the Climate of Opinion." *Public Opinion Quarterly* 65 (3): 295–320.
- Gunther, Albert C., Stephanie Edgerly, Heather Akin, and James A. Broesch. 2012. "Partisan Evaluation of Partisan Information." *Communication Research* 39 (4): 439–57.
- Gunther, Albert C., and Kathleen Schmitt. 2004. "Mapping Boundaries of the Hostile Media Effect." *Journal of Communication* 54 (1): 55–70.
- Hakmon, Alon. 2017. "A Record-Breaking Demonstration against AG Mandelblit." Maariv. <https://www.maariv.co.il/news/politics/Article-591710>.
- Halbfinger, David M. 2019. "Israel's Netanyahu Indicted on Charges of Fraud, Bribery and Breach of Trust." *The New York Times*. <https://www.nytimes.com/2019/11/21/world/middleeast/netanyahu-corruption-indicted.html>
- Hartmann, Tilo, and Martin Tanis. 2013. "Examining the Hostile Media Effect as an Intergroup Phenomenon: The Role of Ingroup Identification and Status." *Journal of Communication* 63 (3): 535–55.
- Herrman, John, and Mike Isaac. 2016. "Conservatives Accuse Facebook of Political Bias." The New York Times. <http://www.nytimes.com/2016/05/10/technology/conservatives-accuse-facebook-of-political-bias.html>.
- Heß, Simon. 2017. "Randomization Inference with Stata: A Guide and Software." *The Stata*

- Journal* 17 (3): 630–51.
- Hovel, Revital. 2019. “Mandelblit: Claim of Netanyahu Being Persecuted - Nonsense; Nitzan: We Must Expose the Truth.” *Haaretz*.
<https://www.haaretz.co.il/news/law/1.7287885>.
- Huddy, Leonie, Lilliana Mason, and Lene Aarøe. 2015. “Expressive Partisanship: Campaign Involvement, Political Emotion, and Partisan Identity.” *American Political Science Review* 109 (1): 1–17.
- Huge, Michael, and Carroll J. Glynn. 2010. “Hostile Media and the Campaign Trail: Perceived Media Bias in the Race for Governor.” *Journal of Communication* 60 (1): 165–81.
- Kubovich, Yaniv, and Jonathan Lis. 2017. “Chair of the Ministry of Interior: Leading Police Investigators Are Leftists.” *Haaretz*. <http://www.haaretz.co.il/news/law/1.3195959>.
- Levi, Liran. 2019. “‘Stop the Persecution’: Hundreds in a Demonstration Supporting Netanyahu in Front of AG’s Home.” *Walla!News*.
<https://news.walla.co.il/item/3315968>.
- Levitsky, Steven, and Daniel Ziblatt. 2018. *How Democracies Die*. New York: Crown.
- McCoy, Jennifer, and Murat Somer. 2019. “Toward a Theory of Pernicious Polarization and How It Harms Democracies: Comparative Evidence and Possible Remedies.” *Annals of the American Academy of Political and Social Science* 681 (1): 234–71.
- Misgav, Uri. 2019. “Mandelblit Decided to Help Netanyahu.” *Haaretz*.
<https://www.haaretz.co.il/opinions/.premium-1.7017752>
- Nix, Naomi. 2018. “Trump Accuses Twitter of Political Bias.” *Bloomberg*.
<https://www.bnnbloomberg.ca/trump-accuses-twitter-of-political-bias-1.1158838>
- Ohlemacher, Stephen. 2013. “Obama Says He Won’t Tolerate Political Bias at IRS.” *Yahoo! News*. <http://news.yahoo.com/obama-says-wont-tolerate-political-bias-irs->

170732604.html.

- Peffley, Mark, and Jon Hurwitz. 2010. *Justice in America: The Separate Realities of Blacks and Whites*. New York: Cambridge University Press.
- Perloff, Richard M. 2015. "A Three-Decade Retrospective on the Hostile Media Effect." *Mass Communication and Society* 18 (6): 701–29.
- Rhodes-purdy, Matthew, Rachel Navarre, and Stephen M. Utych. 2020. "Measuring Simultaneous Emotions: Existing Problems and a New Way Forward." *Journal of Experimental Political Science*. <https://doi.org/10.1017/XPS.2019.35>.
- Richardson, John D., William P. Huddy, and Shawn M. Morgan. 2008. "The Hostile Media Effect, Biased Assimilation, and Perceptions of a Presidential Debate." *Journal of Applied Social Psychology* 38 (5): 1255–70.
- Riek, Blake M., Eric W. Mania, and Samuel L. Gaertner. 2006. "Intergroup Threat and Outgroup Attitudes: A Meta-Analytic Review." *Personality and Social Psychology Review* 10 (4): 336–53.
- Scheepers, Daan, and Naomi Ellemers. 2005. "When the Pressure Is up: The Assessment of Social Identity Threat in Low and High Status Groups." *Journal of Experimental Social Psychology* 41 (2): 192–200.
- Sheffer, Lior, Peter John Loewen, Stuart Soroka, Stefaan Walgrave, and Tamir Sheafer. 2018. "Nonrepresentative Representatives: An Experimental Study of the Decision Making of Elected Politicians." *American Political Science Review* 112 (2): 302–11.
- Shultziner, Doron, and Yelena Stukalin. 2019. "Distorting the News? The Mechanisms of Partisan Media Bias and Its Effects on News Production." *Political Behavior*. <https://doi.org/10.1007/s11109-019-09551-y>.
- Smith, Glen R. 2010. "Politicians and the News Media: How Elite Attacks Influence Perceptions of Media Bias." *The International Journal of Press/Politics* 15 (3): 319–43.

- Stephan, Walter G., Oscar Ybarra, and Kimberly Rios Morrison. 2009. "Intergroup Threat Theory." In *Handbook of Prejudice, Stereotyping, and Discrimination*, edited by Todd D. Nelson, 43–59.
- Strother, Logan, and Shana Kushner Gadarian. 2019. "The Supreme Court in a Polarized Era: Is Legitimacy at Risk?" <https://doi.org/10.2139/ssrn.3426819>.
- Tsfati, Y., and Jonathan. Cohen. 2005. "Democratic Consequences of Hostile Media Perceptions: The Case of Gaza Settlers." *The Harvard International Journal of Press/Politics* 10 (4): 28–51.
- Turner, Joel. 2007. "The Messenger Overwhelming the Message: Ideological Cues and Perceptions of Bias in Television News." *Political Behavior* 29 (4): 441–64.
- Vallone, Robert P., Lee Ross, and Mark R Lepper. 1985. "The Hostile Media Phenomenon: Biased Perception and Perceptions of Media Bias in Coverage of the Beirut Massacre." *Journal of Personality and Social Psychology* 49 (3): 577–85.
- Wilkinson, Tracy. 2017. "At Her Confirmation Hearing, Nikki Haley Decries U.N.'s Position on Israel." Los Angeles Times. <http://www.latimes.com/nation/la-na-pol-haley-un-2017-story.html>.
- Yair, Omer, and Raanan Sulitzeanu-kenan. 2018. "When Do We Care about Political Neutrality? The Hypocritical Nature of Reaction to Political Bias." *PLoS ONE* 13 (5): e0196674.
- Yair, Omer, and Raanan Sulitzeanu-Kenan. 2015. "Biased Judgment of Political Bias: Perceived Ideological Distance Increases Perceptions of Political Bias." *Political Behavior* 37 (2): 487–507.
- Ynet. 2015. "New Report: Political Bias at the Supreme Court." Ynet. <http://www.ynet.co.il/articles/0,7340,L-4668629,00.html>.
- Young, Alwyn. 2019. "Channeling Fisher: Randomization Tests and the Statistical

Insignificance of Seemingly Significant Experimental Results.” *The Quarterly Journal of Economics* 134 (2): 557–98.

**The Hostile Mediator Phenomenon: When Threatened, Rival Partisans Perceive
Various Mediators as Biased against Their Group**

Online Appendix

Section A: Comparison of the samples, descriptive statistics, participation rates, and exclusions in Studies 1–2

Section B: Wording of the questions and text of the experimental vignettes

Section C: Voting bloc classification in Studies 1–2

Section D: Study 2—Balance tests for the experimental conditions

Section E: Study 2—Results of the manipulation checks in Study 2 (emotional responses)

Section F: Robustness tests and additional empirical analyses, Studies 1–2

Section G: Changes from the Study 2 experiment's pre-registration

Section H: Study 3—Americans' attitudes toward Facebook

Section I: Study 4—Israelis' attitudes toward the Israeli police

Section A: Comparison of the samples, descriptive statistics, participation rates, and exclusions in Studies 1–2

Comparison of the samples. Table A1 compares the two samples' demographic and political characteristics with those of Jewish respondents from the 2019 Israeli National Election Study (INES). Overall, the two samples are similar to that in the INES in terms of gender composition and the average of respondents' ideological self-placement. They deviate from the INES sample in the average age of respondents (respondents are younger than those in the INES), their education (more educated than in the INES), religiosity (more secular than in the INES, especially in Study 1), and their vote intention (less likely to be in the *other* category than those in the INES). These results suggest that respondents in these two samples, as in samples of many other online surveys, are younger, more educated, and more engaged in politics.

Descriptive statistics. Table A2 shows the descriptive statistics of the main variables in Studies 1–2.

Participation rates. In both studies the survey company sent out invitations to potential respondents and ended the survey after a preset quota of responses had been filled. Study 1 is based on questions asked in the second round (or wave) of a longitudinal (panel) study that examined unrelated issues. In the first wave, the "participation rate," calculated for non-probability internet panels (AAPOR 2016, 49–50), was 20.8%: The survey company sent out a total of 11,544 invitations to complete the survey, and the survey was ended when 2,400 respondents had completed the survey: $2,400/11,544=0.208$. In the second wave, conducted less than a month later, the survey company sent out invitations to 2,389 of the 2,400 first-wave respondents; 2,003 of them completed the survey, for a 83.8% retention rate ($2,003/2,389=0.838$).

In Study 2, the participation rate was 10.3%: The survey company sent out a total of 11,650 invitations, and the survey was ended when 1,201 respondents¹⁶ had completed the survey: $1,201/11,650=0.103$.

Exclusions. In both studies, the relatively few non-Jewish respondents sampled—72 respondents in Study 1 and 13 in Study 2—were excluded from the analyses. The surveys were administered in Hebrew, which is not the native language of most non-Jewish (mostly Arab) citizens of Israel. Nonetheless, adding these respondents to the analyses has no effect on the observational results in either study or the experimental results in Study 2.

¹⁶ The pre-registered sample size for Study 2 was 1,200. One additional respondent completed the questionnaire before the survey was closed.

Table A1. Comparison of the samples with a nationally representative sample

	Study 1 (April 2019)	Study 2 (September 2019)	INES April 2019 sample (Jewish population)
Age (Mean; <i>SD</i>)	41.6 (<i>13.3</i>)	42.4 (<i>15.5</i>)	48.6 (<i>18.3</i>)
Women (% of sample)	49.8%	51.2%	49.7%
College education (% of sample)	59.0%	48.4%	44.8%
Religious affiliation / observance of religious tradition¹⁷			
Secular / Not at all	59.6%	28.2%	20.2%
Traditional / A little	17.9%	39.6%	47.8%
Modern Orthodox / A lot	13.2%	14.1%	19.4%
Ultra-Orthodox / All of it	9.3%	18.1%	12.6%
Vote intention¹⁸			
A right-wing party	47.1%	46.1%	37.1%
A center party	26.4%	25.4%	22.6%
A left-wing party	11.8%	12.9%	8.7%
Other (undecided/don't know, etc.)	14.8%	15.6%	31.7%
Ideological self-placement (mean; <i>SD</i>) (0-1; 0 = left, 0.5 = center, 1 = right)¹⁹	0.65 (<i>0.24</i>)	0.63 (<i>0.27</i>)	0.60 (<i>0.29</i>)

¹⁷ In Study 1, respondents were asked about their religious affiliation; the response options were secular/traditional/modern Orthodox/ultra-Orthodox. In Study 2 and the INES, respondents were asked about their observance of religious tradition; the response options were not at all/a little/a lot/all of it.

¹⁸ See the voting bloc classification in Section C below.

¹⁹ In Study 1, the ideological self-placement item ranged from 0 to 10, while in both Study 2 and the INES it ranged from 1 to 7. These items were all rescaled to range from 0 to 1.

Table A2. Descriptive statistics of the two samples

	Study 1 (April 2019)			Study 2 (September 2019)		
	N	Mean	SD	N	Mean	SD
Age (0 =18; 1 = 85 in Study 1 / 74 in Study 2)	1932	0.35	0.20	1201	0.44	0.28
Female	1932	0.50	0.50	1201	0.51	0.50
4-pt religiosity (0 = no religious tradition; 1 = observes all tradition)	1932	0.24	0.34	1201	0.41	0.35
4-pt education (0 = less than HS graduate; 1 = college education)	1926	0.76	0.34	1200	0.71	0.34
11-pt ideological self-placement (0 = right; 1 = left)	1932	0.65	0.24	-	-	-
7-pt ideological self-placement (0 = right; 1 = left)	-	-	-	1201	0.63	0.27
Vote intention:						
Intention to vote for right-wing parties	1886	0.48	0.50	1201	0.46	0.50
Intention to vote for center parties	1886	0.27	0.44	1201	0.25	0.44
Intention to vote for left-wing parties	1886	0.12	0.33	1201	0.13	0.34
Other (undecided/don't know, etc.)	1886	0.13	0.33	1201	0.16	0.36
9-pt IAG bias item (9 = biased against Netanyahu)	1649	5.37	2.00	1082	4.68	2.10
9-pt hostile bias item (9 = biased against one's political ingroup)	-	-	-	931	5.88	1.97
5-pt anger (0 = not at all; 1 = to a very great extent)	-	-	-	803	0.19	0.29
5-pt concern (0 = not at all; 1 = to a very great extent)	-	-	-	803	0.32	0.33
5-pt enthusiasm (0 = not at all; 1 = to a very great extent)	-	-	-	803	0.19	0.30
5-pt satisfaction (0 = not at all; 1 = to a very great extent)	-	-	-	803	0.21	0.31

Note: All variables except the two bias items were scaled to range from 0 to 1.

Section B: Wording of the questions and text of the experimental vignettes

Wording of the items used in Study 1:

The IAG bias item:

In your opinion, is the Attorney General biased in favor of Netanyahu, biased against Netanyahu, or is he unbiased (neutral)?

Please answer on a scale of 1 to 9, where 1 means biased in favor of Netanyahu, 9 means biased against Netanyahu, and 5 means neutral. If you do not know, please indicate this by choosing the relevant option (88).

1- Biased in favor of Netanyahu

2

3

4

5- Neutral

6

7

8

9- Biased against Netanyahu

88- Don't know

Vote choice:

If the Knesset elections were held today, which party would you vote for?

1. Likud

2. Blue and White

3. Labor

4. Meretz

5. The New Right

6. Kulanu

7. Yahadut Ha'Torah

8. Shas

9. Hadash-Ta'al

10. Blank ballot (No party)

11. Didn't decide/Unsure
12. Does not intend to vote
13. Other / Don't know
14. Yisrael Beitenu
15. Geshet
16. Balad-Ra'am
17. The Jewish Home
18. Yachad
19. Zehut

Ideological self-placement:

Where would you position yourself on the right-left spectrum? Please answer on a scale of 0 to 10, where 0 is right and 10 is left?

Wording of the items used in Study 2:

The IAG bias item:

Over the past year, Attorney General, Avichai Mandelblit, has made several decisions regarding the investigation of Prime Minister Benjamin Netanyahu. For example, the Attorney General:

- Decided to indict the Prime Minister (subject to a hearing) on suspicion of bribery and breach of trust in three different cases.
- Did not accept all the police recommendations, and dropped some of the charges against the Prime Minister.
- Did not launch an investigation of Netanyahu regarding the sale of his shares in a steel company owned by his cousin, Nathan Milikowsky, over the previous decade.
- Postponed the Prime Minister's hearing from July to October [2019] but refused to postpone it again.

In your opinion, is the Attorney General biased in favor of Netanyahu, biased against Netanyahu, or is he unbiased (neutral)?

Please answer on a scale of 1 to 9, where 1 means biased in favor of Netanyahu, 9 means biased against Netanyahu, and 5 means neutral. If you do not know, please indicate this by choosing the relevant option (88).

[Same scale as in Study 1]

Vote choice:

If the Knesset elections were held today, which party would you vote for?

1. Likud
2. Blue and White
3. Yemina
4. Joint List
5. Yahadut Ha'Torah
6. Shas
7. Yisrael Beitenu
8. Labor-Gesher
9. Democratic Camp-Meretz
10. Otzma Yehudit
11. Other (specify: _____)
12. Unsure / Don't know

Ideological self-placement:

We hear a lot of talk these days about right and left in politics. Where would you position yourself on the right-left spectrum? Please answer on a scale of 1 to 7, where 1 is right, 7 is left, and 4 is the midpoint (center).

Manipulation checks: (answered by only respondents in the two treatment conditions)

Factual manipulation check:

According to the article, who is expected to form the next Government?

1. The right-wing bloc
2. The center-left bloc
3. A national unity government is expected
4. Don't know

Four substantive manipulation checks: (anger, enthusiasm, concern, satisfaction)

While reading the article, how much anger did you feel?

1. I did not feel any anger
2. I felt a limited degree of anger
3. I felt a certain degree of anger
4. I felt a great degree of anger
5. I felt a very great degree of anger

While reading the article, how much enthusiasm did your feel?

1. I did not feel any excitement
2. I felt a limited degree of enthusiasm
3. I felt certain degree of enthusiasm
4. I felt a great degree of enthusiasm
5. I felt a very great degree of enthusiasm

While reading the article, how much concern did you feel?

1. I did not feel any concern at all
2. I felt a limited degree of concern
3. I felt a certain degree of concern
4. I felt a great degree of concern
5. I felt a very degree of concern

While reading the article, how much satisfaction did you feel?

1. I did not feel any satisfaction at all
2. I felt a limited degree of satisfaction
3. I felt a certain degree of satisfaction
4. I felt a great degree of satisfaction
5. I felt a very degree of satisfaction

Demographic items:

Age:

What is your age? _____

Gender:

Male / Female / I prefer not to say

Religiosity:

To what extent do you observe religious tradition?

1. Not at all
2. Slightly
3. Very much
4. In all its details

Education:

What is your level of education?

1. Elementary school or less
2. Partial secondary school
3. Secondary school and no matriculation certificate
4. Secondary school and a matriculation certificate
5. Post-secondary education (not college or university)
6. Partial college or university
7. Bachelor's degree
8. Master's degree or higher

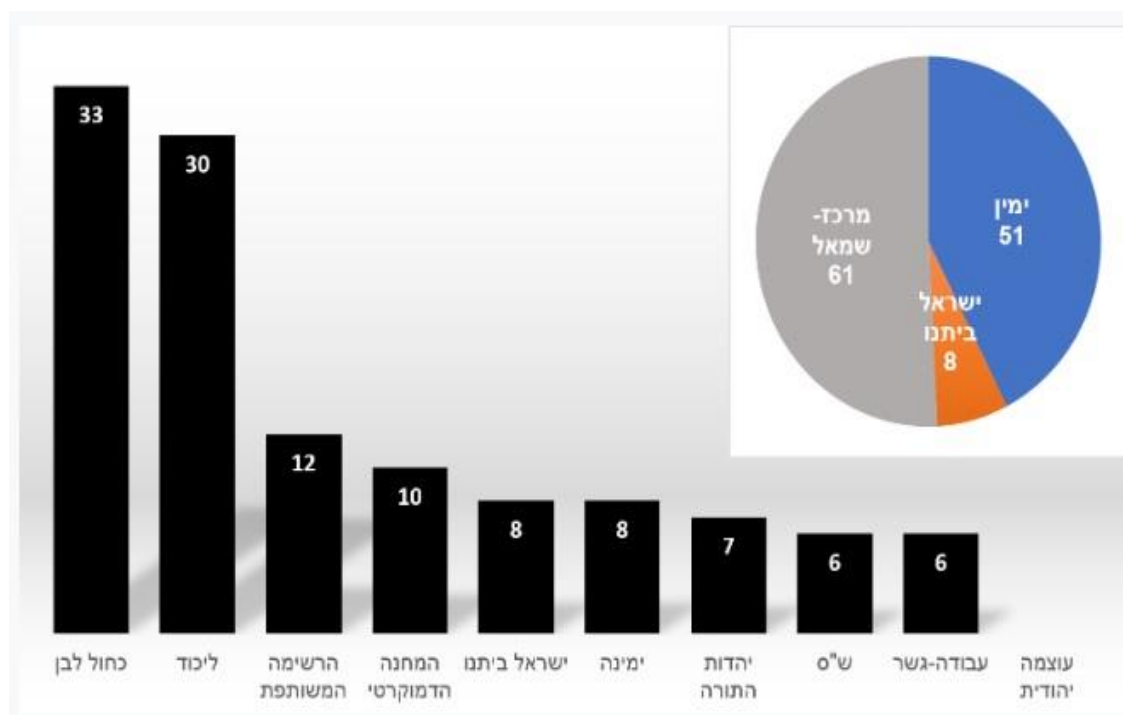
* In the regression analyses, the *Level of education* was created as follows: The first three response options constituted the first level; response option #4 constituted the second level; response option #5 constituted the third level; and finally, response options #6–8 constituted the fourth and final level.

The text of the experimental vignettes in Study 2²⁰

The first experimental condition ("left-center wins"): [ingroup threat to the right; ingroup reassurance for the center-left]

Headline: "New election poll: Center-left expected to form next coalition"

A new poll indicates that the center-left bloc will come to power after the elections: The map of blocs that emerges from the poll results shows the center-left bloc having 61 Knesset members even without Yisrael Beitenu, thus substantially increasing the chances that Blue and White [Kachol Lavan] will form the next Government. According to the results of the poll, conducted for the News Company at the beginning of the week among a representative sample of Israeli adults, for the first time in half a year Blue and White is the leading candidate to form the next coalition. The poll has Blue and White receiving 33 seats, compared to only 30 for the Likud. In addition, the Joint List will have 12 seats, the Democratic Union led by Nitzan Horowitz 10 seats, Yemina led by Ayelet Shaked 8 seats, Yisrael Beitenu 8 seats, United Torah Judaism 7 seats, and Shas and Labor-Gesher 6 seats each. Otzma Yehudit will not cross the threshold (2.1 percent of the votes).

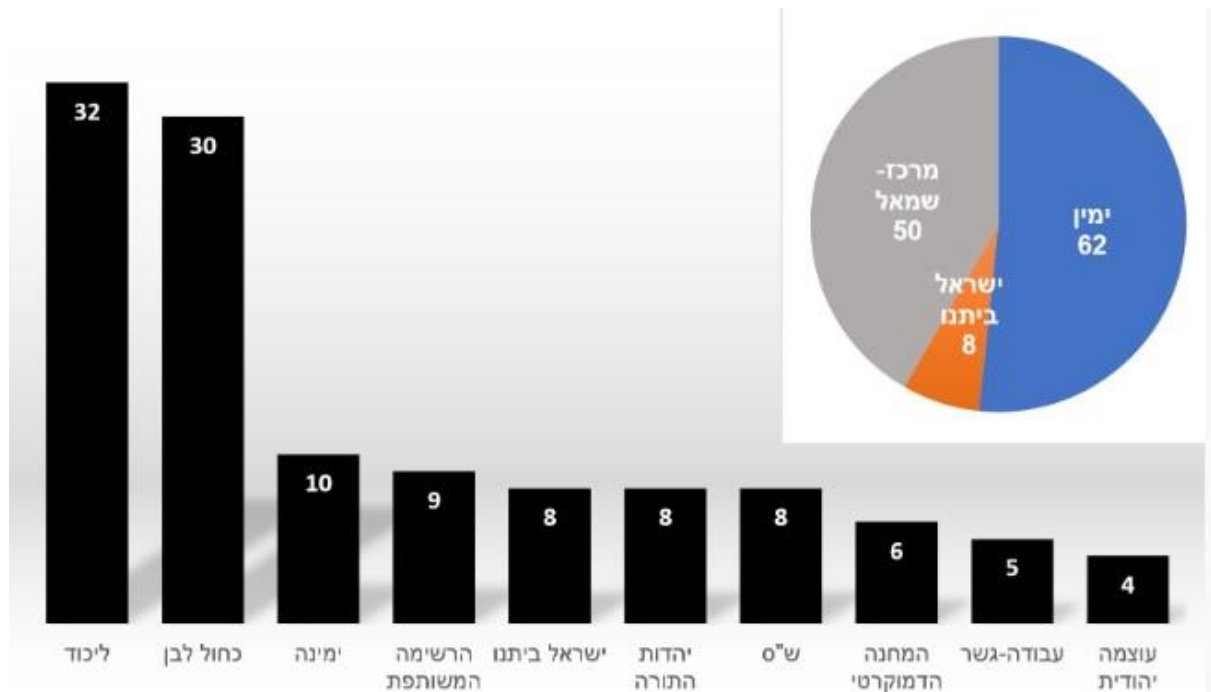


²⁰ Both articles also included graphs depicting the number of seats each party and each ideological bloc was expected to receive (shown under each text).

The second experimental condition ("right-wing wins"): [ingroup reassurance to the right; ingroup threat for the center-left]

Headline: "New election poll: Right expected to form next coalition"

A new poll indicates that the right-wing bloc will remain in power after the elections: The map of blocs that emerges from the poll results shows the right-wing bloc having 62 Knesset members even without Yisrael Beitenu, thus substantially increasing the chances that the Likud will form the next Government. According to the results of the poll, conducted for the News Company at the beginning of the week among a representative sample of Israeli adults, the Likud led by Benjamin Netanyahu is the leading candidate to form the next coalition. The poll has the Likud receiving 32 seats, compared to 30 for Blue and White [Kachol Lavan]. In addition, Yemina led by Ayelet Shaked will have 10 seats, the Joint List 9 seats, Shas, United Torah Judaism, and Yisrael Beitenu 8 seats each, the Democratic Union led by Nitzan Horowitz 6 seats, and Labor-Gesher 5 seats. Otzma Yehudit, continuing its climb in the polls, will cross the threshold for the first time in a long while with 4 seats.



Section C: Voting bloc classification in Studies 1–2

Study 1: The Likud, Jewish Home, New Right, Yisrael Beitenu, Yahadut Ha'Torah, Shas, Yachad, and Zehut were coded as right-wing parties. Blue and White and Gesher were coded as center parties.²¹ Labor, Meretz, Hadash-Ta'al, and Balad-Ra'am were coded as left-wing parties.

Study 2: The Likud, Yemina, Yisrael Beitenu, Yahadut Ha'Torah, Shas, Otzma Yehudit, Noam, Secular Right, and Tzomet were coded as right-wing parties. Blue and White was coded as a center party. Labor-Gesher, the Democratic Camp–Meretz, and the Joint List were coded as left-wing parties.

²¹ At the time, the ideological placement of the Gesher party was not clear. Dropping that party from the analyses barely affects the results of Study 1.

Section D: Study 2—Balance tests for the experimental conditions

It was examined whether respondents in the three *threat* factor conditions (*ingroup threat*, *ingroup reassurance*, *control*) were balanced on individual-level variables. Specifically, chi-square tests were conducted for the dichotomous and ordinal demographic variables (gender, level of education level, religiosity, and voting bloc) and independent t-tests for the age and ideology items. The results (not shown) indicate that, indeed, respondents in the three *threat* factor conditions were adequately balanced with regard to these individual-level variables, as none of the tests conducted was statistically significant ($ps>.21$).

In addition, a multinomial regression in which the dependent variable was the three *threat* factor conditions was utilized in order to determine whether the six abovementioned individual-level variables predicted the chances of being in one of the three groups. The model as a whole was statistically insignificant ($p=.769$). These results provide support for the suggestion that the randomization was successful.

In additional analyses examining whether respondents in the original experimental conditions (*right-wing wins*, *center-left wins*, *control*) were balanced on individual-level variables, similar results were obtained (results not shown).

Section E: Results of the manipulation checks in Study 2 (emotional responses)

Respondents were asked about their emotional reaction while reading the article, with respect to four emotions: anger, concern, enthusiasm, and satisfaction. They were then asked to indicate their reaction on a five-point scale, from "I did not feel any [emotion]" to "I felt a very great degree of [emotion]." All four emotional reaction items were rescaled to range from 0 to 1, with higher values denoting more of the pertinent emotional reaction.

As expected, respondents in the *ingroup threat* condition reported more anger ($M=.34$) than respondents in the *ingroup reassurance* condition ($M=.07$) ($F(1,680)=187.1$; $p<.001$; $\eta^2=.216$). The former also reported more concern ($M=.50$) than the latter ($M=.17$) ($F(1,680)=216.7$; $p<.001$; $\eta^2=.242$). Also as expected, respondents in the *ingroup threat* condition reported less enthusiasm ($M=.04$) than respondents in the *ingroup reassurance* condition ($M=.35$) ($F(1,680)=226.6$; $p<.001$; $\eta^2=.250$), and less satisfaction ($M=.05$, compared with $M=.39$) ($F(1,680)=272.5$; $p<.001$; $\eta^2=.286$). These results are in line with the expectation that respondents exposed to an *ingroup*-threatening article would report much more negative reactions than respondents exposed to an *ingroup*-reassuring article.

Section F: Robustness tests and additional empirical analyses, Studies 1–2

Robustness tests in Study 1:

In the main text, respondents' vote intentions were used to create the voting blocs used in the main analyses. The results are similar overall when groups are created based on an 11-point ideological self-placement item (0=left; 5=center; 10=right). Specifically, this item was used to create three groups: leftists (0–4 on the self-placement scale; 20.1% of the sample), centrists (5 on that scale; 15.6%), and rightists (6–10 on that scale; 64.3%).²²

As expected, rightists and leftists diverged considerably in their evaluations of the IAG's bias, and each group considered the IAG biased against its camp. Rightists perceived the IAG as biased against Netanyahu ($M=5.84$; $SD=2.10$), whereas leftists perceived him as biased in favor of Netanyahu ($M=4.41$; $SD=1.60$). Both of these estimates differ significantly from the neutral score of 5: rightists: $t(1,046)=12.85$; leftists: $t(343)=-6.88$; $ps<.001$). Centrists also considered the IAG biased in favor of Netanyahu ($M=4.77$; $SD=1.30$), and their bias evaluations were slightly closer to the neutral score than those of leftists, but their evaluations, too, differed from it significantly: $t(257)=-2.82$; $p=.005$.

An ANOVA test confirmed that the three ideological groups differed significantly in their IAG bias evaluations ($F(2,1646)=88.4$; $p<.001$; $\eta^2=.097$), and a Scheffe post-hoc test showed that the differences between rightists and leftists and between rightists and centrists were statistically significant at $p<.001$. The leftists-centrists difference was marginally significant ($p=.067$). Overall, the difference between the three *ideological self-placement*

²² The results are very similar when the leftists, centrists, and rightists groups instead comprised respondents with an ideological self-placement of 0–3, 4–6, and 7–10, respectively.

groups was smaller than the difference between the three different *voting blocs*, as evident in the smaller Eta-squared estimate ($\eta^2=.097$ compared to $\eta^2=.177$), but the difference was still rather substantial.

Robustness tests in Study 2:

Several robustness tests were conducted in Study 2. First, the results in the main text, both aggregate and experimental, were replicated using categorization based on the ideological self-placement item instead of the voting blocs. Second, the experimental results were replicated while excluding respondents who failed the factual manipulation check. Finally, the experimental results were replicated while excluding voters of a certain right-wing party (see below).

1A) In the aggregate results section, respondents' vote intentions were used to create the voting blocs used in the main analyses. The results are similar overall when groups are created based on a seven-point ideological self-placement item (1=left; 4=center; 7=right). This item was used to create three groups: leftists (1–3 on the self-placement scale; 22.4% of the sample), centrists (4 on that scale; 22.3%), and rightists (5–7 on that scale; 55.3%).

Rightists and leftists diverged considerably in their IAG evaluations, with both groups considering the IAG biased against their respective camps: Self-identified rightists considered him slightly biased against Netanyahu ($M=5.32$; $SD=2.08$), while self-identified leftists considered him biased in favor of Netanyahu ($M=3.69$; $SD=1.77$). Both of these estimates differ significantly from the neutral score of 5: rightists: $t(584)=3.67$; leftists: $t(257)=-11.87$; $ps<.001$. Like leftists, self-identified centrists also considered the IAG biased in favor of Netanyahu ($M=4.21$; $SD=1.93$), and their bias evaluations also differed significantly from the

neutral score: $t(238)=-6.32$; $p<.001$. An ANOVA test confirmed that the groups exhibited significantly different bias evaluations ($F(2,1079)=69.1$; $p<.001$; $\eta^2=.114$), and a Scheffe post-hoc test showed that the differences between rightists and leftists and between rightists and centrists are statistically significant at $p<.001$ (the leftists-centrists difference is significant at $p=.013$). Overall, the difference between the three *ideological self-placement* groups is smaller than the difference between the three *voting blocs*, as evident in the smaller Eta-squared estimate ($\eta^2=.114$ compared to $\eta^2=.185$), but it is still rather substantial.

1B) In the robustness analyses, three dummy variables were created based on the ideological self-placement item (instead of the vote intention item used in the main analyses): an *ingroup threat* variable, taking the value 1 if a respondent encountered an article with ingroup-threatening information (e.g., rightists reading the *center-left wins* article) and 0 otherwise; an *ingroup reassurance* variable, taking the value 1 if a respondent encountered an article with ingroup-reassuring information (e.g., leftists or centrists reading the *center-left wins* article) and 0 otherwise; and a *control* variable, with respondents from all voting bloc groups (except the *other* group) assigned to the control condition. In these analyses, the dependent variable is a slightly modified *hostile bias* measure—using the *ideological self-placement* groups instead of the *voting blocs*—created by transforming the original IAG bias item such that lower values indicate favorable bias and higher values indicate hostile bias.

Those exposed to ingroup threat ($M=5.84$; $SD=1.93$) considered the IAG more hostilely biased than those exposed to ingroup reassurance ($M=5.64$; $SD=2.06$) (diff=.20; $t(728)=-1.38$; $p=.085$, one-tailed test). Table F1 below shows the results of OLS regressions in which the *hostile bias* item is regressed on the *ingroup threat* and *control* dummy variables (*ingroup reassurance* is the reference category). As in the main text (Table 1), the bottom of Table F1 shows the results of one-tailed, non-parametric permutation tests with 50,000 re-randomizations, conducted using the 'ritest' command in Stata (Heß 2017). Overall, the

results of these analyses are slightly weaker than the results in the main text using the *voting bloc* categorization, yet they still support the claim that ingroup threat increases perceptions of hostile bias compared to ingroup reassurance.

2) In the main text, all respondents were included in the analyses of the experimental results (unless they answered "Don't know" to the IAG bias item). Yet 8.6% of respondents failed the factual manipulation check. As shown in Table F2 below, excluding these respondents from the analyses slightly improves the results. Note that only respondents in the two treatment conditions answered the factual manipulation check; accordingly, respondents in the control condition were dropped from these analyses.

3) In the main analyses, all voters for right-wing parties were considered part of the right-wing bloc. However, the right-wing Yisrael Beiteinu party (Hebrew for "Israel is our home") did not cooperate with Netanyahu following the April 2019 election and consequently was not considered by many to be part of the right-wing bloc prior to the September 2019 election. Indeed, in the two experimental vignettes that party was not considered part of either the right-wing or center-left bloc; and voters for Yisrael Beiteinu in the Study 2 data, while considering themselves right-wing ideologically on the seven-point ideology scale ($M=5.13$; $SD=1.20$), were the only voters for a right-wing party who considered the IAG biased *in favor of* Netanyahu ($M=4.23$; $SD=1.85$). Accordingly, it can be argued that if Yisrael Beiteinu voters read an article in which center-left (right-wing) parties were likely to win the elections, they did not experience an ingroup threat (reassurance). However, as shown in Table F3 below, removing Yisrael Beiteinu voters from the main experimental analyses hardly affects the results.

4) Heterogeneous treatment effects in the data were also examined; namely, whether the effect of *ingroup threat* on bias perception (compared to the effect of *ingroup reassurance*) is

similar across voters for right-wing parties and voters for center and left-wing parties.²³ To test this, an interaction term between the *ingroup threat* dummy variable and the *right-wing voter* dummy variable was added to Model 2 from Table 1 in the main text. The results are presented in Table F4 below. The coefficient of the *ingroup threat X right-wing voter* interaction is statistically insignificant ($b=0.15$; $p=0.292$), suggesting that the treatment effect is not heterogeneous (at least not across the two main rival political groups).

Furthermore, when a second interaction is added between the control condition and *right-wing voters* (results not shown), the coefficient of the *ingroup threat X right-wing voter* interaction is similarly insignificant ($b=0.024$; $p=0.469$) (and the coefficient of the *control X right-wing voter* interaction is also insignificant: $b=-0.257$; $p=0.204$).

Finally, Figure F1 below shows the treatment effects across the two main political groups, left-wing and centrist voters, and right-wing voters. From the figure it is clear that, while right-wing voters overall perceived the IAG as less hostilely biased than leftists and centrists did, in both political groups those in the *ingroup threat* condition perceived him as more hostilely biased than those in the *ingroup reassurance* condition (and the control condition) did.

²³ The author thanks one of the reviewers for suggesting to examine these heterogeneous effects and present the treatment effects across the two main political groups in a graph (see Figure F1).

Table F1. Study 2—Experimental results, with categorization based on the *ideological self-placement* item

Dependent variable	(1) Hostile bias perceptions	(2) Hostile bias perceptions
Ingroup threat	0.20 (0.15)+	0.20 (0.15)+
Control	-0.15 (0.15)	-0.18 (0.15)
Rightist respondent		-0.87 (0.15)***
Age		0.73 (0.24)**
Female		-0.29 (0.12)**
Religiosity		0.74 (0.22)***
Level of education		0.21 (0.18)
Constant	5.64 (0.11)***	5.51 (0.24)***
One-tailed permutation test <i>p</i> -value [<i>SE</i>] of the <i>ingroup threat</i> coefficient	0.0612 [0.0011]	0.0579 [0.0010]
Observations	1,082	1,079
R-squared	0.00	0.06

Note: Robust standard errors in parentheses; ****p*<0.001, ***p*<0.01, **p*<0.05, +*p*<0.1 (one-tailed test). The *ingroup reassurance* group is the reference category. The permutation test *p*-value and standard errors were obtained with 50,000 re-randomizations, using the "ritest" Stata package (Heß 2017). All regressors vary from 0 to 1.

Table F2. Study 2—Experimental results, excluding respondents who failed the factual manipulation check

Dependent variable	(1) Hostile bias perceptions	(2) Hostile bias perceptions
Ingroup threat	0.37 (0.16)**	0.35 (0.16)*
Vote for a right-wing party		−0.61 (0.20)**
Age		0.59 (0.29)*
Female		−0.13 (0.16)
Religiosity		0.42 (0.30)+
Level of education		−0.05 (0.25)
Constant	5.91 (0.11)***	5.91 (0.31)***
One-tailed permutation test <i>p</i> -value [<i>SE</i>] of the <i>ingroup threat</i> coefficient	0.0214 [0.0006]	0.0280 [0.0007]
Observations	576	573
R-squared	0.01	0.04

Note: Robust standard errors in parentheses; ****p*<0.001, ***p*<0.01, **p*<0.05, +*p*<0.1 (one-tailed test). The *ingroup reassurance* group is the reference category. The permutation test *p*-value and standard errors were obtained with 50,000 re-randomizations, using the "ritest" Stata package (Heß 2017). All regressors vary from 0 to 1.

Table F3. Study 2—Experimental results, excluding Yisrael Beitenu voters

Dependent variable	(1) Hostile bias perceptions	(2) Hostile bias perceptions
Ingroup threat	0.29 (0.16)*	0.30 (0.16)*
Control	-0.08 (0.16)	-0.07 (0.16)
Vote for a right-wing party		-0.35 (0.19)*
Age		0.68 (0.25)**
Female		-0.15 (0.13)
Religiosity		0.16 (0.27)
Education level		0.32 (0.20)+
Constant	5.94 (0.11)***	5.60 (0.26)***
One-tailed permutation test <i>p</i> -value [<i>SE</i>] of the <i>ingroup threat</i> coefficient	0.0292 [0.0008]	0.0223 [0.0007]
Observations	862	859
R-squared	0.01	0.03

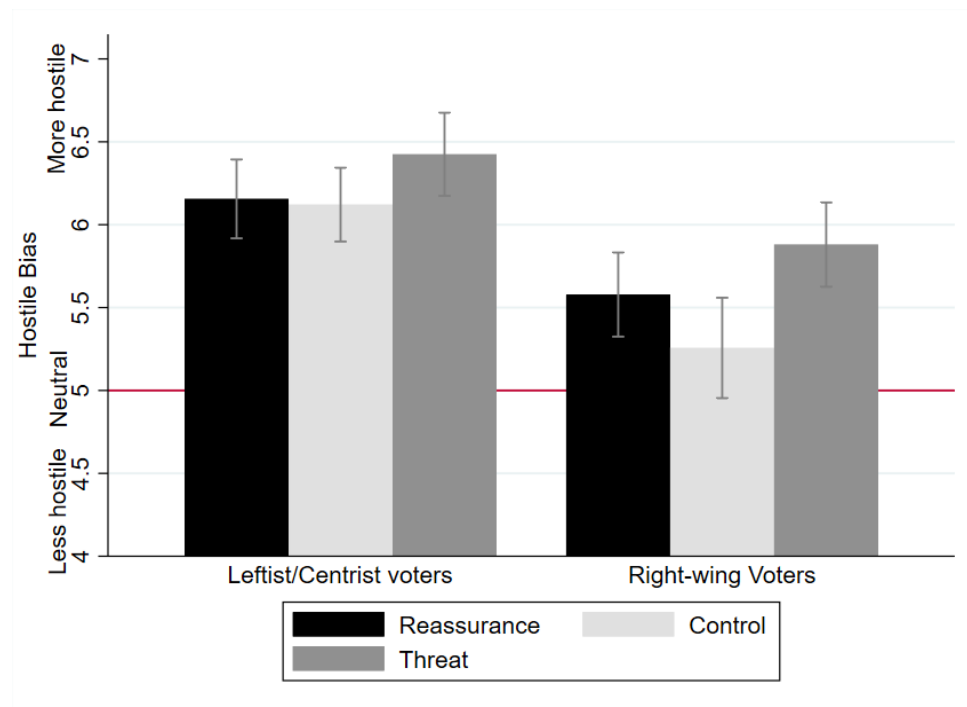
Note: Robust standard errors in parentheses; *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.1$ (one-tailed test). The *ingroup reassurance* group is the reference category. The permutation test *p*-value and standard errors were obtained with 50,000 re-randomizations, using the "ritest" Stata package (Heß 2017). All regressors vary from 0 to 1.

Table F4. Study 2—Interaction between threat condition and right-wing voters

Dependent variable	(1) Hostile bias perceptions
Ingroup threat	0.22 (0.20)
Vote for a right-wing party	-0.81 (0.19)***
Ingroup threat X right-wing voter	0.15 (0.27)
Control	-0.16 (0.16)
Age	0.65 (0.25)**
Female	-0.17 (0.13)+
Religiosity	0.66 (0.25)**
Level of education	0.29 (0.20)+
Constant	5.59 (0.25)***
Observations	928
R-squared	0.05

Note: Robust standard errors in parentheses; *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.1$ (one-tailed test). The *ingroup reassurance* group is the reference category. All regressors vary from 0 to 1.

Figure F1. Study 2: Experimental results – across the two political groups



Note: Whiskers denote 90% confidence intervals. The y-axis varies between 1 and 9 higher values denote more hostile bias perceptions. The solid line on the y-axis denotes a neutral score of 5.

Section G: Changes from pre-registration in the Study 2 experiment

The experimental conditions, research variables, and analyses were pre-registered on the AsPredicted.org website (anonymous link at: <http://aspredicted.org/blind.php?x=d8ke35>).

Nevertheless, in the main analyses two changes were made from the pre-registration due to an error in the original pre-registration. Specifically, the pre-registration specified that "for the party-bloc analysis, the following OLS regression will be used:

$$bias_i = \beta_0 + \beta_1 Right_{wing_{wins}_i} + \beta_2 Control_i + \beta_3 Center_{left}_i + \gamma Z_i + \epsilon_i$$

where $bias_i$ is the level of bias attributed to the IAG; $Right_{wing_{wins}_i}$ indicates the "right-wing bloc wins" condition; $Control_i$ indicates the control condition ["center-left bloc wins" condition the ref. category]; $Center_{left}_i$ indicates the center-left group; and Z_i a set of controls (gender, age, education, and religiosity)" (see Section 5 in the pre-registration).

This specification, however, does not allow for examining the effect of *ingroup threat* compared to *ingroup reassurance*. First, the author mistakenly failed to include the "interactions" that create the *ingroup threat* condition (e.g., center-left respondents ($Center_{left}_i$) assigned to the *right-wing wins* condition), with the *ingroup reassurance* condition as the reference category (instead of the *center-left wins* condition, as in the pre-registration). Second, the dependent variable should not be the original IAG bias item, but rather the *Hostile bias* item. This item was created by transforming the original IAG bias item such that lower values (closer to 1 on the nine-point scale) indicate favorable bias, and higher values (closer to 9 on that scale) indicate hostile bias. Otherwise, one cannot properly gauge the effect of the *ingroup threat* manipulation on perceptions of hostile bias. Accordingly, the following OLS regression in the main analyses of the experimental results (Table 1) was used:

$$Hostile\ bias_i = \beta_0 + \beta_1 ingroup_threat_i + \beta_2 Control_i + \beta_3 Center_left_i + \gamma Z_i + \epsilon_i$$

where $Hostile\ bias_i$ is the level of hostile bias attributed to the IAG; $ingroup_threat_i$ indicates respondents in the *ingroup threat* condition; $Control_i$ indicates the control condition [with the *ingroup reassurance* condition as the ref. category]; $Center_{left_i}$ indicates the center-left group; and Z_i a set of controls (gender, age, education, and religiosity)."

Section H: Study 3—Americans' attitudes toward Facebook

Although it does not create news, Facebook has become an important political platform, since many Americans get their news through Facebook (Shearer and Grieco 2019) and Facebook operates a powerful advertising machine which many consider politically indispensable (see Kreiss and McGregor 2019).²⁴ In recent years we have indeed seen many Republicans and Democrats alike accusing Facebook of unfairly helping their rivals and demanding that it change its policies (see, e.g., Herrman and Isaac 2016; Kurtzleben 2018; Lyons 2020; Sullivan 2020). Because Facebook's practices arguably threatened the parties' chances of advancing future policies and winning the 2020 presidential elections, a hostile mediator phenomenon in Americans' evaluations of Facebook was expected, with both Democrats and Republicans perceiving it as biased against their side and in favor of the other side.

An online survey was utilized to test this prediction. A total of 2,172 American respondents were recruited by Lucid, an online survey company that provides samples suitable for conducting social science research (Coppock and McClellan 2019).²⁵ Lucid sends a sample that is a nationally representative set of survey participants based on age, gender,

²⁴ Some might argue that Facebook is in fact a media outlet—it is, after all, a social *media* platform—which would suggest that evidence in this context would be evidence of a hostile media phenomenon (HMP) and not a hostile mediator phenomenon. Nevertheless, Facebook does not create news, and, unlike news outlets, it allows users to directly reach and inform millions of willing friends/followers, rendering Facebook (and Twitter and other social media platforms) inherently different from traditional news outlets.

²⁵ Lucid did not provide information on the number of invitations sent to potential survey respondents, which made it impossible to calculate the "participation rate" (AAPOR 2016, 49–50) for this study.

ethnicity, and region. In this case, the average age is 46.1 ($SD=16.6$), women constitute 52.7 percent of the sample, and non-Hispanic whites constitute 71.5 percent. In terms of party affiliation, Democrats (including leaning independents) constitute 43.4% of the sample, Republicans (including leaning independents) constitute 41.1%, and pure independents and those who chose "other" constitute 15.5%.

The dependent variable, designed to examine the existence of a hostile mediator phenomenon in partisans' evaluations of Facebook, asked whether Facebook was biased in favor of President Trump, biased against Trump, or unbiased (neutral). The item, otherwise similar to the bias item used in Studies 1–2 in the main text, was followed by a nine-point scale anchored by 1=*Biased in favor of Trump*; 5=*Neutral*; and 9=*Biased against Trump*.²⁶ The mean result for the entire sample was 5.58 ($SD=2.57$), i.e., slightly biased against President Trump. With Trump being the head of the Republican Party, it was expected that Republicans would consider Facebook biased against Trump, and Democrats would consider it biased in favor of Trump.

As expected, Republicans and Democrats diverged in their evaluations of Facebook's bias, with rival partisans considering the company biased against their respective camps. Republicans considered Facebook biased against Trump ($M=6.27$; $SD=2.63$), whereas Democrats considered it slightly biased in favor of Trump ($M=4.86$; $SD=2.38$). The estimate among Republican is significantly different from the neutral score of 5: $t(795)=13.63$; $p<.001$; whereas the estimate among Democrats is marginally significant: $t(798)=-1.70$;

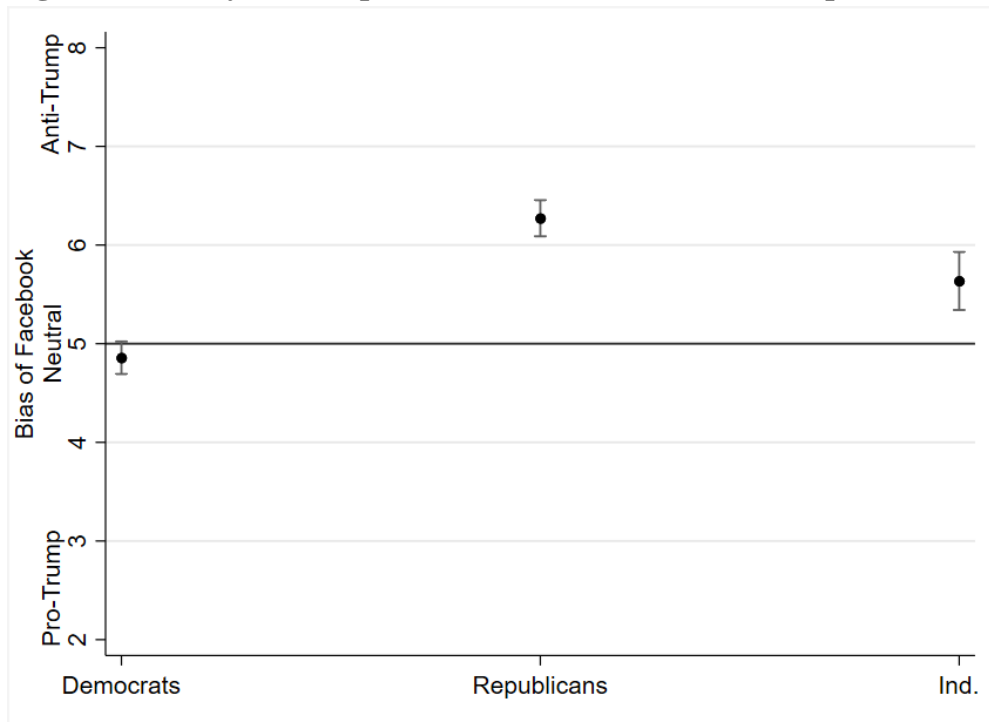
²⁶ A "don't know" option was also available. Those who chose it (15.3%) were removed from the analyses.

$p=.090$.²⁷ Pure independents and those who chose "other" (henceforth "Independents") considered Facebook slightly biased against Trump ($M=5.64$; $SD=2.33$), and this estimate also differed significantly from the neutral score: $t(243)=4.26$; $p<.001$. Figure H1 below shows these results graphically. An ANOVA test confirmed that the two parties (excluding the *Independents* group) differed significantly in their Facebook bias evaluations ($F(1,1593)=126.8$; $p<.001$; $\eta^2=.074$). Furthermore, a Scheffe post-hoc test showed that all three possible differences between Republicans, Democrats, and Independents were statistically significant at $p<.003$.

Overall, the results of this survey provide further evidence as to the existence of a hostile mediator phenomenon outside the media context.

²⁷ These marginally significant results might be at least partially due to inadequate data quality. Several scholars have raised concerns about data quality and inattentiveness in Lucid samples in 2020 (e.g., Aronow et al. 2020). Although this survey did not use attention checks, dropping (in an admittedly post-hoc manner) 113 respondents (5.2% of the sample) who answered the survey rather fast—in less than two minutes, compared to a median survey time of 268 seconds—strengthens the Facebook bias estimate among both Republicans ($M=6.33$; $SD=2.61$; $t(741)=13.82$; $p<.001$) and Democrats ($M=4.81$; $SD=2.35$; $t(739)=2.25$; $p=.025$).

Figure H1. Study 3: Perceptions of bias of Facebook, across parties



Note: Whiskers denote 95% confidence intervals. The solid line on the y-axis denotes a neutral score of 5. The x-axis shows the two parties and the Independents group (*Ind.*).

Section I: Study 4—Israelis' attitudes toward the Israeli police

Like the Israeli Attorney General, in recent years the Israeli police have also been accused by rival political camps in Israel of being politically biased. On the one hand, supporters and politicians from the center and left have accused the police of deliberately—and sometimes violently—trying to stifle the widespread protests against PM Netanyahu that broke out in the second half of 2020.²⁸ The police were accused of being overly aggressive in their handling of the protests and of taking orders directly from the Minister of Public Security, the right-wing Amir Ohana of the Likud party, who allegedly wanted senior police officers to suppress these protests at Netanyahu's behest (e.g., Goralı 2020; Breiner 2020).

On the other hand, supporters and politicians on the right have accused senior officials in the Israeli police, including former Police Commissioner Roni Alsheikh, of a politically motivated prosecution of PM Netanyahu in recent years intended to force Netanyahu to step down. Rightists also accused the police of being too lenient in their handling of the widespread protests against Netanyahu in 2020, supposedly allowing many protesters to break the law and behave in a disorderly manner in main streets and residential neighborhoods of various Israeli cities (e.g., Saban 2019; Levi 2020).

Overall, the actions of the Israeli police were deemed by supporters of rival Israeli ideological camps to have the potential to help the opposing camp by affecting public sentiment in favor or against Netanyahu, perhaps even leading to his resignation. (Public sentiment was split across ideological lines [Israeli and Ditsch 2020]). In this context, where the actions of the Israeli police could be considered *threatening* to both ideological camps, it

²⁸ Demonstrators called for Netanyahu's resignation following the corruption indictments against him and demonstrators' belief that he had failed to adequately address the Covid-19 crisis.

was expected that supporters of both rival camps would perceive the police as biased against their respective camps.

An online survey was used to test this prediction. A total of 1,031 Israeli respondents were recruited by iPanel, a company that operates a large opt-in internet panel in Israel.²⁹ The sample is broadly representative of the Jewish Israeli population in terms of gender, age groups, region, and religiosity. The average age is 46.7 ($SD=16.8$) and the percentage of women is 49.5. Those identifying as ideologically right (5–7 on a 1–7 ideological self-placement item) constitute 51.7% of the sample; centrists (4 on that item) constitute 27.7%; and leftists (1–3 on that item) constitute 20.6%. The survey was fielded on October 8–19, 2020, during the second coronavirus lockdown in Israel.

As the independent variable in this sample, a retrospective vote item (vote choice in the March 2020 national election) was used to create three voting blocs: voters for left-wing parties (8.4% of the sample), center parties (36.2%), and right-wing parties (48.8%). A fourth

²⁹ Study 4 is based on questions asked in the second round (or wave) of a longitudinal (panel) study that examined unrelated issues. In the first wave, the "participation rate," calculated for non-probability internet panels (AAPOR 2016, 49–50), was 22.7%: The survey company sent out a total of 7,086 invitations to complete the survey, and the survey was ended up with 1,612 respondents that completed the survey: $1,612/7,086=0.227$. In the second wave, conducted about three months later, the survey company sent out invitations to the first-wave respondents; 1,031 of them completed the survey, for a 64.0% retention rate ($1,031/1,612=0.640$).

group (*Other*) included voters for other parties, those who voted for no party (a "blank ballot"), and respondents who did not vote (6.6%).³⁰

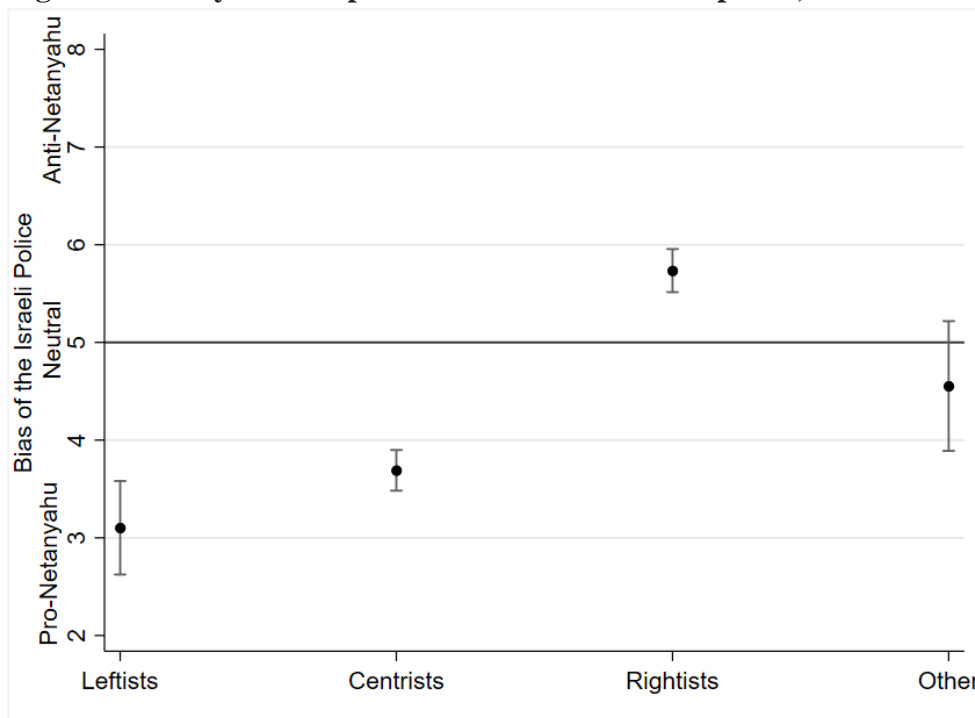
The dependent variable asked whether the Israeli police were biased in favor of Netanyahu, biased against Netanyahu, or unbiased (neutral). The item, otherwise similar to the bias item used in Studies 1–2 in the main text and Study 3 mentioned above, was followed by a nine-point scale anchored by 1=*Biased in favor of Netanyahu*; 5=*Neutral*; and 9=*Biased against Netanyahu*.³¹ The mean result for the entire sample was 4.66 ($SD=2.41$), i.e., slightly biased in favor of Netanyahu. As in Studies 1–2 described in the main text, it was expected that rightists would consider the Israeli police biased against Netanyahu, whereas leftists would consider them biased in favor of Netanyahu.

³⁰ The party bloc classification was as follows: Likud, Yemina, Yisrael Beiteinu, Yahadut Ha'Torah, and Shas were coded as right-wing parties; Blue and White was coded as a center party; the Joint List and Labor-Gesher-Meretz were coded as left-wing parties.

³¹ A "don't know" option was also available. Those who chose it (13.5%) were removed from the analyses. Due to a minor clerical error, the police bias item was erroneously anchored from 1 to 10 (instead of 1–9), with 10=*Biased against Netanyahu* instead of 9 (5 still denoted *Neutral*). That is, there was one additional response option for bias against Netanyahu. In the main analyses the 9–10 response options in that item (28 and 67 respondents, respectively) were collapsed together and treated as 9. Nevertheless, running all analyses reported in this section with the 10-point bias item instead of the transformed 9-point bias item hardly affects the results.

As expected, the rival camps considered the Israeli police biased against their respective camps: Rightists considered them biased against Netanyahu ($M=5.73$; $SD=2.30$),³² whereas leftists ($M=3.10$; $SD=2.12$) and centrists ($M=3.69$; $SD=1.94$) considered them biased in favor of Netanyahu. These three estimates all differ significantly from the neutral score of 5: rightists: $t(421)=6.55$; leftists: $t(77)=-7.89$; centrists: $t(287)=-12.37$; $ps<.001$. Respondents in the *Other* group considered the police slightly biased in favor of Netanyahu ($M=4.55$; $SD=2.48$), but this estimate is not significantly different from the neutral score: $t(55)=-1.35$ $p=.183$. Figure I1 below shows these results graphically.

Figure I1. Study 4: Perceptions of bias of the Israeli police, across voting blocs



Note: Whiskers denote 95% confidence intervals. The solid line on the y-axis denotes a neutral score of 5. The x-axis shows the three voting blocs and the *Other* group.

³² As expected (see Section F of the online appendix above), dropping 16 voters for the Yisrael Beitenu party from the analysis of rightists slightly improves the rightists' estimate ($M=5.82$; $SD=2.25$; $t(405)=7.31$; $p<.001$).

An ANOVA test confirmed that the three voting blocs (excluding the *Other* group) differed significantly in their evaluations of police bias ($F(2,833)=107.5; p<.001; \eta^2=.205$). A Scheffe post-hoc test showed that the differences between rightists and leftists and between rightists and centrists were statistically significant at $p<.001$. The leftists-centrists difference was marginally significant at $p=.094$.

Overall, the results of this survey provide further evidence of the existence of a hostile mediator phenomenon outside the media context, this time with respect to Israelis' evaluations of the Israeli police.

References

- AAPOR, The American Association for Public Opinion Research. 2016. “Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys. 9th Edition. AAPOR.”
- Aronow, Peter M., Josh Kalla, Lilla Orr, and John Ternovski. 2020. “Evidence of Rising Rates of Inattentiveness on Lucid in 2020.” <https://osf.io/preprints/socarxiv/8sbe4/>.
- Breiner, Josh. 2020. “Previous Police Senior Officials: Officers Are Taking a Hard Line against the Protest in Order to Placate Minister Ohana.” Haaretz. <https://www.haaretz.co.il/news/protest2020/.premium-MAGAZINE-1.9205554>.
- Coppock, Alexander, and Oliver A. McClellan. 2019. “Validating the Demographic, Political, Psychological, and Experimental Results Obtained from a New Source of Online Survey Respondents.” *Research & Politics* 6 (1). <https://doi.org/10.1177/2053168018822174>.
- Gorali, Moshe. 2020. “The Israeli Police in Service of the Defendent Benjamin Netanyahu.” Calcalist. <https://www.calcalist.co.il/local/articles/0,7340,L-3848254,00.html>.
- Herrman, John, and Mike Isaac. 2016. “Conservatives Accuse Facebook of Political Bias.” The New York Times. <http://www.nytimes.com/2016/05/10/technology/conservatives-accuse-facebook-of-political-bias.html>.
- Heß, Simon. 2017. “Randomization Inference with Stata: A Guide and Software.” *The Stata Journal* 17 (3): 630–51.
- Israeli, Tzipi, and Moran Ditsch. 2020. “What Does the Israeli Public Think about the Coronavirus Hardships? Findings from a Public Opinion Poll during the Second Wave

- of the Crisis.” INSS. <https://www.inss.org.il/he/publication/coronavirus-inss-survey/>.
- Kreiss, Daniel, and Shannon C. Mcgregor. 2019. “The ‘Arbiters of What Our Voters See’: Facebook and Google’s Struggle with Policy, Process, and Enforcement around Political Advertising.” *Political Communication* 36 (4): 499–522.
- Kurtzleben, Danielle. 2018. “Did Fake News On Facebook Help Elect Trump? Here’s What We Know.” NPR. <https://www.npr.org/2018/04/11/601323233/6-facts-we-know-about-fake-news-in-the-2016-election>.
- Levi, Amir. 2020. “The Left in Balfour Celebrated All Night, in Tel Aviv the Police Dispersed a Right-Wing Demonstration.” Mida. <https://mida.org.il/2020/08/02/-השמאל-בבבלפור-חגג-לתוך-הלילה-בתא-המשטר>.
- Lyons, Kim. 2020. “President Trump Is Reportedly Considering Creating a Panel to Examine Bias Online.” The Verge. <https://www.theverge.com/2020/5/23/21268433/president-trump-conservative-bias-social-media-twitter-facebook-google>.
- Saban, Itzik. 2019. “Confiscating the Phones of the PM Advisors: The Police Was Caught with Its Pants Down.” Israel Hayom. <https://www.israelhayom.co.il/article/703327>.
- Shearer, Elisa, and Elizabeth Grieco. 2019. “Americans Are Wary of the Role Social Media Sites Play in Delivering the News.” Pew Research Center. <https://www.journalism.org/2019/10/02/americans-are-wary-of-the-role-social-media-sites-play-in-delivering-the-news/>.
- Sullivan, Margaret. 2020. “Pro-Trump Voices Have Mark Zuckerberg’s Ear. Is That Why Facebook Undermines Liberal News Sites?” The Washington Post. https://www.washingtonpost.com/lifestyle/media/facebook-news-zuckerberg-conservative-liberal/2020/10/26/04722572-1464-11eb-bc10-40b25382f1be_story.html.