# Acting(s) without Consequence: The (Lack of) Public Costs for Vacancies and Acting Officials\*

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April 3, 2023

#### Abstract

While the use of temporary acting officials in federal agencies has become more common in recent years, presidents still utilize the traditional nomination process, which is slower and constrains presidents' choices, for most executive branch appointments. Recent work emphasizes presidents' incentives for using acting officials, but few scholars have considered what keeps presidents from using them even more often. We argue that presidents' use of acting officials, like other forms of unilateral action, is constrained by public opinion; while acting officials may be expeditious policy tools for presidents, the public perceives them to undermine the legitimacy and competence of the executive branch and punishes presidents and federal agencies accordingly. Through three survey experiments leveraging real-world instances of President Joe Biden's usage of acting officials in his first two years in office, we find little evidence that the public reacts negatively to the use of acting officials in executive agency leadership. While some institutional forces must encourage presidents to seek senatorial advise and consent for their nominees, public opinion does not provide that constraint.

<sup>\*</sup>We thank Meredith McLain, Andrew Reeves, Andrew Stone, and seminar participants at Vanderbilt University for helpful feedback. We are grateful for funding from the Center for the Study of Democratic Institutions at Vanderbilt University and East Tennessee State University that enabled us to field our surveys. The pre-registration documents associated with our experiments can be found at: https://doi.org/10.17605/OSF.IO/8YZ3B and https://doi.org/10.17605/OSF.IO/EWA6J.

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By February 2019, just over two years into his term as president, Donald Trump had replaced 10 of his 24 original Cabinet officials, with half of those vacated positions held by acting officials who the president appointed on a temporary basis without the advise and consent of the Senate. When asked if he was comfortable with this turnover and the high number of acting officials, Trump responded, "It's easier to make moves when they're acting... I like acting because I can move so quickly. It gives me more flexibility." While the frequency with which Trump utilized acting officials to fill both Cabinet- and agency-level posts was unprecedented, all presidents in the modern era commonly address vacancies with acting appointments (O'Connell 2020). Recent studies of executive branch vacancies argue that presidents are often incentivized to forego the lengthy and costly advise and consent process when handling these vacancies because, in doing so, they can empower loyal and/or like-minded officials the Senate would not confirm, promote energy in agencies whose aims they support, and stymie the work of agencies whose missions they oppose (e.g., Kinane 2021; O'Connell 2020; Piper 2022). At the same time, presidents face few barriers to using acting officials and vacancies, as Congress has granted them substantial discretion to fill empty executive branch positions and demonstrated scant willingness to assert its advise and consent prerogative (Mendelson 2020). Given these conditions, some may wonder why presidents often subject their appointments to the constraints posed by the Senate confirmation process.

In this article, we consider one such constraint which may prompt presidents to limit their use of acting officials: public opinion.<sup>2</sup> While institutional constraints afforded Congress and the courts on presidents' use of unilateral powers, such as executive orders, often fail to deter unilateral action, several recent studies illustrate that the public's deep-seated suspicion toward presidential power discourages presidents from utilizing those tools (e.g., Christenson and Kriner 2017b; Reeves and Rogowski 2016, 2018, 2022). We argue that the public's skepticism of unilateralism similarly tinges

<sup>&</sup>lt;sup>1</sup> "Transcript: President Trump on 'Face the Nation,' February 3, 2019." Face the Nation, February 3, 2019, https://www.cbsnews.com/news/transcript-president-trump-on-face-the-nation-february-3-2019/.

<sup>&</sup>lt;sup>2</sup>In this paper, we use terms including "vacancies," "vacancy appointments," "acting officials" interchangeably to refer to cases where an executive branch position subject to the advise and consent of the Senate is occupied by someone who has not received Senate confirmation. While there are multiple mechanisms by which the president can fill a vacancy (or allow a vacancy to be filled), such as allowing the official designated by statute to assume the responsibilities of the post by "default" or making a "strategic" appointment of another senior official in the executive branch (see Footnote 3), these vacancies ultimately allow presidents to decide who will serving in an acting capacity while circumventing the traditional advise and consent process, even if the president does so by not taking action. Therefore, management of these vacancies represent unilateral exercise of presidential power.

perceptions of presidents' use of acting officials, whom the president can appoint and remove on his own with few restrictions, such that presidents limit their use of actings lest they incur public costs for their own reputations and the agencies they oversee. We further posit that these public costs stem from more negative impressions of agencies' competence and legitimacy when led by acting officials relative to when headed by Senate-confirmed personnel.

We evaluate our expectations through three pre-registered survey experiments based on the proliferation of acting officials present during the first two years of Joe Biden's presidency. Our first experiment prompts respondents to consider President Biden's progress in nominating and confirming officials across the executive branch five months into his presidency, and our treatment conditions highlight the presence of acting officials and the negative consequences acting leadership can have on government performance. Differently, our second and third experiments focus on controversial policy decisions and governmental failures associated with the Food and Drug Administration (FDA) and the Federal Aviation Administration (FAA), both of which were headed by acting officials when they attracted scrutiny; in our treatment conditions, respondents were made aware of the agency heads' acting status and provided with information about why the lack of a Senate-confirmed leader may hamstring the agencies' performance. Across all three experiments, we find scant evidence that the public's appraisal of President Biden suffers when the presence of acting officials are made salient—even when providing context about why acting officials can impede government performance. Differently, our results indicate that the public punishes agencies when made aware they are run by acting officials, but only in the wake of salient governmental failures. Importantly, this pattern of results persists even when conditioning on respondents' partisan affiliations.

Our results have important implications for our understanding of presidential power and democratic accountability. First, whereas other studies demonstrate that the public responds negatively to presidents' use of unilateral powers which skirt traditional constitutional processes, like executive orders (Christenson and Kriner 2017b; Reeves and Rogowski 2016, 2018; but see Christenson and Kriner 2019), we find no evidence that presidents personally suffer negative consequences when employing acting officials. This contrast raises the possibility that the public evaluates the various types of unilateral power at presidents' disposal differently. Second, our null results raise normative concerns with respect to democratic accountability in the administrative state. As unelected entities, agencies derive much of their legitimacy from their high-ranking officials having been nominated and confirmed by the president and the senators whom voters empower to hold the administrative state accountable. If the public seldom sanctions the president or agencies for deviating from this accountability mechanism, presidents may be emboldened to appoint acting officials whose preferences diverge from those of senators and their constituents. Consequently, the actions and directions of federal agencies may become more liable to drift from the public's preferences.

# What Limits Presidents' Use of Acting Appointments?

Presidential appointments to federal agencies are one of the central tools by which all presidents exert control over bureaucratic policymaking (Lewis 2008; Moe 1985). While presidents can staff some agency positions at their own discretion, they can only make permanent appointments to the most powerful and prestigious jobs, such as Cabinet secretaries, agency directors, and their deputies and assistants, by nominating individuals whom the Senate must confirm to their posts. Because the process to install individuals in Presidential Appointments needing Senate confirmation (PAS) positions is time-consuming—especially in the modern era as senatorial delay on presidential nominations has become more common—presidents often opt to leave the broad swath of PAS positions without Senate-confirmed personnel for extended periods of time (Lewis and Richardson 2021; O'Connell 2017; Resh et al. Forthcoming).

Presidents can choose to leave these posts empty or, through the Federal Vacancies Reform Act of 1998 (FVRA), unilaterally select someone to fill them on an interim basis.<sup>3</sup> In addition to saving presidents the time and resource costs associated with the advise and consent process, such as securing senators' support to hold confirmation hearings and ultimately approve the nominees,

<sup>&</sup>lt;sup>3</sup>Under FVRA, if there is an individual serving in the "first deputy" or "first assistant" position below the PAS position, that individual will become the acting official by default. The president may also select a previously confirmed PAS official or a senior "officer or employee" within the agency at the equivalent of the GS-15 pay level or above to serve in an acting capacity (Brannon 2020).

presidents can exercise greater control over the appointment process through FVRA because they can empower preferred individuals the Senate might otherwise block (O'Connell 2020). Recent empirical studies indicate that presidents' decisions to employ acting officials rather than pursue the advise and consent process hinge on contextual factors such as their ideological alignment with the agency in which the vacancy resides and whether the agency is connected to the president's campaign priorities. For instance, Kinane (2021) and Piper (2022) show that presidents more frequently use acting officials in agencies that they seek to make positive, or expansive, policy change. Further, Piper (2022) shows that presidents use acting officials more frequently in ideologically opposed agencies and that the use of acting officials sometimes prompts the president to delay the pace at which they make formal nominations to those positions. Thus, presidents' choices to empower individuals on an interim basis constitute a consequential utensil in their unilateral toolkit they can employ to advance their goals (Lowande and Rogowski 2021).

While scholars have expressed emerging interest in presidents' motivations for using acting appointments, few have investigated why presidents elect to pursue the arduous Senate confirmation process to fill PAS positions they could more easily populate with acting appointees.<sup>4</sup> Indeed, with the Senate excluded from the selection process, separation of powers limits on presidents' appointments—the traditional check on presidential appointment powers (Calvert, McCubbins, and Weingast 1989; McCarty and Razaghian 1999)—are nonexistent and, in the extreme, presidents could fill executive branch leadership positions by drawing from non-Senate confirmed appointees or senior agency staff eligible to serve under FVRA. However, Senate-confirmed appointees are the norm, not the exception, in PAS positions; examining a selection of PAS position from 15 executive departments in every year from 1977-2016, Kinane (2021) reports that 80.5% of posts were filled by Senate-confirmed personnel.<sup>5</sup> Thus, a paradox emerges whereby presidents exercise in moderation

<sup>&</sup>lt;sup>4</sup>Some scholars have noted that acting appointments can be undesirable because they degrade the performance of agencies where they are placed. For instance, agencies with acting appointments may have lower employee morale, be more reticent to undertake significant policy initiatives, and curtail their long-term planning (O'Connell 2020; Piper and Lewis 2022). However, because these negative impacts on agency performance can often be the objective for presidents who want to impede the work of agencies whose preferences or missions they oppose (Kinane 2021; Piper 2022); they are are not themselves constraints on presidents' use of acting appointees. Other scholars have noted that acting officials also suffer in comparison to their Senate confirmed counterparts because of limits on their service (O'Connell 2020; Piper 2022). However, in practice, acting officials are able to serve for multiple years, depending on when they take office and if the president makes nominations to the position.

<sup>&</sup>lt;sup>5</sup>Focusing on "key" PAS positions, Piper (2022) notes that Presidents Obama, Biden, and Trump placed Senate-

their exclusive power to make acting appointments despite an absence of institutional constraints compelling such moderation.

In the next section, we propose a potential limit on presidents' use of acting appointments that resolves this paradox: public opinion. Drawing on recent scholarship on public constraints on unilateral power, we argue that presidents may avoid excessive use of acting appointments because they diminish the public's evaluations of presidents and the federal agencies they oversee. Thus, while acting appointments obviate the advise and consent process as an accountability mechanism, public opinion may compensate by holding presidents accountable through an alternative pathway.

### Public Constraints on Acting Appointments

All presidents enter office with ambitious electoral, policy, and legacy goals (Light 1999) and immediately inherit immense responsibilities for policy programs and outputs—many of which are beyond the president's ability to control (Cllifford et al. n.d.; Cronin 1980; Lowi 1986). While the Constitution grants presidents limited expressed powers through which they can pursue these goals and shoulder these responsibilities, presidents often draw on a range of unilateral powers that enable them to influence the policymaking process without the consent of Congress or the courts (Howell 2003; Lowande and Rogowski 2021; Moe and Howell 1999). Though most scholarship on unilateral powers focuses on official declarations made by presidents, such as executive orders and and memoranda, presidents possess many other unilateral tools with which they can shape the policy process independently, such as directing the flow of federal grants (Kriner and Reeves 2015) creating Schedule C appointments in federal agencies (Lewis 2005), and making recess appointments (Black et al. 2007). Recent work identifies acting officials, which allow presidents to lay the groundwork for new policy outcomes while circumventing the Senate's advise and consent power, as another utensil in presidents' unilateral toolkits (Kinane 2021; Piper 2022).

Unilateral powers enable presidents to pursue their goals and fulfill their responsibilities more expeditiously than they can working with Congress, but they also create accountability problems for American democracy. Namely, when presidents act independent of Congress, they sever critical confirmed personnel in 53.1% of such positions by the end of their first years in office—a large percentage considering

that most PAS positions become vacant when a new president takes office.

checks and balances afforded the legislative branch and create the risk that presidents pursue policy aims at odds with those of Congress and the public. While Congress and the courts can assert their institutional prerogatives to constrain presidents from using unilateral action (Chiou and Rothenberg 2017; Howell 2003), recent work suggests that these coequal branches often fail to confront presidents who employ unilateral tools (Lowande 2021).

Alternatively, scholars have argued that the public, rather than Congress and the courts, is a more effective constraint on presidents' use of unilateral power (Posner and Vermeule 2011). Presidents are responsive to public opinion because it is the coin of the realm for pursuing electoral success for themselves and their copartisans, seeking to leverage public attitudes to pressure Congress to support their initiatives, and striving for a favorable legacy; without public support, presidents' futures in office become short and their reputations crumble (Neustadt 1991). While studies of presidential accountability and public opinion typically focus on how well presidents' priorities and actions align with those of the public (Canes-Wrone and Shotts 2004; Eshbaugh-Soha and Rottinghaus 2013; Griffin and Newman 2016; Wood 2009) and generate favorable policy outcomes (Kalmoe et al. 2019; Sances 2021; Singer 2021), many members of the public also hold preferences over the processes by which presidents and other policymakers exercise their authority and reward and sanction for adherence to or abandonment of these processes (Hibbing and Theiss-Morse 2002). Importantly, many people view many forms of unilateral action negatively, perceiving them as counter to the rule of law and associated with unpopular past policies (Lowande and Gray 2017; Reeves and Rogowski 2016, 2018). While these unfavorable views can be influenced by partisanship and elite rhetoric (Christenson and Kriner 2017a,b), they are largely stable across time and even changes in partisan control of the White House (Reeves and Rogowski 2022, n.d.). Consequently, many scholars suggest that presidents temper their use of unilateral action in order to avoid these deleterious effects of public opinion.

Though much of the extant work on the public's ability to restrain unilateral action focuses on presidents' use of official declarations, such as executive orders, we argue that public opinion similarly constrains presidents' unilateral authority to utilize acting officials. A key element of Americans' political socialization through formal schooling and immersion in political life is re-

peated exposure to the concept of checks and balances (Reeves and Rogowski 2022, 38-42), and the Senate's authority to provide advise and consent for presidents' nominations to executive and judicial branch posts is not only an expressed constitutional power of the Senate, but also an oft-referenced and easy to understand example of this concept. Thus, a president's use of acting officials, which subverts the Senate's advise and consent authority, may stir up among members of the public the same rule of law concerns that unilateral declarations activate and prompt them to withhold support from the president.

Whereas presidents' unilateral directives reflect primarily on the president, who uses them to issue specific policy-oriented directives attributable to him directly (Ansolabehere and Rogowski 2020), the presidents' use of acting officials could also reflect on the public's perception of the executive branch agencies they inhabit. That agency leaders, who are the most salient public officials in their respective agencies, are empowered outside the standard appointments process might prompt the public to offer more negative perceptions of agencies headed by acting officials. Since presidents are held accountable for managing the entire executive branch and the public's perception of their management ultimately influences their public approval (Cronin 1980; Lowi 1986; Rogowski 2020; Svensen 2022), presidents must be cognizant not only of how the public responds to their initial use of acting officials, but also to how the public reacts to the presence of vacancies and acting officials in the bureaucracy. Thus, in considering how the public may constrain presidents' use of acting officials, it is important to consider that presidents' use of acting officials may not only prompt direct public costs to their reputations, but may also prompt costs for the reputations of federal agencies they are responsible for managing.

In addition to our general expectations concerning the effects of acting officials on public opinion toward presidents and the executive branch, we also posit two mechanisms which might underlie these effects. First, acting officials may impact perceptions of the executive branch's legitimacy. As an unelected entity of government, the federal bureaucracy's legitimacy is sourced in large part from the control and oversight the elected officials—Congress and the president—exercise over it (Kagan 2000; Mashaw 1985; Wallach 2016). The traditional constitutional appointment process, by which both the president and Senate sanction agency leaders in PAS positions, helps confer legitimacy on

those leaders and the agencies they head. However, when presidents remove the Senate from the process with acting appointments, members of the public may perceive those acting officials as less legitimate than their Senate-confirmed counterparts because they carry approval from only one of the two coequal branches and may represent attempts by the president to empower agency leaders that would not receive an endorsement from their elected representatives in the Senate. These diminished perceptions of the executive branch's legitimacy may subsequently undermine public approval of the president and executive branch.

Second, vacancies and acting officials may impair public perceptions of the executive branch's competence. One of the key reasons why elected officials and the public grant authority to and follow the guidance of bureaucratic entities is because they cultivate strong reputations for competence and expertise; when bureaucrats demonstrate high levels of knowledge and skill in their respective domains, they typically enjoy more autonomy and compliance with their actions (Busuioc and Lodge 2016; Carpenter 2001; Hall, Quin Monson, and Patterson 2009). While acting officials may sometimes have equivalent competence and expertise as their Senate-confirmed counterparts, their transitory titles and lack of Senate confirmation may signal to the public that they are of inferior quality compared to permanent appointees. These perceptions may lead members of the public to question whether the agencies these acting leaders oversee can perform competently under their direction, ultimately tarnishing their approval of the agencies themselves and the individual responsible for appointing those acting leaders—the president.

Finally, while our preceding expectations pertain to members of the public writ large, recent scholarship suggests that public responses to unilateral action can be conditioned by partisan or ideological predilections. For instance, Christenson and Kriner (2017a) find that people respond more positively (negatively) to unilateral action when the president shares (does not share) their partisan affiliation and when the policy aligns (does not align) with their own preferences. Differently, Reeves and Rogowski (2018) show that unilateral action diminishes public support for the president most strongly among those who agree with the policy the president adopts, suggesting that policy agreement is tempered by procedural means. Because these studies find evidence of partisan- and ideology-conditional effects, but in different directions, we do not have ex ante

expectations concerning how respondents' partisan identification or ideological persuasions might moderate the effect of vacancy appointments on public opinion, but conduct exploratory analyses of these potential effects.

# Research Design

Examining the implications of elite actions, such as the president's choice to utilize an acting official, on public opinion poses important research design challenges (see Boston et al. 2023; Miller and Reeves 2017, 2022; Reeves and Rogowski 2022). Presidents staff leadership positions in the executive branch both through the traditional process of sending nominees to the Senate for confirmation and through acting appointments. However, were we to merely compare existing opinion poll measures of public perceptions of the president and the executive branch following the president making each type of appointment or appointees of each type taking public actions, we could not attribute differences in public attitudes to the means of appointment alone. The key barrier to inference is confounding; because no two presidential appointees are identical, serve in the same institutional settings and political environments, and conduct the same policymaking activities, we could not attribute observed differences in public opinion to the means by which the official was appointed.<sup>6</sup>

In light of these challenges, we utilize survey experiments which present respondents with realistic tableaus about presidential appointees in the executive branch that systematically vary whether those appointees are Senate-confirmed or acting while holding all other aspects constant (Gaines, Kuklinski, and Quirk 2007). Through random assignment, we are able to attribute any differences in respondent perceptions of the president and the executive branch to the featured appointees' status as acting or Senate-confirmed.

When employing survey experiments, it is critical to be mindful of external validity (Cohen 2017). Several features of our experimental design promote external validity and enable us to generalize our results to real-world contexts. First, because people may encounter information about whether executive branch officials are acting or Senate-confirmed in many different stages of

<sup>&</sup>lt;sup>6</sup>Even individuals who begin their tenure as an acting official and are later confirmed to the same post by the Senate are not comparable because they enter into their Senate-confirmed period with prior experience as an acting official and the political environment they inhabit (e.g., economic performance, issue agenda) evolves over time.

the policy process, we implement three experiments, each of which focuses on a different context in which respondents are likely to be made aware of agency officials' Senate-confirmed or acting status. In our Executive Branch experiment, we focus on the appointment stage by apprising respondents of Joe Biden's progress at staffing the executive branch with his appointees, and our treatment conditions highlight that a large proportion of positions are occupied by acting officials. Differently, in our FDA experiment, we spotlight the policymaking process by focusing on the Food and Drug Administration's decision under an acting commissioner to approve a new drug to treat Alzheimer's disease, and our treatments emphasize the commissioner's acting status. Finally, in our FAA experiment, we feature the implementation stage by leveraging an outage of one of the Federal Aviation Administration's key safety systems that caused massive air travel disruptions, and our treatment conditions highlight that this outage occurred while the FAA was run by an acting administrator. By situating these experiments in different contexts, we are able to assess the extent to which public responses to acting officials are uniform across or are conditioned by the circumstances under which the public learns about executive branch officials' acting or Senate-confirmed status.

Second, we make sure that our vignettes' subject matter and content are realistic by drawing directly from media reports which highlight the presence of acting officials in the executive branch. As we detail below and in Supplemental Information Section A, our vignettes focus on discrete events that received considerable attention from major media outlets such as *CNN*, *Politico*, *The New York Times*, and *The Wall Street Journal*, and the text in our vignettes draws heavily from news stories published by those outlets. For instance, our Executive Branch vignettes are drawn nearly verbatim from a *Wall Street Journal* story from May 2021 providing an overview of President Biden's progress in filling executive branch positions through the first five months of his presidency. Further, the Acting Official conditions in our FDA and FAA experiments, which add "Acting" to the agency heads' titles, mirrors media outlets' standard practice of identifying officials' acting status when applicable.<sup>7</sup> By using news events covered by and text from major national publications as

<sup>&</sup>lt;sup>7</sup>To get a sense of how consistently media outlets explicitly designate acting officials as "Acting," we performed Nexis Uni searches of the names of the two acting officials in our experiments—Janet Woodcock and Billy Nolen—in "Major U.S. Newspapers" with and without "acting" as part of our search. Of the 193 articles mentioning Janet Woodcock during her tenure as Acting FDA Commissioner (January 20, 2021 to February 17, 2022), 171 identified

the basis of our experimental materials, we ensure that we expose our respondents to information the public can plausibly encounter in everyday life and that the strength of our treatments mirrors the wording and content typically used to convey the underlying concepts.

#### **Experimental Protocol**

We fielded our Executive Branch and FDA experiments in July 2021 with approximately 3,100 respondents recruited through Lucid, an online survey platform that provides researchers with panels whose demographic characteristics mirror those of the national population (Coppock and McClellan 2019). In the survey flow, respondents were randomly assigned to participate in one of these two experiments, thus splitting the sample into roughly even sizes. Differently, we fielded our FAA experiment in February 2023 with approximately 1,170 respondents recruited through CloudResearch Connect, which similarly provides panels with distributions of demographic characteristics similar to those of the US population.<sup>8</sup> All three experiments were pre-registered with Evidence in Governance and Politics.<sup>9</sup>

#### **Executive Branch**

Respondents in our Executive Branch experiment were asked to read a vignette about President Joe Biden's progress in filling executive branch vacancies through the first five months of his term. <sup>10</sup> All respondents read two short paragraphs about how Biden had, by the beginning of June 2021, made more nominations to Senate-confirmed positions than Presidents Bill Clinton, George W. Bush, Barack Obama, and Donald Trump had at the same stage of their presidencies, but that the Senate had confirmed fewer of his nominees than it had for Clinton, Bush, and Obama. Those

her as an acting official. Similarly, of the 12 articles mentioning Billy Nolen between April 1, 2022 and December 31, 2022, 10 specified that he was an acting official.

<sup>&</sup>lt;sup>8</sup>In both surveys, respondents completed a battery of pre-treatment demographic questions and two attention checks drawn from or stylized after those introduced by (Berinsky, Margolis, and Sances 2014). Please see Supplemental Information Section A for more details.

<sup>&</sup>lt;sup>9</sup>The pre-registration documents associated with our experiments can be found at: https://doi.org/10.17605/OSF.IO/8YZ3B and https://doi.org/10.17605/OSF.IO/EWA6J

<sup>&</sup>lt;sup>10</sup>This vignette draws heavily from a then-recent article in *The Wall Street Journal* which discussed the pace of Biden's nominations and confirmations to executive branch positions (Thomas, Ken. "Biden Leads Predecessors in Nominations, Lags Behind in Confirmations," *The Wall Street Journal*, May 30, 2021, https://www.wsj.com/articles/biden-leads-predecessors-in-nominations-lags-in-confirmations-11622367002).

assigned to our first treatment condition—the Acting Official treatment—also receive an additional sentence-length paragraph which explains that, because few of Biden's nominees had received Senate confirmation, "some Cabinet-level departments in the executive branch of the US government are led by deputy secretaries and many key positions are filled with acting leadership."

While the Acting Official treatment makes clear to respondents that many leadership positions in the executive branch were filled by acting officials, it is possible that respondents may not understand the potential deleterious consequences acting leadership can have for the working of the federal government. Thus, to assess whether respondents respond more negatively to the presence of acting officials once informed why actings might be problematic, we provided respondents in our second treatment condition—the Acting Official with Context treatment—the same text supplied in the Acting Official treatment as well as another sentence discussing how "[t]he lack of Senate-confirmed leaders throughout government can lead to delays in implementing executive actions and initiatives across the executive branch." 11

After reading their assigned vignette, respondents were asked to express their level of approval for the president's job performance and his management of the executive branch, as well as their perceptions of the competence and legitimacy of the executive branch.<sup>12</sup>

#### FDA

Participants in our FDA experiment were presented with a vignette about the Food and Drug Administration's June 2021 approval of aducanumab, a novel drug developed to treat Alzheimer's disease.<sup>13</sup> This approval was overseen by Dr. Janet Woodcock, a longtime FDA official who

<sup>&</sup>lt;sup>11</sup>The text unique to the Acting Official with Context treatment is taken nearly verbatim from the original *The Wall Street Journal* article. By including both the Acting Official and Acting Official with Context treatments, we are able to discern whether respondents react to the mere mention of "acting" status or whether they react only once apprised of the implications of acting officials' presence.

<sup>&</sup>lt;sup>12</sup>Perceptions of competence and legitimacy are measured using four questions—two for each concept. Our competence questions ask respondents to indicate their level of agreement that the executive branch is led by well-qualified individuals and responds effectively to policy problems and crises. Our legitimacy questions, adapted from the judicial legitimacy battery developed by Gibson, Caldeira, and Spence (2003), ask respondents to indicate their level of agreement that the executive branch makes decisions that are right for the country as a whole and does not make decisions that favor some groups more than others. Responses are measured on four-point scales, and each respondents' perceptions of competence and legitimacy are obtained by averaging their responses to the corresponding questions.

<sup>&</sup>lt;sup>13</sup>Our vignettes draw heavily from articles published by *The New York Times* and *Politico* discussing the FDA's approval of a new Alzheimer's drug under an acting commissioner (Kaplan, Sheila. "F.D.A. Still Lacks a Permanent Chief, Despite Pressing, Weighty Problems," *The New York Times*, June 12, 2021, https://www.nytimes.com/

President Biden named acting commissioner at the beginning of his term, and our treatments exploit Commissioner Woodcock's acting status by systematically providing or withholding this information while holding all other components of the vignettes constant. All respondents were presented with two short paragraphs recounting Dr. Woodcock's decision to approve aducanumab despite criticism from medical experts who asserted that the drug's clinical trials did not provide sufficient evidence that it is an effective treatment.

While respondents in the Control condition were told that "FDA Commissioner Janet Wood-cock" approved the drug, respondents in the Acting Official condition were told that "Acting FDA Commissioner Janet Woodcock" made the decision. Then, as in our Executive Branch experiment, respondents in a Acting Official with Context condition were provided additional information that critics argued that the approval decision "highlights the need for a permanent commissioner to run the agency... [because] the agency lacks leadership to launch new initiatives, make major policy decisions, and address a backlog of plant inspections and drug and medical device approvals." Finally, respondents in this third condition were told that President Biden had not yet nominated a permanent FDA commissioner.

After reading their assigned vignette, respondents in the FDA experiment were asked to express their levels of approval for Biden's handling of his job as president, his management of the FDA, Dr. Woodcock's handling of her job as FDA Commissioner, and the FDA's approval of aducanumab. Finally, respondents were also asked to express their perceptions of the competence and legitimacy of the FDA using a battery of questions similar to those used in the Executive Branch experiment.

#### **FAA**

Respondents in our FAA experiment were provided with a vignette about an outage affecting the FAA's Notice to Air Missions (NOTAM) system, which provides pilots with information about potential hazards on their flight routes. When this system malfunctioned early on January 11, 2023, the FAA grounded all flights within the United States for 90 minutes, causing over 10,000

2021/06/12/health/fda-woodcock-agenda.html; Owermohle, Sarah and Cancryn, Adam and Gardner, Lauren. "Controversial Drug Approval Stokes Concern About Lack of a Permanent FDA Chief," *Politico*, June 11, 2021, https://www.politico.com/news/2021/06/11/fda-woodcock-controversial-drug-approval-493324).

flight delays and 1,300 flight cancellations and inconveniencing and stranding untold numbers of passengers. Like most governmental failures, the NOTAM outage sparked a "blame game" in which the media and political elites scrutinized the FAA's actions and sought to identify someone to hold accountable (Boin, McConnell, and T'Hart 2008; Boin et al. 2010; Hood 2011; Miller and Reeves 2022). Notably for the present study, the FAA was headed by an acting administrator, Billy Nolen, an aviation industry veteran who assumed his role in April 2022, and, similar to our FDA experiment, we leveraged Nolen's status to randomly provide or withhold information about his role as an acting official while holding the remainder of the vignettes constant.

We provided all respondents with two short paragraphs detailing the NOTAM outage and its consequences on commercial air travel, as well as mention of the FAA's early assessment of the cause of the outage and its commitment to prevent similar incidents in the future. While those in the Control condition read that the FAA was under the direction of "Administrator Billy Nolen," respondents in the Acting Official condition instead read that "Acting Administrator Billy Nolen" was in charge of the agency. Differently, respondents in our Acting Official with Context condition received an additional paragraph indicating that critics "expressed concern that the FAA system outage highlights the need for a permanent administrator to run the agency," and that without a permanent leader "the agency lacks the leadership to launch new initiatives, make major policy decisions, and address a backlog of approvals and certifications of aircraft and aircraft parts." Additionally, respondents in this third condition were informed that President Biden had nominated a permanent FAA administrator in July 2022, but that the Senate had not yet confirmed his nominee.

After reviewing their vignettes, respondents were prompted to provide their levels of approval for Biden's handling of his job as president, his management of the FAA, Billy Nolen's handling of his job as FAA Administrator, and the FAA's handling of the NOTAM malfunction. Respondents

<sup>&</sup>lt;sup>14</sup>Josephs, Leslie, "Flight Disruptions Ease After FAA Outage but Questions Linger about System Outage," *CNBC*, January 12, 2023, https://www.cnbc.com/2023/01/12/faa-notam-outage-flight-impact-eases.html.

<sup>&</sup>lt;sup>15</sup>Our vignettes adhere to the same format as those in the FDA experiment, but with factual details changed to reflect the FAA's NOTAM outage. We drew heavily from the *CNBC* article referenced in Footnote 14, as well as articles published by *CNN* and *Reuters* (Fung, Brian, "Aging, outdated technology leaves air travel at risk of meltdown," *CNN*, January 13, 2023, https://www.cnn.com/2023/01/13/business/airline-meltdowns; Shepardson, David, "U.S. Congress to investigate FAA computer outage that snarled flights," *Reuters*, January 11, 2023, https://www.reuters.com/world/us/us-senate-commerce-committee-investigate-faa-computer-outage-2023-01-11/).

were also asked to indicate their perceptions of the FAA's competence and legitimacy using a battery of questions similar to those used in the Executive Branch and FDA experiments.

# Results

We evaluate our pre-registered expectations concerning the overall effects of our treatments on respondents' evaluations of President Biden and the executive branch using linear regression. We supplement our analyses with causal mediation (Imai et al. 2011) to assess whether the effects of our treatments on those evaluations are mediated by respondents' perceptions of federal agencies' competence and legitimacy. While we present in full our examination of the overall treatment effects in the main text, we only mention of key findings from our causal mediation analyses and reserve full presentation for Supplemental Information Section B.

For ease of presentation, we use binary indicators for respondents' approval of President Biden, the FDA, and the FAA, such that treatment effects represent the change in approval for the object of evaluation relative to the level of approval expressed by respondents in the corresponding control condition. For instance, a value of -0.02 for presidential approval would indicate that respondents in a given treatment condition expressed a level of approval 2 percentage points lower than respondents in the control condition. Differently, our measures of respondents' perceptions of the executive branch, FDA, and FAA's competence and legitimacy range from 1 to 4, where higher values indicate stronger perceptions of each quality.

Figure 1 presents the treatment effects associated with our Acting Official(s) and Acting Official(s) with Context (circles and triangles, respectively) for the Executive Branch, FDA, and FAA experiments (left, center, and right panes, respectively). Considering first the results from our Executive Branch and FDA experiments, we see that respondents in both treatment conditions did not offer evaluations of President Biden or the federal agencies in question that were distinguishably different from those offered by respondents in the control condition across all outcome measures. For instance, Executive Branch respondents in the Acting Officials and Acting Officials with Con-

<sup>&</sup>lt;sup>16</sup>The estimates in Figure 1 represent tests of each of the overall treatment effects hypothesized in our preregistration documents (H1a-H6b).

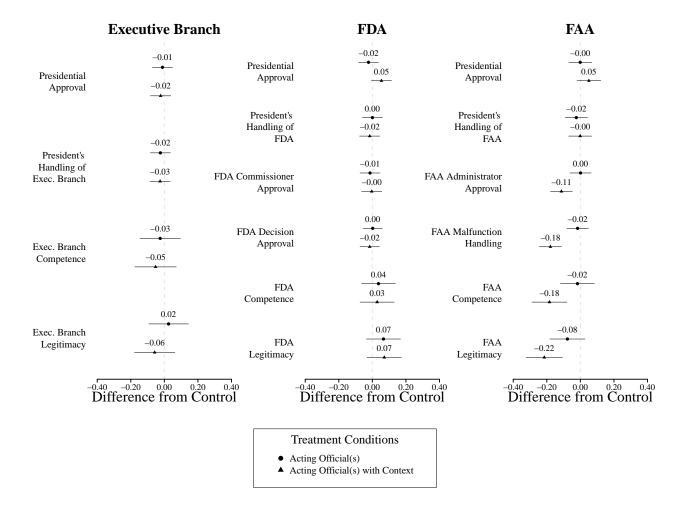


Figure 1: Public Responses to Vacancy Appointments. Linear regression coefficients for treatment effects of the Acting Official(s) (circles) and Acting Official(s) with Context (triangles) conditions relative to the control condition in the Executive Branch (right panel), FDA (center panel), and FAA (right panel) experiments. Approval outcome measures are coded as binary variables, such that positive (negative) values along the x-axis reflect increases (decreases) in levels of approval ratings relative to the control condition (i.e., -0.02 reflects a decrease in approval by 2 percentage points). Competence and legitimacy outcome measures are coded on a 1 to 4 scale, such that higher (lower) values reflect increases (decreases) in respondents' perceptions of the executive branch, FDA, or FAA's competence and legitimacy on those scales. Bars around point estimates represent 95 percent confidence intervals.

text treatments were only 2 to 3 percentage points less likely to approve of Biden's handling of the executive branch, and the 95% confidence intervals for these estimates include zero. Again, FDA respondents' perceptions of the agency's competence and legitimacy were slightly more positive among those in the treatment conditions relative to those in the control conditions (between 0.03 and 0.07 on 1 to 4 scales), but these differences are substantively small and not statistically

distinguishable at the 95% level. Taken together, the findings from both experiments provide no evidence that the use of acting officials exact public opinion costs on presidents or the executive branch.

However, our FAA experiment yields a substantively different pattern of results. While respondents in both treatment conditions again express levels of approval for President Biden's overall performance as president and handling of the FAA that are not distinguishably different from those in the control condition, those in the Acting Official with Context condition provide distinguishably more negative evaluations of the FAA. When asked to express levels of approval for FAA Acting Administrator Billy Nolen and the FAA's handling of the NOTAM outage, respondents in the Acting Official with Context condition are 11 and 18 percentage points less approving, respectively, than those in the control condition. We also observe that the perceptions of the FAA's competence and legitimacy among those in the Acting Official with Context condition are 0.18 and 0.22 points lower on the 1 to 4 scale, respectively, relative to the same perceptions of control condition respondents. Further, our causal mediation analyses indicate that respondents' perceptions of both the FAA's competence and legitimacy mediate between roughly 30% to 60% of the effect of the Acting Officials with Context treatment on evaluations of Acting Administrator Nolen and the FAA's handling of the malfunction (see Supplemental Information Section B). Importantly, these negative effects are not observed among respondents in the Acting Official condition, suggesting that it is the combination of making respondents aware of Nolen's acting status and apprising them of why acting officials can be detrimental for agency performance, rather than merely identifying Nolen as an acting official, that causes these costs for the FAA. Overall, in the wake of the FAA's governmental failure with an acting administrator at the helm, the president evades public costs from empowering an acting official just as in the Executive Branch and FDA experiments, but the agency itself incurs the public's wrath when people are informed about the dangers of acting officials. We expand on this disconnect, and the troubling normative consequences it implies, in our Conclusion.

#### Copartisan-Conditional Effects

We now examine the extent to which the correspondence between respondents' partisan identification and that of Democratic President Joe Biden may condition the effect of our treatments. We do so by interacting our treatment indicators with a dichotomous indicator for whether each respondent is a copartisan of President Biden (i.e., a Democrat) and present the resulting copartisan-conditional effects in Figure 2.

Overall, the copartisan-conditional analyses for our Executive Branch and FDA experiments yield null results similar to those in Figure 1. The copartisan-conditional treatment effects in our Executive Branch experiment are again of substantively small magnitude and are not statistically distinguishable from zero. One estimate in our FDA experiment is statistically distinguishable from zero—that for presidential approval among non-copartisans in the Acting Official with Context condition—but the direction of this difference is counter to expectations drawn from previous research; while we should expect that non-copartisans react negatively to President Biden's unilateral appointment of Janet Woodcock as interim FDA commissioner, we instead find that non-copartisan respondents in the Acting Official with Context condition were 9 percentage points more likely to approve of the president. One potential explanation for this counter-intuitive finding may be that once non-copartisans learn that using acting officials can make it more difficult for presidents to manifest their policy agendas, they become more favorably disposed towards a president who is seemingly less likely to successfully adopt policies they oppose. However, this aberrant finding should be interpreted with caution because this effect is not statistical distinugishable from the corresponding treatment effect among copartisans in the Acting Official with Context condition and because this increase in approval among non-copartisans loses statistical distinguishability once Bonferroni corrections are applied to account for multiple comparisons. 17,18

Pivoting to the FAA experiment, we observe conditional effects among both presidential copartisans and non-copartisans assigned to our treatment conditions. Focusing first on evaluations of

 $<sup>^{17}</sup>$ The p-value for the difference in the effect of the Acting Official with Context condition among copartisans (2 percentage point increase) and noncopartisans (9 percentage point increase) is 0.16.

<sup>&</sup>lt;sup>18</sup>Because the center panel of Figure 2 depicts 24 hypothesis tests, the Bonferroni-corrected *p*-value for this set of estimates is  $\frac{0.05}{24} \approx 0.002$ , which is smaller than the *p*-value associated with the treatment effect associated with the Acting Official with Context condition among noncopartisans (p = 0.008).

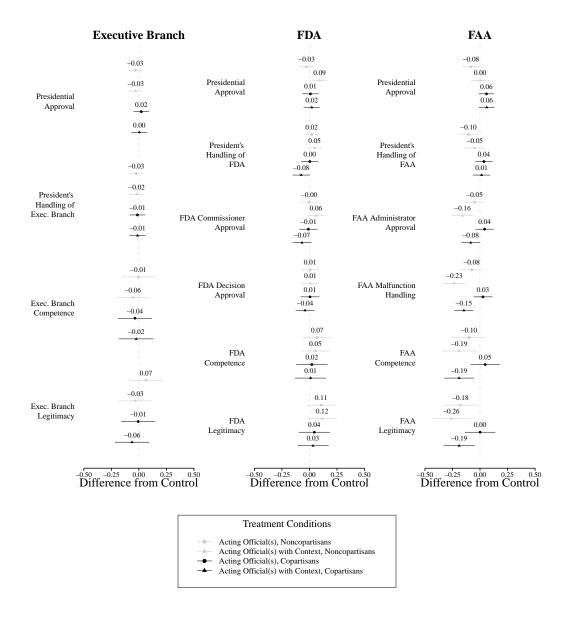


Figure 2: Partisan-Conditional Responses to Vacancy Appointments. Linear regression coefficients for treatment effects of the Acting Official(s) (circles) and Acting Official(s) with Context (triangles) conditions relative to the control condition in the Executive Branch, FDA, and FAA experiments (left, center, and right panes, respectively). Black points and lines correspond with the treatment effects among respondents who are presidential copartisans (i.e., Democrats), while gray points and lines correspond with the treatment effects among presidential noncopartisans (i.e., those not identifying as Democrats). Approval outcome measures are coded as binary variables, such that positive (negative) values along the x-axis reflect increases (decreases) in levels of approval ratings relative to the control condition (i.e., -0.03 reflects a decrease in approval by 3 percentage points). Competence and legitimacy outcome measures are coded on a 1 to 4 scale, such that higher (lower) values reflect increases (decreases) in respondents' perceptions of the executive branch, FDA, or FAA's competence and legitimacy on those scales. Bars around point estimates represent 95 percent confidence intervals.

President Biden, we see that presidential non-copartisans in the Acting Official condition expressed distinguishably lower levels of approval of Biden's overall performance and his handling of the FAA relative to those in the control condition (8 and 10 percentage point decreases, respectively), though presidential non-copartisans in the Acting Official with Context condition do not exhibit similar treatment effects. One potential explanation for these results is that non-copartisans, who are attentive to reasons to express displeasure at the president, direct ire at Biden for leaving an acting official in charge of the FAA, but scale back those negative evaluations once they learn that the acting official's presence hinders Biden's ability to enact and implement policies at the FAA. However, as in the FDA experiment, this aberrant set of findings should be interpreted with caution because these two treatment effects for presidential non-copartisans in the Acting Official condition are no longer distinguishable once Bonferroni corrections are applied.<sup>19</sup>

Moving to respondents' evaluations of the FAA, both presidential copartisans and non-copartisans in the Acting Official with Context condition offer more negative evaluations of the FAA than those in the control condition. For instance, non-copartisan and copartisan respondents in the Acting Official with Context condition offer approval ratings for Acting Administrator Nolen that are 16 and 8 percentage point lower and approval ratings for the FAA's handling of the NOTAM outage that are 23 and 15 percentage points lower than respondents in the control condition, respectively.<sup>20</sup> Moving to perceptions of the FAA's competence and legitimacy, we observe that copartisan and non-copartisan respondents in the Acting Official with Context condition offer perceptions for both traits that are between 0.19 and 0.26 points lower on the 1 to 4 scale relative to control condition respondents.<sup>21</sup> In sum, the negative effects associated with the Acting Official with Context condition for evaluations of the FAA in Figure 1 are not driven by divergent behavior among presidential copartisans and non-copartisans; rather, both types of respondents express less favorable opinions

 $<sup>^{19}</sup>$  Because the right panel of Figure 2 depicts 24 hypothesis tests, the Bonferroni-corrected *p*-value for this set of estimates is  $\frac{0.05}{24}\approx 0.002$ , which is smaller than the *p*-values associated with the treatment effect associated with approval of Biden's job performance and handling of the FAA among non-copartisans in the Acting Official condition (*p* = 0.0392 and *p* = 0.0195, respectively).

<sup>&</sup>lt;sup>20</sup>After applying Bonferroni corrections, all but the difference in approval rating for Acting Administrator Nolen among copartisan respondents remain statistically distinguishable.

<sup>&</sup>lt;sup>21</sup>Non-copartisans in the Acting Official condition also offer perceptions of the FAA's legitimacy that are 0.18 lower on the same scale relative to those in the control condition. However, once Bonferroni corrections are applied to these five differences, only the effect of the Acting Officials with Context treatment on the FAA's legitimacy among non-copartisans remains distinguishable.

of the FAA when provided information about why placing an acting official at its helm may detract from its performance.  $^{22}$ 

#### Discussion

The results from our three experiments offer little evidence to support our hypotheses concerning the effect of the presence of acting officials on public evaluations of the president and federal agencies. For evaluations of President Biden directly, we find scant evidence that his use of acting officials in any of the three contexts we consider harms his public reputation. Differently, for federal agencies, we find no evidence that the presence of acting officials in a general sense (Executive Branch experiment) or at the center of a controversial policymaking decision (FDA experiment) erodes support for those agencies, but we do find that when an agency headed by an acting official suffers a governmental failure and the public is made aware of the negative consequences of acting officials, that agency suffers public costs (FAA experiment). Though the conditions in each of our experiments constitute each other's counterfactuals, each of our experiments differ along several important dimensions (e.g., stage of the policy process, agencies implicated), which makes it difficult to discern why the consequences for agency reputations diverge. While providing definitive explanations for these differences is best left for future research, we elaborate on two related potential explanations here.

First, unlike the routine functioning of the federal bureaucracy and decisionmaking by federal agencies, governmental failures prompt the public to attribute blame and hold someone accountable for the negative policy outcome (Arnold 1990; Boin, McConnell, and T'Hart 2008; Boin et al. 2010; Hood 2011; Miller and Reeves 2022). While respondents in the Acting Officials with Context treatments in Executive Branch and FDA experiments were apprised of the potential dangers of acting officials, they may not have fully processed how these dangers could manifest as real-world consequences and thus registered little incentive to prospectively punish agencies. However, once governmental failures occur, as they did in the FAA experiment, context that an acting official's

 $<sup>^{22}</sup>$ While the point estimates for these conditional effects are generally larger among non-copartisans, formal hypothesis tests indicate that the differences between the treatment effects for copartisans and non-copartisans for each of the four FAA outcomes are not statistically distinguishable at the 95% level.

presence may have created conditions which led to the failure may simplify the public's task of tracing responsibility to the agency and its acting leadership.

Second, the degree of ambiguity concerning how negative an acting official's presence is for agency performance may condition the public's reaction. In our Executive Branch experiment, the negative consequences of acting officials were presented as prospective and fairly abstract, with respondents in our Acting Official with Context condition told only that acting officials "can lead to delays in implementing exective actions and initiatives across the executive branch" (emphasis added). Meanwhile, in our FDA experiment, respondents were presented with the two-sided frame reflected in contemporary journalistic accounts whereby "Alzheimer's patient advocacy groups praised the FDA's decision" but "medical experts... criticized the decision"; through providing both positive and negative considerations for respondents to process, these vignettes and the journalistic accounts on which they were based may have led respondents to perceive the consequences of an acting official's presence as more opaque (Chong and Druckman 2007; Zaller 1992). However, because the NOTAM outage was unambiguously disastrous, respondents were motivated to punish someone or something for the negative policy outcome and did not encounter any countervailing frames that might have deflected blame from the FAA; thus, once informed that the presence of an acting official atop the FAA may have created fertile conditions for the outage, respondents exercised accountability by offering pessimistic evaluations of the agency.

# Conclusion

In his Commentaries on the Constitution of the United States, Justice Joseph Story asserts that, through the Constitution's design, presidents are "compelled to consult public opinion in the most important appointments; and must be interested to vindicate the propriety of his appointments, by selections from those whose qualifications are unquestioned and unquestionable. If he should act otherwise... it will be impossible for him to long retain public favor" (1851, 329). In Story's framework, public opinion should serve as a check when the "propriety" of presidents' appointments are undermined, as acting officials—which skirt the typical appointments process by excluding the Senate—have the potential to do. However, our survey experiments find little evidence that the

public constrains presidents from utilizing acting officials; in fact, even when respondents were provided with context drawn from real-world journalistic sources explaining why vacancies and the use of acting officials can be detrimental to the functioning of the federal government, our respondents did not punish President Biden, and they only exacted punishment on federal agencies in the wake of notable governmental failures. While presidents' ability to exercise other types of unilateral powers, such as executive orders, may be restrained by public opinion (Christenson and Kriner 2017b; Lowande and Gray 2017; Reeves and Rogowski 2016, 2018, 2022), our results indicate that the public largely absolves the president of similar costs when making acting appointments. Though negative consequences for agencies themselves, as demonstrated in our FAA experiment, could discourage presidents from utilizing acting officials, this disincentive is an effective check on presidents only to the extent that presidents prioritize the public reputations of the executive branch; given that presidents' use of acting officials often stems from a motivation to hamstring the affected agencies (Kinane 2021; Piper 2022), these potential costs to agencies' reputations may only serve to further encourage presidents to use them.

Though our experiments cannot shed light on why we observe null effects, we suggest a few potential explanations here and encourage future researchers to explore them in future studies of presidential accountability and public opinion. One palpable reason is that the public, which is often ill-informed about the fine points of governmental procedure (Delli Carpini and Keeter 1996; Hibbing and Theiss-Morse 2002), does not understand why acting officials may be troublesome for government performance and therefore seldom impose costs on federal agencies or the president for acting appointments. However, while this could explain the null effects for our Acting Official(s) conditions, it does not account for the null effects for our Acting Official(s) with Contexts conditions on evaluations of President Biden and of federal agencies, as the additional text provided in those conditions explicitly provides respondents with the information they need to understand the implications of acting officials on government performance; thus, public ignorance of the meaning of acting officials' titles is an unsatisfactory explanation.

Alternatively, respondents' evaluations of Biden and federal agencies may not have responded to our treatments because the public's distaste for unilateralism in policymaking does not carry over to presidents' management of executive branch personnel. Notably, previous studies of presidential power and public opinion have focused primarily on tools presidents can employ to enact policy directly, such as executive orders and national security directives, but have seldom considered how the public interprets presidents' unilateral staffing actions, such as making acting or Schedule C appointments (Christenson and Kriner 2017a,b; Lowande and Gray 2017; Reeves and Rogowski 2022).<sup>23</sup> Whereas the public perceives a broad range of unilateral policymaking tools as unpalatable (Reeves et al. 2017), it might be more permissive of the president, as chief executive, managing the staff of the agencies he oversees. Future work should consider whether the public's well-documented suspicion of unilateral policymaking by presidents bleeds over to other types of presidential actions which do not explicitly "make" policy, such as staffing decisions and the flow of federal grant funding (Lewis 2005; Kinane 2021; Kriner and Reeves 2015; Piper 2022).

Future work might also consider whether there exist conditions beyond those considered here under which acting officials could stimulate public costs for presidents. For instance, because presidential transitions make vacancies and acting officials more common early in presidents' terms—as was the case in our experiments—the public may be more tolerant of actings when presidents enter office but lose patience for them as presidents' time in office wears on and they expect vacancies to have been filled with Senate-confirmed leaders. Differently, the ranks held by acting officials may influence how the public reacts to their presence; for instance, the public may not react to (or even learn about) acting officials serving in relatively low-level leadership positions, but it might respond negatively when presidents staff Cabinet-level posts with actings.<sup>24</sup> Finally, returning to our Discussion section, while the public may not express displeasure with the mere presence of acting

<sup>&</sup>lt;sup>23</sup>The three-question unilateral power attitudes survey instrument introduced by Reeves and Rogowski (2022) does include one question about presidents' appointment decisions, but it focuses on the appointment of federal judges, not executive branch appointments. While judicial appointments inherently raise interbranch relations concerns, executive branch appointments may be seen by the public as more squarely in the purview of the president, as chief executive; consequently, it is conceivable that the public's low level of agreement with the statement that "the president should be able to appoint judges of his choosing regardless of whether the US Senate agrees with his selections" does not reflect its attitudes relating to presidents' appointment of executive branch officials (Reeves and Rogowski 2022, 52).

<sup>&</sup>lt;sup>24</sup>Our experiments do not feature the use of acting officials in Cabinet-level posts, but the treatment conditions for our Executive Branch experiment, which stated that "some Cabinet-level departments in the executive branch of the US government are led by deputy secretaries and many key positions are filled with acting leadership," may have made respondents believe that some Cabinet-level positions had acting leaders. However, future studies should investigate whether the public reacts more strongly when the presence of actings in Cabinet-level posts is made explicit.

officials in the executive branch, it may consider them as an aggravating factor when governmental failures arise under their watch; thus, acting officials may be latent liabilities who only exact public costs on presidents if things go wrong on their watch. Future studies might hone in on how the confluence of acting officials and these contextual factors may generate public costs that extend to the Oval Office.

In the absence of evidence for public costs to presidents for using acting officials, we are left with the same paradox we presented at the outset: if presidents face few constitutional and legal barriers to using acting officials, why do presidents not circumvent the Senate and use acting officials more often? Even President Trump, who used more vacancy appointees than any other modern president, left office with 524 (69.2%) of the 757 "key" PAS positions, as defined by the Washington Post and Partnership for Public Service, occupied by Senate-confirmed personnel.<sup>25</sup> Future work should investigate what other constraints may press presidents, even those who openly admit to preferring acting appointees, to hew to the advice and consent process for most executive branch positions. One possibility is that the perceptions of other key constituencies—namely personnel within agencies and outside stakeholders, such as Congress and interest groups—are what limits presidents' use of acting officials. Some scholars have suggested that these groups perceive acting officials as possessing less stature and authority, compared to their confirmed counterparts (O'Connell 2020; Piper 2022). It is also possible that presidents often send their appointees to the Senate because the performance of executive branch agencies suffers when vacancies persist and acting officials are chosen (Piper and Lewis 2022). However, that presidents are more likely to use actings to fill positions in agencies aligned with presidents' priorities—the very agencies where presidents should want to enhance performance—undercuts the logic of agency performance as a constraint (Kinane 2021; Piper 2022).

A different avenue for investigating constraints on on the use of acting officials lies in how the contours of the political environment may condition tolerance for acting officials in the executive

<sup>&</sup>lt;sup>25</sup>In fact, President Trump would have left office with an even higher number of positions with confirmed appointees were it not for the large number of resignations among executive branch leaders following the insurrection he provoked at the United States Capitol on January 6, 2021 that sought to prevent Congress' certification of the Electoral College ballots. ("The Nominees Donald Trump Tapped for Key Roles During His Term." *The Washington Post*, January 15, 2021, https://www.washingtonpost.com/graphics/politics/trump-administration-appointee-tracker/database/).

branch. In the recent decades, presidents have kept the overwhelming majority of PAS positions filled with Senate-confirmed personnel (Kinane 2021), and this equilibrium in which presidents typically follow the advice and consent process but sometimes use acting officials may be acceptable to Congress and the public; Congress is afforded regular opportunities to check the president through the confirmation process, the public observes that the president usually conforms to the traditional appointment process, and both audiences acknowledge that presidents need some flexibility in managing turnover in agency leadership. However, if presidents dramatically increased the share of actings in the federal government, Congress and the public may begin to react negatively to the use of acting officials. For instance, the Senate might be compelled to defend its advice and consent prerogative through stronger oversight or legislation or budget adjustments that sanction presidents and their executive branch allies. Importantly, in conducting investigations into or merely speaking out about presidents' use of acting officials, members of Congress could damage the president's public standing, ultimately enabling the public to constrain the president's use of such appointments (Christenson and Kriner 2017b; Kriner and Schickler 2014).

Finally, our findings are an important reminder that the rule of law in American democracy is not self-regulating, but rather requires political elites and the public to respond to deviations from standard governmental procedure and norms. While the public sometimes functions as an effective guardrail against political practices that push against or violate the rule of law, such as the issuance of executive orders (Christenson and Kriner 2017b; Lowande and Gray 2017; Reeves and Rogowski 2016, 2018, 2022), the adoption of anti-democratic policies (Nelson and Witko 2022), and the incitement of political violence (Li and DiSalvo 2022), the public punishment levied against elites that shirk the rule of law is often limited, especially when members of the public must consider tradeoffs between supporting the rule of law or elites who share their partisan or ideological preferences (Carey et al. 2022; Christenson and Kriner 2017a; Graham and Svolik 2020). While the general public may be able to constrain errant presidents under some circumstances, it is not a perfectly reliable fail-safe, and continued adherence to the rule of law relies on both an interlocking set of institutional checks and balances as well as a commitment to democratic principles by both elites and rank-and-file citizens.

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# **Supplemental Information**

Table of Contents		
	A Experimental Protocol	SI.3
	A.1 Executive Branch Experiment	SI.3
	A.2 FDA Experiment	
	A.3 FAA Experiment	
	A.4 Respondent Descriptive Statistics	
	B Empirical Analyses	SI.17
	B.1 Outcome Measures	SI.17
	B.2 Robustness Checks	
	B.3 Causal Mediation Analyses	
L	ist of Tables	
	SI.1 Respondent Descriptive Characteristics	SI.15
	SI.2 Executive Branch Experiment, Unconditional Effects	SI.19
	SI.3 FDA Experiment, Unconditional Effects	
	SI.4 FAA Experiment, Unconditional Effects	
	SI.5 Executive Branch Experiment, Partisanship-Conditional	
	SI.6 FDA Experiment, Partisanship-Conditional	
	SI.7 FAA Experiment, Partisanship-Conditional	
	SI.8 Executive Branch Experiment, Unconditional Effects (Four-Point O	,
	SI.9 FDA Experiment, Unconditional Effects (Four-Point Outcome Scale SI.10 FAA Experiment, Unconditional Effects (Four-Point Outcome Scale	,
	SI.11 Executive Branch Experiment, Partisanship-Conditional (Four-Point	,
	SI.12FDA Experiment, Partisanship-Conditional (Four-Point Outcome S	,
	SI.13 FAA Experiment, Partisanship-Conditional (Four-Point Outcome Source St. 13 FAA Experiment, Partisanship-Conditional (Four-Point Outcome Source St. 14 FAA Experiment,	,
	SI.14 Causal Mediation Analysis—Competence and Presidential Approval (	,
	Experiment)	
	SI.15 Causal Mediation Analysis—Competence and President's Handlin	
	Branch (Executive Branch Experiment)	9
	SI.16 Causal Mediation Analysis—Legitimacy and Presidential Approval (F	
	Experiment)	SI.27
	SI.17 Causal Mediation Analysis—Legitimacy and President's Handling of	Executive Branch
	(Executive Branch Experiment)	
	SI.18 Causal Mediation Analysis—Competence and Presidential Approva	
	ment)	
	SI.19 Causal Mediation Analysis—Competence and Handling of the FDA (	FDA Experiment)SI.28

S1.20 Causal Mediation Analysis—Competence and FDA Commissioner Approval (FDA
Experiment)
SI.21 Causal Mediation Analysis—Competence and Approval of FDA's Approval of Adu-
canumab (FDA Experiment)
SI.22 Causal Mediation Analysis—Legitimacy and Presidential Approval (FDA Experiment)SI.30
${ m SI.23CausalMediationAnalysis-LegitimacyandHandlingoftheFDA(FDAExperiment)SI.30}$
SI.24 Causal Mediation Analysis—Legitimacy and FDA Commissioner Approval (FDA
Experiment)
SI.25 Causal Mediation Analysis—Legitimacy and Approval of FDA's Decision to Approve
Aducanumab (FDA Experiment)
SI.26 Causal Mediation Analysis—Competence and Presidential Approval (FAA Experi-
ment)
SI.27 Causal Mediation Analysis—Competence and Handling of the FAA (FAA Experiment)SI.32
SI.28 Causal Mediation Analysis—Competence and FAA Administrator Approval (FAA
Experiment)
SI.29 Causal Mediation Analysis—Competence and Approval of FAA's Handling of System
Malfunction (FAA Experiment)
SI.30 Causal Mediation Analysis—Legitimacy and Presidential Approval (FAA Experiment)SI.34
SI.31 Causal Mediation Analysis—Legitimacy and Handling of the FAA (FAA Experiment)SI.34
SI.32 Causal Mediation Analysis—Legitimacy and FAA Administrator Approval (FAA
Experiment)
SI.33 Causal Mediation Analysis—Legitimacy and Approval of FAA's Handling of System
Malfunction (FAA Experiment)

# A Experimental Protocol

In this section, we describe the protocols and provide the vignettes and question wordings for our experiments.

Both our Executive Branch and FDA experiments were included in a survey fielded using Lucid Theorem on July 1 and 2, 2021. Lucid Theorem is a survey respondent recruitment platform commonly used in political science research that supplies researchers with survey samples that are representative of the American public for common demographic characteristics such as race, gender, party identification, education, income, and age (Coppock and McClellan 2019). The 3140 respondents in this survey who reached the module of our survey that contained our experiments were then randomly assigned to participate in either our Executive Branch experiment or our FDA experiment, and 3108 of these respondents provided an answer for at least one of our post-treatment outcome questions (1548 for the Executive Branch experiment, 1560 for the FDA experiment).

Our FAA experiment was included in a survey fielded between February 24 and 28, 2023, using CloudResearch Connect, which is also a survey respondent recruitment platform that supplies researchers with survey samples that are representative of the American public for common demographic characteristics including age, gender, race, and ethnicity. All 1170 respondents in this survey who reached the module containing this experiment participated in the experiment.

In both surveys, after respondents provided consent to participate, they completed a battery of demographic questions and two attention check tasks drawn directly from and/or styled after those in Berinsky, Margolis, and Sances (2014).<sup>1</sup>

The descriptive statistics of the respondents who participated in each of the three experiments are presented in Table SI.1.

# A.1 Executive Branch Experiment

All respondents assigned to the Executive Branch experiment were presented with a vignette detailing President Joe Biden's progress in filling Presidential Appointments needing Senate confirmation (PAS) positions as of June 2021. This experiment was styled after an article in *The Wall Street Journal* on May 30, 2021, which reported on how Biden had appointed more individuals to the positions at this point in his presidency than Presidents Bill Clinton, George W. Bush, Barack Obama, and Donald Trump had at the same stage of their presiencies, but that the Senate had confirmed fewer of his nominees than it had for Clinton, Bush, and Obama.<sup>2</sup>

Respondents in the control condition are provided only this information, while respondents in our treatment conditions receive additional text that closely follows the original article in *The Wall Street Journal*. First, respondents in the Acting Official treatment receive an additional sentence-length paragraph explaining that, because few of Biden's nominees had received Senate confirmation, "some Cabinet-level departments in the executive branch of the US government are led by deputy secretaries and many key positions are filled with acting leadership." This text is meant to make salient for respondents that many officials holding leadership in the executive branch

<sup>&</sup>lt;sup>1</sup>In the first survey, our attention checks were the news source and feelings checks provided by Berinsky, Margolis, and Sances (2014). In the second survey, we again used the news source attention check, but our second attention check prompted respondents to indicate which Taylor Swift songs in the list below they had listened to in the past year, but, later in the prompt, specified two choices they should select to indicate they are paying attention.

<sup>&</sup>lt;sup>2</sup>Thomas, Ken. "Biden Leads Predecessors in Nominations, Lags Behind in Confirmations," *The Wall Street Journal*, May 30, 2021, https://www.wsj.com/articles/biden-leads-predecessors-in-nominations-lags-in-confirmations-11622367002.

of the federal government at the time the experiment was fielded were acting officials. Second, Respondents in the Acting Official with Context treatment receive the same text as in the Acting Official treatment as well as an additional sentence asserting that "lack of Senate-confirmed leaders throughout the government can lead to delays in implementing executive actions and initiatives across the executive branch." The contents of the Acting Official with Context treatment are meant to not only make salient the presence of acting officials, but also to explain why acting officials can be detrimental for government performance. By including both treatment conditions, we can disentangle whether our treatment effects, if any are observed, are prompted by the mere mention of acting officials or if members of the public need to also receive contextual details about why acting officials can be problematic before utilizing that information to form their opinions.

After reading their assigned vignettes, respondents were asked a series of outcome questions about their perceptions of President Biden and the executive branch of the federal government. Two of these questions asked respondents whether they approved of President Biden's handling of his job as president and of his handling of the executive branch on a four-point scale. A separate set of four questions asked respondents to express their level of agreement with statements meant to measure their perceptions of the competence and legitimacy of the executive branch. As we explain in Supplemental Information Section B, our main analyses binarize respondents' approval of President Biden and use the questions about respondents' perceptions of the executive branch's competence and legitimacy to construct scales for each concept.<sup>3,4</sup>

That The Wall Street Journal reported on presidential appointments and the presence of acting officials in leadership positions for the federal government heightens the external validity of this experiment because it demonstrates that major media organizations communicate information about vacancy appointments to members of the public, such that we can reasonably expect that people can encounter this information in their day-to-day lives. We further heighten external validity by hewing closely to the language in the original article in our vignettes, making only slight alterations for concision and/or grammatical correctness.

#### A.1.1 Vignettes

Five months into his presidency, President Joe Biden has nominated agency heads and leaders throughout the federal government at a faster clip than his recent predecessors. By the beginning of June 2021, President Biden made 244 nominations to Senate-confirmed positions, which is more than double the number President Donald Trump made at the same stage of his administration. The pace of Mr. Biden's nominations for the roughly 1,200-Senate confirmed positions also surpasses those of Presidents Bill Clinton, George W. Bush and Barack Obama.

However, only 53 of President Biden's nominees had been confirmed by the Senate by the beginning of June 2021, a smaller number than were confirmed at that point in the administrations

<sup>&</sup>lt;sup>3</sup>The two questions used to measure competence are original to the present study. The two questions used to measure legitimacy are adapted from the judicial legitimacy battery introduced by (Gibson, Caldeira, and Spence 2003); while the original battery included six questions, we utilize only two which could be easily adapted to the present context.

<sup>&</sup>lt;sup>4</sup>Because our pre-analysis plan anticipated that we would test whether respondents' perceptions of the federal government's competence and legitimacy mediate their evaluations of President Biden, we randomized whether respondents were first asked to indicate their approval of President Biden's handling of his job as president and of the executive branch or to provide their perceptions of the federal government's competence and legitimacy (Chaudoin, Gaines, and Livny 2021).

of Presidents Clinton, Bush, and Obama.

# [INSERT TREATMENT HERE]

- Treatments
  - CONTROL: Blank
  - ACTING OFFICIAL TREATMENT: As a result, some Cabinet-level departments in the executive branch of the US government are led by deputy secretaries and many key positions are filled with acting leadership.
  - ACTING OFFICIAL WITH CONTEXT TREATMENT: As a result, some Cabinet-level departments in the executive branch of the US government are led by deputy secretaries and many key positions are filled with acting leadership. The lack of Senate-confirmed leaders throughout the government can lead to delays in implementing executive actions and initiatives across the executive branch.

## A.1.2 Post-Treatment Outcome Questions

- Do you approve or disapprove of the way Joe Biden is handling his job as president?
  - Strongly approve
  - Somewhat approve
  - Somewhat disapprove
  - Strongly disapprove
- Do you approve or disapprove of the way Joe Biden is managing the executive branch of the US government?
  - Strongly approve
  - Somewhat approve
  - Somewhat disapprove
  - Strongly disapprove
- I trust that the executive branch makes decisions that are right for the country as a whole. (Used to construct legitimacy scale)
  - Strongly agree
  - Somewhat agree
  - Somewhat disagree
  - Strongly disagree
- I trust the executive branch to respond effectively to policy problems and crises. (Used to construct competence scale)
  - Strongly agree
  - Somewhat agree
  - Somewhat disagree
  - Strongly disagree
- I trust that the executive branch is led by well-qualified individuals. (Used to construct competence scale)

- Strongly agree
- Somewhat agree
- Somewhat disagree
- Strongly disagree
- I trust that the executive branch's decisions do not favor some groups more than others. (Used to construct legitimacy scale)
  - Strongly agree
  - Somewhat agree
  - Somewhat disagree
  - Strongly disagree

# A.2 FDA Experiment

All respondents assigned to the FDA experiment were presented with a vignette detailing the Food and Drug Administration's recent approval of, aducanumab, a new drug designed to treat Alzheimer's disease. The FDA's approval decision was criticized by many Alzheimer's experts who claimed that clinical trials did not provide sufficient evidence of the drug's efficacy, and subsequent reporting disclosed that multiple FDA internal advisory panels had recommended against its approval and alleged that executives of the pharmaceutical company, Biogen, Inc., had improper contact with regulators in the weeks leading up to the approval decision. At the time of aducanumab's approval, the FDA was headed by Dr. Janet Woodcock, a longtime FDA official who President Biden had appointed as acting commissioner.<sup>5,6</sup>

Respondents in the control condition read two short paragraphs about the FDA's approval of aducanumab drawn from contemporary media accounts, explaining that the drug is designed to treat the underlying causes of Alzheimer's and that many Alzheimer's experts criticized the decision by "FDA Commissioner Janet Woodcock" because clinical trials did not provide sufficient evidence of its efficacy.<sup>8</sup> Respondents in the Acting Official treatment read the same content as those in the control condition except that the decision was attributed to "Acting FDA Commissioner Janet Woodcock." This slight addition was meant to make salient for respondents Woodcock's status as a vacancy appointee. Respondents in the Acting Official with Context treatment read the same common content with Woodcock identified as an acting official and received an additional paragraph communicating that "critics have expressed concern that the FDA's approval of aducanumab highlights the need for a permanent commissioner" and explained why the lack of a permanent commissioner may hamper the FDA's performance. The contents of the Acting Official with Context treatment are meant to not only make salient that Woodcock was an acting official, but also to explain why her presence as an acting official could have been detrimental for the agency's performance. By including both treatment conditions, we can disentangle whether our treatment effects, if any are observed, are prompted by the mere mention of Woodcock's acting status or if members

<sup>&</sup>lt;sup>5</sup>Acting Commissioner Woodcock did not personally approve aducanumab, but instead left the decision to the director of the FDA's Center for Drug Evaluation and Research, who holds formal authority over drug approvals. However, as acting commissioner, Woodcock held ultimate authority over the decision and was a focal point of many media stories covering the drug's controversial approval.

<sup>&</sup>lt;sup>6</sup>Belluck, Pam, Sheila Kaplan, And Rebecca Robbins. "How an Unproven Alzheimer's Drug Got Approved." The New York Times, July 19, 2021, https://www.nytimes.com/2021/07/19/health/alzheimers-drug-aduhelm-fda.html; Kaplan, Sheila. "F.D.A. Still Lacks a Permanent Chief, Despite Pressing, Weighty Problems," The New York Times, June 12, 2021, https://www.nytimes.com/2021/06/12/health/fda-woodcock-agenda.html; Owermohle, Sarah and Cancryn, Adam and Gardner, Lauren. "Controversial Drug Approval Stokes Concern About Lack of a Permanent FDA Chief," Politico, June 11, 2021, https://www.politico.com/news/2021/06/11/fda-woodcock-controversial-drug-approval-493324.

<sup>&</sup>lt;sup>7</sup>Kaplan, Sheila. "F.D.A. Still Lacks a Permanent Chief, Despite Pressing, Weighty Problems," *The New York Times*, June 12, 2021, https://www.nytimes.com/2021/06/12/health/fda-woodcock-agenda.html; Owermohle, Sarah and Cancryn, Adam and Gardner, Lauren. "Controversial Drug Approval Stokes Concern About Lack of a Permanent FDA Chief," *Politico*, June 11, 2021, https://www.politico.com/news/2021/06/11/fda-woodcock-controversial-drug-approval-493324.

<sup>&</sup>lt;sup>8</sup>Initial reporting at the time of aducanumab's approval attributed the decision to Woodcock, who as acting commissioner held ultimate authority over the decision. Only later did Woodcock and FDA spokespeople later clarify that she was not personally involved in the approval decision. Thus, our framing of Woodcock as the key decisionmaker reflected contemporary media coverage (Belluck, Pam, Sheila Kaplan, And Rebecca Robbins. "How an Unproven Alzheimer's Drug Got Approved." *The New York Times*, July 19, 2021, https://www.nytimes.com/2021/07/19/health/alzheimers-drug-aduhelm-fda.html).

of the public need to also receive contextual details about why Woodcock's acting status can be problematic before utilizing that information to form their opinions.

After reading their assigned vignettes, respondents were asked a series of outcome questions about their perceptions of President Biden and the FDA. Two of these questions asked respondents whether they approved of President Biden's handling of his job as president and of his handling of the FDA on a four-point scale. Another two questions asked respondents whether they approved of Commissioner Woodcock's handling of her job as FDA Commissioner and of the FDA's decision to approve aducanumab. A final set of four questions asked respondents to express their level of agreement with statements meant to measure their perceptions of the competence and legitimacy of the FDA. As we explain in Supplemental Information Section B, our main analyses binarize respondents' approval of President Biden, Commissioner Woodcock, and the FDA's approval decision and use the questions about respondents' perceptions of the FDA's competence and legitimacy to construct scales for each concept. 9,10

The external validity of this experiment is strong not only because it draws on a real-world agency decision made under an acting official that received considerable media attention, but also because several news stories published around the time of the FDA's approval of aducanumab highlighted Woodcock's role as an acting official and explicitly discussed why acting officials can be detrimental for agency performance. For instance, a *Politico* article titled "Controversial Drug Approval Stokes Concern About Lack of a Permanent FDA Chief' notes, "The lack of a politically appointed commissioner could hinder the FDA's ability to launch new initiatives or make major policy decisions like tobacco reform efforts. The agency is also whittling away a backlog of plant inspections and drug and medical device approvals." <sup>11</sup> Again, a The New York Times entitled "F.D.A. Still Lacks a Permanent Chief, Despite Pressing, Weighty Problems" mentions that "without a permanent commissioner, the agency lacks the leadership to set long-term goals and a new agenda in the first year of Mr. Biden's administration..." <sup>12</sup> This media focus demonstrates that we can reasonably expect that the public can be made aware of the presence and consequences of acting officials through news coverage when potential relevant to the main story being reported. Further, in designing our vignettes, we borrowed heavily from this language to ensure that the information to which we exposed our respondents aligns closely with that they could encounter in their everyday news consumption.

<sup>&</sup>lt;sup>9</sup>The two questions used to measure competence are original to the present study. The two questions used to measure legitimacy are adapted from the judicial legitimacy battery introduced by (Gibson, Caldeira, and Spence 2003); while the original battery included six questions, we utilize only two which could be easily adapted to the present context.

<sup>&</sup>lt;sup>10</sup>Because our pre-analysis plan anticipated that we would test whether respondents' perceptions of the FDA's competence and legitimacy mediate their evaluations of President Biden, Commissioner Woodcock, and the FDA's decision, we randomized whether respondents were first asked to indicate their approval of President Biden, Commissioner Woodcock, and the FDA's decision or to provide their perceptions of the FDA's competence and legitimacy (Chaudoin, Gaines, and Livny 2021).

<sup>&</sup>lt;sup>11</sup>Owermohle, Sarah and Cancryn, Adam and Gardner, Lauren. "Controversial Drug Approval Stokes Concern About Lack of a Permanent FDA Chief," *Politico*, June 11, 2021, https://www.politico.com/news/2021/06/11/fda-woodcock-controversial-drug-approval-493324.

<sup>&</sup>lt;sup>12</sup>Kaplan, Sheila. "F.D.A. Still Lacks a Permanent Chief, Despite Pressing, Weighty Problems," *The New York Times*, June 12, 2021, https://www.nytimes.com/2021/06/12/health/fda-woodcock-agenda.html.

#### A.2.1 Vignettes

In early June, the Food and Drug Administration (FDA) approved a new drug to treat Alzheimer's disease. Alzheimer's patient advocacy groups praised the FDA's decision on aducanumab, the first therapy approved to treat the underlying causes of the disease rather than merely managing its symptoms.

However, many medical experts have criticized the decision by FDA Commissioner Janet Woodcock, whom President Joe Biden selected to lead the agency. An FDA advisory panel had previously recommended that the agency not approve aducanumab because clinical trials did not provide evidence that it is an effective treatment, and three of the panel's members resigned in protest after the FDA's decision.

#### [INSERT TREATMENT HERE]

- Treatments
  - CONTROL: Blank
  - ACTING OFFICIAL TREATMENT: Insert "Acting" in front of "FDA Commissioner Janet Woodcock."
  - ACTING OFFICIAL WITH CONTEXT TREATMENT: Insert "Acting" in front of "FDA Commissioner Janet Woodock." Additionally, insert text following second paragraph: "Critics have also expressed concern that the FDA's approval of aducanumab highlights the need for a permanent commissioner to run the agency. Without a permanent commissioner, the agency lacks the leadership to launch new initiatives, make major policy decisions, and address a backlog of plant inspections and drug and medical device approvals. President Biden has not yet nominated a permanent FDA commissioner, and the White House has declined to answer reporters' questions on the delay."

#### A.2.2 Post-Treatment Outcome Questions

- Do you approve or disapprove of the way Joe Biden is handling his job as president?
  - Strongly approve
  - Somewhat approve
  - Somewhat disapprove
  - Strongly disapprove
- Do you approve or disapprove of the way Joe Biden is managing the FDA?
  - Strongly approve
  - Somewhat approve
  - Somewhat disapprove
  - Strongly disapprove
- Do you approve or disapprove of the way Janet Woodcock is handling her job as FDA Commissioner?
  - Strongly approve
  - Somewhat approve
  - Somewhat disapprove

- Strongly disapprove
- Do you agree or disagree with the FDA's approval of aducanumab, a new drug to treat Alzheimer's disease?
  - Strongly approve
  - Somewhat approve
  - Somewhat disapprove
  - Strongly disapprove
- I trust the FDA to make decisions that are right for the country as a whole. (Used to construct legitimacy scale)
  - Strongly agree
  - Somewhat agree
  - Somewhat disagree
  - Strongly disagree
- I trust the FDA to make sure the medicines used to prevent and treat disease are safe and effective. (Used to construct competence scale)
  - Strongly agree
  - Somewhat agree
  - Somewhat disagree
  - Strongly disagree
- I trust that the FDA is led by well-qualified individuals. (Used to construct competence scale)
  - Strongly agree
  - Somewhat agree
  - Somewhat disagree
  - Strongly disagree
- I trust that the FDA's decisions do not favor some groups more than others. (Used to construct legitimacy scale)
  - Strongly agree
  - Somewhat agree
  - Somewhat disagree
  - Strongly disagree

# A.3 FAA Experiment

All respondents in the FAA experiment were asked to read a vignette about a computer system malfunction that the FAA experienced on January 11, 2023. This malfunction concerning the FAA's Notice to Air Missions (NOTAM) system grounded all flights within the United States for 90 minutes and led to over 10,000 flight delays and 1,300 flight cancellations.<sup>13</sup> At the time of this malfunction, the FAA was headed by Billy Nolen, who had worked in aviation as a pilot and executive with over three decades of experience who President Biden had appointed as acting administrator.

Respondents in the control condition were presented with a short description of the FAA NO-TAM outage and the FAA's immediate response. Respondents in each of the remaining two groups received the same information as those in the control condition along with information about the acting status of FAA Administrator Billy Nolan. In the Acting Official condition, respondents were told that Billy Nolan is the "Acting FAA Administrator" rather than the "FAA Administrator." This slight addition was intended to make salient for respondents Nolen's status as a vacancy appointee. In the Acting Official with Explanation condition, respondents read the same statement as in the Acting Official condition, along with an explanation that some critics argue that the outage "highlights the need for a permanent administrator to run the agency" because "the agency lacks the leadership to launch new initiatives, make major policy decisions, and address a backlog of approvals and certifications of aircraft and aircraft parts." The contents of the Acting Official with Context treatment are intended to not only make salient Nolen's acting status, but also explain why his presence as an acting official could have been detrimental for the agency's performance. Through including both treatment conditions, we can disentangle whether our treatment effects, if any are observed, are prompted by the mere mention of Nolen's acting status or if members of the public need to also receive contextual details about why Nolen's acting status can be problematic before utilizing that information to form their opinions.

After reading their assigned vignette, respondents were asked a series of questions about their perceptions of President Biden and the FAA. Two of these questions asking respondents whether they approved of Biden's handling of his job as president and of his handling of the FAA on a four-point scale. Another two questions asked respondents whether they approve of Administrator Nolen's handling of his job as FAA Administrator and of the FAA's handling of the system malfunction. Finally, respondents were asked the same four questions included in the FDA experiment concerning their perceptions of competence and legitimacy, but the subject of these questions was changed to the FAA.

As with the FDA experiment, the external validity of the FAA experiment is strong because is not only draws on a salient real-world event concerning a federal agency that, at the time of the governmental failure, was headed by an acting official, but also because media stories published around the time of the malfunction highlighted Nolen's role as an acting official and detailed why acting officials can hinder agency performance. For instance, a *CNN* article published shortly after the malfunction noted that "the FAA continues to be led by an acting administrator, and lacks a Senate-confirmed chief. That has real-world consequences for IT upgrades and other projects, according to a person familiar with the agency, speaking on condition of anonymity to discuss the matter more freely." This anonymous source is further quoted as saying, "It's really hard to set direction and vision when you don't know if you're going to be there for a week or you're going to

<sup>&</sup>lt;sup>13</sup>Josephs, Leslie, "Flight disruptions ease after FAA outage but questions linger about system outage," CNBC, January 12, 2023, https://www.cnbc.com/2023/01/12/faa-notam-outage-flight-impact-eases.html

be there for 18 months." <sup>14</sup> Another story published by *Reuters* highlighted Nolen's acting status before echoing statements from members of Congress bemoaning "the number of empty desks and vacant offices at the FAA" and emphasizing that "[the FAA] needs skilled, dedicated and permanent leadership in positions across the agency, starting with the administrator's office." <sup>15</sup> This media focus illustrates that we can reasonably expect that when agencies headed by acting officials become newsworthy, the media will highlight not only the officials' acting status but also communicate to the public the potential consequences for a lack of permanent leadership. We further sought to bolster external validity in designing our vignettes by borrowing heavily from language used in news stories published after the FAA's NOTAM malfunction; in doing so, we ensure that the information we included in our vignettes aligns closely with that they could encounter in their everyday news consumption.

#### A.3.1 Vignettes

On January 11, 2023, the Federal Aviation Administration (FAA) grounded all flights within the United States for 90 minutes because one of its computer safety systems malfunctioned. This malfunction led to over 10,000 flight delays and over 1,300 flight cancellations, disrupting the plans of many travelers and causing frustration and confusion at airports nationwide.

Later that day, the FAA, under the direction of Administrator Billy Nolen, announced that it had traced the system malfunction to a damaged database file and would make the necessary repairs to prevent similar problems in the future.

#### [INSERT TREATMENT HERE]

- Treatments
  - CONTROL: Blank
  - ACTING OFFICIAL TREATMENT: Insert "Acting" in front of "Administrator Billy Nolen"
  - ACTING OFFICIAL WITH EXPLANATION TREATMENT: Insert "Acting" in front of "Administrator Billy Nolen." Additionally, insert text following second paragraph: "Many critics have also expressed concern that the FAA system outage highlights the need for a permanent administrator to run the agency. Without a permanent administrator, the agency lacks the leadership to launch new initiatives, make major policy decisions, and address a backlog of approvals and certifications of aircraft and aircraft parts. President Biden nominated a new FAA commissioner in July 2022, but the Senate has not yet confirmed Biden's nominee."

#### A.3.2 Post-Treatment Outcome Questions

• Do you approve or disapprove of the way Joe Biden is handling his job as president?

<sup>&</sup>lt;sup>14</sup>Fung, Brian. "Aging, Outdated Technology Leaves Air Travel at Risk of Meltdown." *CNN*, January 13, 2023, https://www.cnn.com/2023/01/13/business/airline-meltdowns.

<sup>&</sup>lt;sup>15</sup>Shepardson, David, "U.S. Congress to investigate FAA computer outage that snarled flights," *Reuters*, January 11, 2023, https://www.reuters.com/world/us/us-senate-commerce-committee-investigate-faa-computer-outage-2023-01-11/.

- Strongly approve
- Somewhat approve
- Somewhat disapprove
- Strongly disapprove
- Do you approve or disapprove of the way Joe Biden is managing the FAA?
  - Strongly approve
  - Somewhat approve
  - Somewhat disapprove
  - Strongly disapprove
- Do you approve or disapprove of the way Billy Nolen is handling his job as FAA [Acting] Administrator?
  - Strongly approve
  - Somewhat approve
  - Somewhat disapprove
  - Strongly disapprove
- Do you approve or disapprove of the FAA's handling of the computer safety system malfunction it experienced on January 11, 2023?
  - Strongly approve
  - Somewhat approve
  - Somewhat disapprove
  - Strongly disapprove
- I trust the FAA to make decisions that are right for the country as a whole. (To be used to construct legitimacy scale)
  - Strongly agree
  - Somewhat agree
  - Somewhat disagree
  - Strongly disagree
- I trust the FAA to make sure that air travel is safe and efficient. (To be used to construct competence scale)
  - Strongly agree
  - Somewhat agree
  - Somewhat disagree
  - Strongly disagree
- I trust that the FAA is led by well-qualified individuals. (To be used to construct competence scale)
  - Strongly agree
  - Somewhat agree
  - Somewhat disagree
  - Strongly disagree
- I trust that the FAA's decisions do not favor some groups more than others. (To be used to construct legitimacy scale)

- Strongly agree
- Somewhat agree
- Somewhat disagree
- Strongly disagree

# A.4 Respondent Descriptive Statistics

Table SI.1: Respondent Descriptive Characteristics

Characteristic	Executive Branch	FDA	FAA
	(Lucid)	(Lucid)	(Connect)
Age	,	/	/
$\frac{6}{18-29}$	23.3% (360)	22.2% (347)	22.1% (259)
30-49	36.8% (569)	$35.4\% \ (552)$	$39.0\% \ (456)$
50-64	22.7% (352)	$26.7\% \ (416)$	27.7% (324)
65 and over	17.2% (267)	15.7% (245)	11.1% (130)
NA	0.0% (0)	0.0%(0)	0.1% (1)
Gender	,		` ,
Female	49.0% (759)	52.4% (817)	49.6% (580)
Male	51.0% (789)	47.6% (743)	50.0% (585)
Other	0.0% (0)	0.0% (0)	0.3% (4)
NA	0.0% (0)	0.0% (0)	0.1% (1)
Race/Ethnicity			
White/Non-Hispanic	64.5% (999)	67.3% (1050)	72.0% (842)
White/Hispanic	5.3% (82)	5.5% (86)	8.4% (98)
Black/Non-Hispanic	11.1% (172)	10.9% (170)	9.3% (109)
Black/Hispanic	1.4% (21)	1.3% (20)	1.6% (19)
Asian	6.6% (102)	5.8% (91)	5.4% (63)
Other	10.0% (155)	8.3% (130)	3.2% (37)
NA	1.1%~(17)	0.8% (13)	0.2% (2)
Education			
High school degree	22.0% (341)	23.1% (361)	10.9% (128)
or less			
Some college,	33.8% (523)	35.3% (551)	30.1% (352)
no 4-year degree			
Bachelor's degree	22.7% (351)	23.2% (362)	$42.2\% \ (494)$
Post-graduate degree	20.5% (318)	17.8% (278)	16.6% (194)
NA	1.0% (15)	0.5% (8)	0.2% (2)
$\underline{\text{Income}}$			
Less than \$25,000	24.3% (376)	23.8% (371)	$14.4\% \ (168)$
\$25,000-\$50,000	22.2% (344)	23.4% (365)	25.8% (302)
\$50,000-\$75,000	17.4% (270)	16.5%~(258)	22.2% (260)
\$75,000-\$100,000	11.2% (174)	$10.5\% \ (164)$	$15.0\% \ (176)$
\$100,000-\$200,000	14.9% (230)	15.6% (243)	18.3% (214)
200,000 or more	2.8% (43)	3.4% (53)	4.3% (50)
NA	7.2% (111)	6.8% (106)	0.0% (0)
Party Identification			
Democrat	48.0% (743)	46.0% (718)	57.3% (670)
Independent	$10.8\% \ (167)$	$10.8\% \ (169)$	$11.5\% \ (135)$
Republican	36.7% (568)	38.2% (596)	28.9% (338)

Characteristic	Executive Branch	FDA	FAA
	(Lucid)	(Lucid)	(Connect)
Other	4.5% (70)	4.9% (77)	2.2% (26)
NA	0.0% (0)	0.0% (0)	0.1% (1)
Ideology			
Very liberal	13.5% (209)	14.0% (218)	$13.8\% \ (162)$
Liberal	14.3% (22)	15.6% (244)	24.3% (284)
Slightly liberal	9.0%~(139)	9.6% (150)	$14.2\% \ (166)$
Moderate	34.4% (532)	33.1% (517)	20.9% (244)
Slightly conservative	7.7% (119)	7.2% (112)	9.4%~(110)
Conservative	$10.7\% \ (165)$	$11.1\% \ (173)$	12.9%~(151)
Very conservative	9.8% (152)	9.2%~(143)	4.5% (53)
NA	0.6% (10)	0.2% (3)	0.0% (0)

Note: This table indicates the percentage and number of respondents in each sample (denoted by the column headings) who reported each demographic characteristic (denoted by the row labels). Some characteristics may not sum to 100% due to rounding.

# B Empirical Analyses

In this section, we present the data and models used to create Figures 1 and 2 in the main paper and provide additional analyses to demonstrate the robustness of our results to alternative specifications and explore potential mediation effects.

All analyses include all respondents irrespective of attention check passage. The substantive interpretation of our findings is consistent across both experiments when we use information about attention check passage to calculate complier average treatment effects.

#### **B.1** Outcome Measures

While the original outcome questions that relate to respondents' approval of President Biden, the FDA, and the FAA were originally measured on four-point scales from "Strongly disagree" to "Strongly agree," we transformed these measures to binary indicators—"Strongly or somewhat disagree" (0) and "Strongly or somewhat agree" (1)—for ease of exposition in Figures 1 and 2 in the main paper. In doing so, we are able to interpret treatment effect estimates as percentage point differences in the mean level of approval expressed by respondents in a given treatment condition to the mean level of approval among control condition respondents (e.g., a treatment effect of -0.03 represents a 3 percentage point decrease in approval relative to the control condition).

Differently, we measure respondents' perceptions of the competence and legitimacy of the executive branch, FDA, and FAA using two-question scales (see Supplemental Information Section A for question wordings). Each question asks respondents to indicate their level of agreement about a statement concerning the executive branch, FDA, and FAA's competence and legitimacy on a four-point scale, and we use as our measure of respondents' perceptions of each concept the average the numerical values corresponding with respondents' answers to each pair of questions. Thus, the treatment effects which correspond to these outcome measures in Figures 1 and 2 in the main paper represent the change in the mean rating provided by respondents in each treatment condition on a four-point scale relative to the mean rating provided by the respondents in the control condition The internal consistency of our scales is high, with Cronbach's  $\alpha$  exceeding 0.80 for each scale ( $\alpha = 0.90$  for Executive Branch competence,  $\alpha = 0.84$  for Executive Branch legitimacy,  $\alpha = 0.85$  for FDA competence,  $\alpha = 0.80$  for FDA competence).

#### B.2 Robustness Checks

The tabular summaries of the linear regression models used to create the figures in the main paper are presented in Tables SI.2, SI.3, and SI.4, (Figure 1) and Tables SI.5, SI.6, and SI.7 (Figure 2). Because these models used binarized versions of some of our outcome measures (noted at the beginning of this section), we also provide summaries of analogous linear regression models which employ the original four-point scales for these outcomes in Tables SI.8-SI.13. The substantive interpretation of the estimates in these models are consistent with those made when using the corresponding binarized outcomes across each of the three experiments.

# **B.3** Causal Mediation Analyses

In our pre-analysis plan, we anticipated that respondents' perceptions of the competence and legitimacy of the executive branch, FDA, and FAA would mediate the effect of our treatments on respondents' evaluations of the job performance and policy decisions made by President Biden, the

executive branch, the FDA, and the FAA. To evaluate these expectations, we use causal mediation, which enables us to recover unbiased estimates of the average direct effect (ADE), or the effect of our treatments themselves on the outcomes, and the average causal mediation effect (ACME), or the effect of the treatments on the outcomes through each of the posited mediators (Imai et al. 2011).

We conduct our causal mediation analyses using the two-step estimation procedure outlined by (Imai et al. 2011) and implemented in the mediation package in R (Tingley et al. 2014). For both steps, we use linear regression models and the transformed versions of our outcomes measures utilized in our analyses in the main paper (i.e., binarized versions of respondents' evaluations of respondents' approval of President Biden, the executive branch, the FDA, and the FAA, and two-question scales of respondents' perceptions of competence and legitimacy). We use 1000 simulations to estimate our quantities of interest and obtain uncertainty measures through bootstrapping.

We present the results of our causal medation analyses for our unconditional treatment effects (i.e., the effects of our treatments on our outcomes without conditioning by copartisanship, as performed for Figure 1) in Tables SI.14-SI.33.<sup>17</sup> Across outcome measures and treatment conditions, we find no evidence that respondents' perceptions of legitimacy or competence mediate the effect of our treatments on our outcome measures for the executive branch and FDA experiments, but we do find that respondents' negative perceptions towards FAA Administrator Billy Nolen and the FAA's handling of its system malfunction are mediated by respondents' perceptions of the FAA's competence and legitimacy.

 $<sup>^{16}</sup>$ The estimation procedure in (Imai et al. 2011) assumes that the posited mediators are independent, which is likely not the case in the present circumstance, as perceptions of the competence and legitimacy of the executive branch or individual agencies may be related. To account for the potential for causal dependence and individual-level heterogeneity in the interactive effect between our treatments and posited mediators, we repeated our causal mediation analyses for those cases where we initially detected a mediation effect using the procedure outlined in (Imai and Yamamoto 2013) and implemented through the multimed function in mediation. These analyses (not shown here, but included in our replication archive) indicate that our mediation effects remain statistically distinguishable at the 95% confidence level when accounting for causal dependence and under the homogeneous interaction assumption, though at smaller magnitudes than those reported here. However, our sensitivity analyses which assess robustness to violations of the homogeneous interaction assumption suggest that our results are not robust to more than low levels of individual-level heterogeneity in the interactive effect between our treatments and posited mediators, as our mediated effects are no longer distinguishable when the value of the  $\sigma$  parameter exceeds 20% to 30% of its maximum value across unique mediator/outcome specifications.

<sup>&</sup>lt;sup>17</sup>We also performed our causal mediation analyses on the subsets of respondents who identified as copartisans and did not identify as non-copartisans, separately. These analyses are not included here but are available in our replication archive.

Table SI.2: Executive Branch Experiment, Unconditional Effects

	Pres.	Pres.	Exec. Branch	Exec. Branch
	Approval	Exec. Handling	Competence	Legitimacy
Intercept	0.61*	0.62*	2.71*	2.64*
	(0.02)	(0.02)	(0.04)	(0.04)
Acting	-0.01	-0.02	-0.03	0.02
	(0.03)	(0.03)	(0.06)	(0.06)
Acting w/	-0.02	-0.03	-0.05	-0.06
Context	(0.03)	(0.03)	(0.06)	(0.06)
Num. obs.	1547	1546	1536	1539

 $<sup>^*</sup>p < 0.05$ . Omitted category is the control condition, where respondents are told only about how many nominees Biden has, not that most have not been confirmed. The first and second models use as outcome measures dichotomized versions of the original approval questions, where "strongly disapprove" and "somewhat disapprove" are coded as 0 and "somewhat approve" and "strongly approve" are coded as 1. Third and fourth models use as outcome measures scales ranging from 1 to 4 which reflect respondents' appraisals of the executive branch's competence and legitimacy, respectively.

Table SI.3: FDA Experiment, Unconditional Effects

	Pres.	Pres.	FDA Comm.	FDA	FDA	FDA
	Approval	FDA Handling	Approval	Decision Approval	Competence	Legitimacy
Intercept	0.58*	0.57*	0.59*	0.67*	2.92*	2.78*
	(0.02)	(0.02)	(0.02)	(0.02)	(0.04)	(0.04)
Acting	-0.02	0.00	-0.01	0.00	0.04	0.07
	(0.03)	(0.03)	(0.03)	(0.03)	(0.05)	(0.05)
Acting w/	0.05	-0.02	-0.00	-0.02	0.03	0.07
Context	(0.03)	(0.03)	(0.03)	(0.03)	(0.05)	(0.05)
Num. obs.	1554	1552	1551	1554	1546	1546

p < 0.05. Omitted category is the control condition, where respondents are not told that the FDA does not have a confirmed commissioner. The first through fourth models use as outcome measures dichotomized versions of the original approval questions, where "strongly disapprove" and "somewhat disapprove" are coded as 0 and "somewhat approve" and "strongly approve" are coded as 1. Fifth and sixth models use as outcome measures scales ranging from 1 to 4 which reflect respondents' appraisals of the FDA's competence and legitimacy, respectively.

Table SI.4: FAA Experiment, Unconditional Effects

	Pres.	Pres.	FAA Admin.	FAA	FAA	FAA
	Approval	FAA Handling	Approval	Handling Approval	Competence	Legitimacy
Intercept	0.53*	0.63*	0.72*	0.72*	3.12*	2.99*
	(0.02)	(0.02)	(0.02)	(0.02)	(0.04)	(0.04)
Acting	-0.00	-0.02	0.00	-0.02	-0.02	-0.08
	(0.03)	(0.03)	(0.03)	(0.03)	(0.05)	(0.05)
Acting w/	0.05	-0.00	$-0.11^*$	$-0.18^*$	$-0.18^*$	$-0.22^{*}$
Context	(0.04)	(0.03)	(0.03)	(0.03)	(0.05)	(0.06)
Num. obs.	1168	1168	1169	1168	1169	1170

<sup>\*</sup>p < 0.05. Omitted category is the control condition, where respondents are not told that the FAA does not have a confirmed administrator. The first through fourth models use as outcome measures dichotomized versions of the original approval questions, where "strongly disapprove" and "somewhat disapprove" are coded as 0 and "somewhat approve" and "strongly approve" are coded as 1. Fifth and sixth models use as outcome measures scales ranging from 1 to 4 which reflect respondents' appraisals of the FAA's competence and legitimacy, respectively.

Table SI.5: Executive Branch Experiment, Partisanship-Conditional

	Pres.	Pres.	Exec. Branch	Exec. Branch
	Approval	Exec. Handling	Competence	Legitimacy
Intercept	$0.35^{*}$	$0.35^{*}$	2.24*	2.20*
	(0.03)	(0.03)	(0.05)	(0.05)
Acting	-0.03	-0.03	-0.01	0.07
	(0.03)	(0.03)	(0.07)	(0.07)
Acting w/	-0.03	-0.02	-0.06	-0.03
Context	(0.04)	(0.04)	(0.08)	(0.08)
Pres. Copart.	$0.54^{*}$	$0.55^{*}$	$0.96^{*}$	$0.90^{*}$
	(0.04)	(0.04)	(0.08)	(0.08)
Acting:	0.05	0.01	-0.03	-0.07
Pres. Copart	(0.05)	(0.05)	(0.11)	(0.11)
Acting w/	0.03	0.01	0.03	-0.03
Context:	(0.05)	(0.05)	(0.11)	(0.11)
Pres. Copart				
Num. obs.	1547	1546	1536	1539

 $<sup>^*</sup>p < 0.05$ . Omitted category is the control condition, where respondents are told only about how many nominees Biden has, not that most have not been confirmed. Omitted category for copartisanship is non-presidential copartisan, which is any respondent who does not identify as a Democrat. The first and second models use as outcome measures dichotomized versions of the original approval questions, where "strongly disapprove" and "somewhat disapprove" are coded as 0 and "somewhat approve" and "strongly approve" are coded as 1. Third and fourth models use as outcome measures scales ranging from 1 to 4 which reflect respondents' appraisals of the executive branch's competence and legitimacy, respectively.

Table SI.6: FDA Experiment, Partisanship-Conditional

	Pres.	Pres.	FDA Comm.	FDA	FDA	FDA
	Approval	FDA Handling	Approval	Decision Approval	Competence	Legitimacy
Intercept	$0.32^*$	0.32*	0.43*	0.58*	2.62*	$2.47^{*}$
	(0.02)	(0.03)	(0.03)	(0.03)	(0.05)	(0.05)
Acting	-0.03	0.02	-0.00	0.01	0.07	0.11
	(0.03)	(0.04)	(0.04)	(0.04)	(0.07)	(0.07)
Acting w/	$0.09^{*}$	0.05	0.06	0.01	0.05	0.12
Context	(0.03)	(0.04)	(0.04)	(0.04)	(0.07)	(0.07)
Pres. Copart.	$0.56^{*}$	$0.54^{*}$	$0.36^{*}$	$0.18^{*}$	$0.64^{*}$	$0.66^{*}$
	(0.04)	(0.04)	(0.04)	(0.04)	(0.07)	(0.07)
Acting:	0.04	-0.02	-0.01	-0.00	-0.05	-0.06
Pres. Copart	(0.05)	(0.05)	(0.06)	(0.06)	(0.10)	(0.10)
Acting w/	-0.07	$-0.12^*$	$-0.13^*$	-0.05	-0.04	-0.08
Context:	(0.05)	(0.05)	(0.06)	(0.06)	(0.10)	(0.10)
Pres. Copart	•	•			,	
Num. obs.	1554	1552	1551	1554	1546	1546

 $<sup>^*</sup>p < 0.05$ . Omitted category for experimental condition is the control condition, where respondents are not told that the FDA does not have a confirmed commissioner. Omitted category for copartisanship is non-presidential copartisan, which is any respondent who does not identify as a Democrat. The first and second models use as outcome measures dichotomized versions of the original approval questions, where "strongly disapprove" and "somewhat disapprove" are coded as 0 and "somewhat approve" and "strongly approve" are coded as 1. Fifth and sixth models use as outcome measures scales ranging from 1 to 4 which reflect respondents' appraisals of the FDA's competence and legitimacy, respectively.

Table SI.7: FAA Experiment, Partisanship-Conditional

	Pres.	Pres.	FAA Admin.	FAA	FAA	FAA
	Approval	FAA Handling	Approval	Handling Approval	Competence	Legitimacy
Intercept	0.20*	$0.39^*$	0.64*	$0.67^{*}$	2.96*	2.88*
	(0.03)	(0.03)	(0.03)	(0.03)	(0.05)	(0.06)
Acting	-0.08*	$-0.10^*$	-0.05	-0.08	-0.10	$-0.18^*$
	(0.04)	(0.04)	(0.05)	(0.05)	(0.08)	(0.08)
Acting w/	0.00	-0.05	-0.16*	$-0.23^{*}$	$-0.19^*$	-0.26*
Context	(0.04)	(0.05)	(0.05)	(0.05)	(0.08)	(0.08)
Pres. Copart.	$0.59^{*}$	$0.42^{*}$	$0.14^{*}$	0.09	$0.28^{*}$	$0.20^{*}$
	(0.04)	(0.04)	(0.04)	(0.05)	(0.07)	(0.07)
Acting:	$0.14^{*}$	$0.14^{*}$	0.09	0.10	0.15	0.18
Pres. Copart	(0.05)	(0.06)	(0.06)	(0.07)	(0.10)	(0.11)
Acting w/	0.06	0.06	0.07	0.09	-0.00	0.07
Context:	(0.05)	(0.06)	(0.07)	(0.07)	(0.11)	(0.11)
Pres. Copart						
Num. obs.	1167	1167	1168	1167	1168	1169

 $<sup>^*</sup>p < 0.05$ . Omitted category for experimental condition is the control condition, where respondents are not told that the FAA does not have a confirmed administrator. Omitted category for copartisanship is non-presidential copartisan, which is any respondent who does not identify as a Democrat. The first and second models use as outcome measures dichotomized versions of the original approval questions, where "strongly disapprove" and "somewhat disapprove" are coded as 0 and "somewhat approve" and "strongly approve" are coded as 1. Fifth and sixth models use as outcome measures scales ranging from 1 to 4 which reflect respondents' appraisals of the FAA's competence and legitimacy, respectively.

Table SI.8: Executive Branch Experiment, Unconditional Effects (Four-Point Outcome Scales)

	Pres.	Pres.
	Approval	Exec. Handling
Intercept	2.70*	2.69*
	(0.05)	(0.05)
Acting	-0.06	-0.06
	(0.07)	(0.07)
Acting w/	-0.07	-0.07
Context	(0.07)	(0.07)
Num. obs.	1547	1546

 $<sup>^*</sup>p<0.05.$  Omitted category is the control condition, where respondents are told only about how many nominees Biden has, not that most have not been confirmed. Models use as outcome measures the original four-point approval questions.

Table SI.9: FDA Experiment, Unconditional Effects (Four-Point Outcome Scales)

	Pres.	Pres.	FDA Comm.	FDA
	Approval	FDA Handling	Approval	Decision Approval
Intercept	2.62*	2.57*	2.63*	2.78*
	(0.05)	(0.05)	(0.04)	(0.04)
Acting	-0.04	0.02	-0.02	0.02
	(0.07)	(0.06)	(0.05)	(0.05)
Acting w/	0.11	-0.02	0.01	-0.03
Context	(0.07)	(0.06)	(0.06)	(0.05)
Num. obs.	1554	1552	1551	1554

p < 0.05. Omitted category is the control condition, where respondents are not told that the FDA does not have a confirmed commissioner. Models use as outcome measures the original four-point approval questions.

Table SI.10: FAA Experiment, Unconditional Effects (Four-Point Outcome Scales)

	Pres.	Pres.	FAA Admin.	FAA
	Approval	FAA Handling	Approval	Handling Approval
Intercept	$2.45^{*}$	2.62*	2.83*	2.87*
	(0.05)	(0.04)	(0.04)	(0.04)
Acting	-0.03	-0.03	-0.03	-0.04
	(0.08)	(0.06)	(0.05)	(0.06)
Acting w/Explanation	0.11	0.02	$-0.24^{*}$	$-0.36^{*}$
	(0.08)	(0.06)	(0.05)	(0.06)
Num. obs.	1168	1168	1169	1168

p < 0.05. Omitted category is the control condition, where respondents are not told that the FAA does not have a confirmed administrator Models use as outcome measures the original four-point approval questions.

Table SI.11: Executive Branch Experiment, Partisanship-Conditional (Four-Point Outcome Scales)

	Pres.	Pres.
	Approval	Exec. Handling
Intercept	2.04*	$2.05^{*}$
	(0.06)	(0.06)
Acting	-0.09	-0.06
	(0.08)	(0.08)
Acting w/	-0.06	-0.06
Context	(0.08)	(0.08)
Pres. Copart.	$1.34^{*}$	$1.30^{*}$
	(0.08)	(0.08)
Acting:	0.10	0.02
Pres. Copart	(0.11)	(0.11)
Acting w/	0.02	0.03
Context:	(0.11)	(0.11)
Pres. Copart		
Num. obs.	1547	1546

 $<sup>^*</sup>p < 0.05.$  Omitted category for experimental condition is the control condition, where respondents are told only about how many nominees Biden has, not that most have not been confirmed. Omitted category for copartisanship is non-presidential copartisan, which is any respondent who does not identify as a Democrat. Models use as outcome measures the original four-point approval questions.

Table SI.12: FDA Experiment, Partisanship-Conditional (Four-Point Outcome Scales)

	Pres.	Pres.	FDA Comm.	FDA
	Approval	FDA Handling	Approval	Decision Approval
Intercept	$1.93^{*}$	$1.99^*$	$2.30^{*}$	$2.58^{*}$
	(0.05)	(0.05)	(0.05)	(0.05)
Acting	-0.04	0.08	-0.01	0.01
	(0.08)	(0.07)	(0.07)	(0.07)
Acting w/	$0.22^{*}$	0.14	0.11	0.02
Context	(0.08)	(0.07)	(0.07)	(0.07)
Pres. Copart.	$1.46^{*}$	$1.24^{*}$	$0.70^{*}$	$0.42^{*}$
	(0.08)	(0.08)	(0.07)	(0.07)
Acting:	0.09	-0.08	-0.00	0.02
Pres. Copart	(0.11)	(0.11)	(0.10)	(0.10)
Acting w/	-0.21	$-0.31^*$	$-0.20^*$	-0.11
Context:	(0.11)	(0.11)	(0.10)	(0.11)
Pres. Copart				
Num. obs.	1554	1552	1551	1554

p < 0.05. Omitted category for experimental condition is the control condition, where respondents are not told that the FDA does not have a confirmed commissioner. Omitted category for copartisanship is non-presidential copartisan, which is any respondent who does not identify as a Democrat. Models use as outcome measures the original four-point approval questions.

Table SI.13: FAA Experiment, Partisanship-Conditional (Four-Point Outcome Scales)

-	Pres.	Pres.	FAA Admin.	FAA
	Approval	FAA Handling	Approval	Handling Approval
Intercept	1.70*	2.12*	2.72*	2.76*
	(0.06)	(0.06)	(0.05)	(0.06)
Acting	$-0.23^*$	-0.15	$-0.21^*$	$-0.21^*$
	(0.08)	(0.08)	(0.08)	(0.09)
Acting w/	-0.01	-0.02	-0.36*	$-0.47^{*}$
Context	(0.09)	(0.08)	(0.08)	(0.09)
Pres. Copart.	$1.32^{*}$	$0.89^{*}$	$0.20^{*}$	$0.19^*$
	(0.08)	(0.07)	(0.07)	(0.08)
Acting:	$0.33^{*}$	0.21	$0.31^{*}$	$0.30^{*}$
Pres. Copart	(0.11)	(0.11)	(0.10)	(0.12)
Acting w/	0.15	0.03	0.20	0.18
Context:	(0.11)	(0.11)	(0.11)	(0.12)
Pres. Copart				
Num. obs.	1167	1167	1168	1167

p < 0.05. Omitted category is the control condition, where respondents are not told that the FAA does not have a confirmed administrator. Omitted category for copartisanship is non-presidential copartisan, which is any respondent who does not identify as a Democrat. Models use as outcome measures the original four-point approval questions.

Table SI.14: Causal Mediation Analysis—Competence and Presidential Approval (Executive Branch Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Officials	ACME	-0.01	[-0.05, 0.03]
(N=1032)	ADE	0.00	[-0.04, 0.05]
	Total Effect	-0.01	[-0.07, 0.05]
	Prop. Mediated	1.09	[-5.71, 7.49]
Acting Officials	ACME	-0.02	[-0.06, 0.02]
with Context	ADE	0.00	[-0.05, 0.05]
(N=986)	Total Effect	-0.02	[-0.08, 0.04]
	Prop. Mediated	1.02	[-7.10, 5.93]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of Joe Biden's handling of his job as president, as mediated by perceptions of the executive branch's competence, in the Executive Branch experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the competence scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method).

Table SI.15: Causal Mediation Analysis—Competence and President's Handling of Executive Branch (Executive Branch Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Officials	ACME	-0.01	[-0.05, 0.03]
(N=1031)	ADE	-0.01	[-0.06, 0.03]
	Total Effect	-0.02	[-0.08, 0.04]
	Prop. Mediated	0.40	[-4.13, 4.07]
Acting Officials	ACME	-0.02	[-0.06, 0.02]
with Context	ADE	-0.00	[-0.05, 0.04]
(N=985)	Total Effect	-0.02	[-0.08, 0.04]
	Prop. Mediated	0.83	[-5.16, 6.92]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of Joe Biden's handling of the executive branch, as mediated by perceptions of the executive branch's competence, in the Executive Branch experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the competence scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method).

Table SI.16: Causal Mediation Analysis—Legitimacy and Presidential Approval (Executive Branch Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Officials	ACME	0.01	[-0.03, 0.05]
(N=1033)	ADE	-0.02	[-0.06, 0.03]
	Total Effect	-0.01	[-0.07, 0.05]
	Prop. Mediated	-0.84	[-6.17, 6.88]
Acting Officials	ACME	-0.02	[-0.06, 0.02]
with Context	ADE	-0.00	[-0.05, 0.05]
(N=991)	Total Effect	-0.02	[-0.08, 0.04]
	Prop. Mediated	0.99	[-4.44, 9.69]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of Joe Biden's handling of his job as president, as mediated by perceptions of the executive branch's legitimacy, in the Executive Branch experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the legitimacy scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method).

Table SI.17: Causal Mediation Analysis—Legitimacy and President's Handling of Executive Branch (Executive Branch Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Officials	ACME	0.01	[-0.03, 0.05]
(N=1032)	ADE	-0.03	[-0.08, 0.01]
	Total Effect	-0.02	[-0.08, 0.04]
	Prop. Mediated	-0.33	[-7.74, 6.68]
Acting Officials	ACME	-0.02	[-0.06, 0.02]
with Context	ADE	-0.01	[-0.05, 0.04]
(N=990)	Total Effect	-0.02	[-0.08, 0.04]
	Prop. Mediated	0.77	[-6.04, 5.48]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of Joe Biden's handling of the executive branch, as mediated by perceptions of the executive branch's legitimacy, in the Executive Branch experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the legitimacy scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method).

Table SI.18: Causal Mediation Analysis—Competence and Presidential Approval (FDA Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Official	ACME	0.01	[-0.02, 0.04]
(N=1042)	ADE	-0.03	[-0.08, 0.02]
	Total Effect	-0.02	[-0.08, 0.04]
	Prop. Mediated	-0.46	[-6.80, 8.09]
Acting Official	ACME	0.01	[-0.02, 0.04]
with Context	ADE	0.05	[-0.01, 0.10]
(N=1022)	Total Effect	0.05	[-0.01, 0.11]
	Prop. Mediated	0.16	[-0.73, 1.66]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of Joe Biden's handling of his job as president, as mediated by perceptions of the FDA's competence, in the FDA experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the competence scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method).

Table SI.19: Causal Mediation Analysis—Competence and Handling of the FDA (FDA Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Official	ACME	0.01	[-0.02, 0.04]
(N=1040)	ADE	-0.01	[-0.06, 0.05]
	Total Effect	0.00	[-0.06, 0.06]
	Prop. Mediated	8.74	[-10.61, 5.82]
Acting Official	ACME	0.01	[-0.02, 0.04]
with Context	ADE	-0.02	[-0.07, 0.03]
(N=1022)	Total Effect	-0.01	[-0.07, 0.05]
	Prop. Mediated	-0.63	[-5.23, 8.71]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of Joe Biden's handling of the FDA, as mediated by perceptions of the FDA's competence, in the FDA experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the competence scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method).

Table SI.20: Causal Mediation Analysis—Competence and FDA Commissioner Approval (FDA Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Official	ACME	0.01	[-0.02, 0.04]
(N=1039)	ADE	-0.03	[-0.08, 0.02]
	Total Effect	-0.02	[-0.08, 0.04]
	Prop. Mediated	-0.64	[-7.45, 8.48]
Acting Official	ACME	0.01	[-0.02, 0.04]
with Context	ADE	-0.01	[-0.06, 0.05]
(N=1021)	Total Effect	-0.00	[-0.06, 0.06]
	Prop. Mediated	-3.18	[-8.72, 5.41]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of Janet Woodcock's handling of her job as FDA commissioner, as mediated by perceptions of the FDA's competence, in the FDA experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the competence scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method).

Table SI.21: Causal Mediation Analysis—Competence and Approval of FDA's Approval of Aducanumab (FDA Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Official	ACME	0.01	[-0.01, 0.03]
(N=1042)	ADE	-0.00	[-0.05, 0.05]
	Total Effect	0.00	[-0.05, 0.06]
	Prop. Mediated	1.74	[-5.56, 5.63]
Acting Official	ACME	0.01	[-0.02, 0.03]
with Context	ADE	-0.02	[-0.07, 0.04]
(N=1023)	Total Effect	-0.01	[-0.07, 0.05]
•	Prop. Mediated	-0.50	[-4.50, 5.04]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of the FDA's decision to approve aducanumab, as mediated by perceptions of the FDA's competence, in the FDA experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the competence scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method).

Table SI.22: Causal Mediation Analysis—Legitimacy and Presidential Approval (FDA Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Official	ACME	0.02	[-0.01, 0.05]
(N=1042)	ADE	-0.04	[-0.10, 0.01]
	Total Effect	-0.02	[-0.08, 0.04]
	Prop. Mediated	-0.80	[-14.53, 8.0911.19]
Acting Official	ACME	0.02	[-0.01 0.05]
with Context	ADE	0.03	[-0.02, 0.09]
(N=1023)	Total Effect	0.05	[-0.01, 0.12]
	Prop. Mediated	0.38	[-0.86, 2.27]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of Joe Biden's handling of his job as president, as mediated by perceptions of the FDA's legitimacy, in the FDA experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the legitimacy scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method).

Table SI.23: Causal Mediation Analysis—Legitimacy and Handling of the FDA (FDA Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Official	ACME	0.02	[-0.01, 0.05]
(N=1040)	ADE	-0.02	[-0.07, 0.03]
	Total Effect	0.00	[-0.06, 0.05]
	Prop. Mediated	14.13	[-8.57, 12.74]
Acting Official	ACME	0.02	[-0.01, 0.05]
with Context	ADE	-0.04	[-0.09, 0.01]
(N=1023)	Total Effect	-0.02	[-0.07, 0.04]
	Prop. Mediated	-1.20	[-9.08, 10.32]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of Joe Biden's handling of the FDA, as mediated by perceptions of the FDA's legitimacy, in the FDA experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the legitimacy scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method).

Table SI.24: Causal Mediation Analysis—Legitimacy and FDA Commissioner Approval (FDA Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Official	ACME	0.02	[-0.01, 0.05]
(N=1039)	ADE	-0.04	[-0.09, 0.02]
	Total Effect	-0.02	[-0.08, 0.04]
	Prop. Mediated	-1.19	[-11.76, 11.26]
Acting Official	ACME	0.02	[-0.01, 0.05]
with Context	ADE	-0.03	[-0.08, 0.03]
(N=1022)	Total Effect	-0.01	[-0.07,  0.05]
	Prop. Mediated	-2.83	[-11.60, 13.04]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of Janet Woodcock's handling of her job as FDA commissioner, as mediated by perceptions of the FDA's legitimacy, in the FDA experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the legitimacy scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method).

Table SI.25: Causal Mediation Analysis—Legitimacy and Approval of FDA's Decision to Approve Aducanumab (FDA Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Official	ACME	0.01	[-0.01, 0.04]
(N=1042)	ADE	-0.01	[-0.06, 0.04]
	Total Effect	0.00	[-0.06, 0.06]
	Prop. Mediated	4.60	[-7.31, 7.58]
Acting Official	ACME	0.02	[-0.01, 0.04]
with Context	ADE	-0.03	[-0.08, 0.03]
(N=1024)	Total Effect	-0.01	[-0.07, 0.04]
	Prop. Mediated	-1.02	[-7.80, 8.15]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of the FDA's decision to approve aducanumab, as mediated by perceptions of the FDA's legitimacy, in the FDA experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the legitimacy scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method).

Table SI.26: Causal Mediation Analysis—Competence and Presidential Approval (FAA Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Official	ACME	0.00	[-0.03, 0.02]
(N=818)	ADE	0.00	[-0.07, 0.07]
	Total Effect	0.00	[-0.07, -0.07]
	Prop. Mediated	-12.45	[-2.79, 6.58]
Acting Official	ACME	-0.04*	[0.06, -0.02]
with Context	ADE	$0.09^{*}$	[0.02,  0.15]
(N=775)	Total Effect	0.05	[-0.01, 0.11]
	Prop. Mediated	-0.75	[-7.82, 7.27]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of Joe Biden's handling of his job as president, as mediated by perceptions of the FAA's competence, in the FAA experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the competence scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method). Please note that the estimate for the proportion of the effect mediated for those in the Acting Official condition vs. the Control condition falls outside of the 95% confidence interval; this is a mechanical consequence of the mediation package estimating the proportion mediated and the confidence interval through separate calculations that, when no mediation effect is present, can yield inconsistent values.

Table SI.27: Causal Mediation Analysis—Competence and Handling of the FAA (FAA Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Official	ACME	-0.00	[03, 0.02]
(N=818)	ADE	-0.02	[-0.08, 0.04]
	Total Effect	-0.03	[-0.09, 0.04]
	Prop. Mediated	0.18	[-4.37, 2.42]
Acting Official	ACME	-0.05*	[-0.08, -0.02]
with Context	ADE	0.05	[-0.01, 0.11]
(N=777)	Total Effect	-0.00	[-0.07, 0.06]
	Prop. Mediated	17.72	[-16.90, 17.97]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of Joe Biden's handling of the FAA, as mediated by perceptions of the FAA's competence, in the FAA experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the competence scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method). Please note that the estimate for the proportion of the effect mediated for those in the Acting Official with Context condition vs. the Control condition is nearly equal to the upper bound of the 95% confidence interval; this is a mechanical consequence of the mediation package estimating the proportion mediated and the confidence interval through separate calculations that, when no mediation effect is present, can yield inconsistent values.

Table SI.28: Causal Mediation Analysis—Competence and FAA Administrator Approval (FAA Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Official	ACME	-0.01	[-0.04, 0.03]
(N=819)	ADE	0.01	[-0.05, 0.06]
	Total Effect	-0.00	[-0.06, 0.06]
	Prop. Mediated	8.16	[-4.45, 8.10]
Acting Official	ACME	-0.06*	[-0.10, -0.03]
with Context	ADE	-0.05	[-0.11, 0.00]
(N=777)	Total Effect	-0.11*	[-0.19, -0.05]
	Prop. Mediated	0.56*	[0.30, 1.05]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of Billy Nolan's handling of his job as FAA administrator, as mediated by perceptions of the FAA's competence, in the FAA experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the competence scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method). Please note that the estimate for the proportion of the effect mediated for those in the Acting Official condition vs. the Control condition falls outside of the 95% confidence interval; this is a mechanical consequence of the mediation package estimating the proportion mediated and the confidence interval through separate calculations that, when no mediation effect is present, can yield inconsistent values.

Table SI.29: Causal Mediation Analysis—Competence and Approval of FAA's Handling of System Malfunction (FAA Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Official	ACME	-0.00	[-0.03, 0.03]
(N=818)	ADE	-0.01	[-0.07,  0.05]
	Total Effect	-0.02	[-0.08, 0.05]
	Prop. Mediated	0.28	[-4.49, 4.70]
Acting Official	ACME	-0.05*	[-0.08, -0.02]
with Context	ADE	-0.12*	[-0.18, -0.06]
(N=776)	Total Effect	-0.18*	[-0.25, -0.11]
	Prop. Mediated	$0.31^{*}$	[0.14,  0.50]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of the FAA's handling of its system malfunction, as mediated by perceptions of the FAA's competence, in the FAA experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the competence scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method).

Table SI.30: Causal Mediation Analysis—Legitimacy and Presidential Approval (FAA Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Official	ACME	-0.02	[-0.04, 0.00]
(N=819)	ADE	0.01	[-0.05, 0.07]
	Total Effect	-0.00	[-0.06, 0.06]
	Prop. Mediated	19.33	[-6.26, 7.64]
Acting Official	ACME	-0.04*	[-0.07, -0.02]
with Context	ADE	$0.09^{*}$	[0.03,  0.16]
(N=776)	Total Effect	0.05	[-0.02, 0.12]
	Prop. Mediated	-0.85	[-9.25, 5.94]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of Joe Biden's handling of his job as president, as mediated by perceptions of the FAA's legitimacy, in the FAA experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the legitimacy scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method). Please note that the estimate for the proportion of the effect mediated for those in the Acting Official condition vs. the Control condition falls outside of the 95% confidence interval; this is a mechanical consequence of the mediation package estimating the proportion mediated and the confidence interval through separate calculations that, when no mediation effect is present, can yield inconsistent values.

Table SI.31: Causal Mediation Analysis—Legitimacy and Handling of the FAA (FAA Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Official	ACME	-0.02	[-0.05, 0.01]
(N=819)	ADE	-0.00	[-0.06, 0.06]
	Total Effect	-0.02	[-0.09, 0.05]
	Prop. Mediated	0.80	[-4.44, 6.29]
Acting Official	ACME	-0.05*	[-0.08, -0.03]
with Context	ADE	0.05	[-0.01, 0.12]
(N=778)	Total Effect	-0.00	[-0.07, 0.07]
	Prop. Mediated	39.83	[-18.44, 21.09]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of Joe Biden's handling of the FAA, as mediated by perceptions of the FAA's legitimacy, in the FAA experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the legitimacy scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method). Please note that the estimate for the proportion of the effect mediated for those in the Acting Official with Context condition vs. the Control condition falls outside of the 95% confidence interval; this is a mechanical consequence of the mediation package estimating the proportion mediated and the confidence interval through separate calculations that, when no mediation effect is present, can yield inconsistent values

Table SI.32: Causal Mediation Analysis—Legitimacy and FAA Administrator Approval (FAA Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Official	ACME	-0.02	[-0.06, 0.01]
(N=820)	ADE	0.03	[-0.02, 0.08]
	Total Effect	0.00	[-0.06, 0.06]
	Prop. Mediated	-26.10	[-15.64, 13.79]
Acting Official	ACME	-0.07*	[-0.10, -0.03]
with Context	ADE	-0.04	[-0.10, 0.01]
(N=778)	Total Effect	-0.11*	[-0.18, -0.04]
	Prop. Mediated	$0.61^{*}$	$[\ 0.35,\ 1.25]$

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of Billy Nolan's handling of his job as FAA administrator, as mediated by perceptions of the FAA's legitimacy, in the FAA experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the legitimacy scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method). Please note that the estimate for the proportion of the effect mediated for those in the Acting Official condition vs. the Control condition falls outside of the 95% confidence interval; this is a mechanical consequence of the mediation package estimating the proportion mediated and the confidence interval through separate calculations that, when no mediation effect is present, can yield inconsistent values.

Table SI.33: Causal Mediation Analysis—Legitimacy and Approval of FAA's Handling of System Malfunction (FAA Experiment)

Context	Causal Quantity	Estimate	95% Confidence Interval
Acting Official	ACME	-0.02	[-0.05, 0.01]
(N=819)	ADE	0.00	[-0.05, 0.06]
	Total Effect	-0.02	[-0.08, 0.04]
	Prop. Mediated	1.23	[-5.22, 9.41]
Acting Official	ACME	-0.06*	[-0.09, -0.03]
with Context	ADE	-0.12*	[-0.19, -0.06]
(N=777)	Total Effect	-0.18*	[-0.25, -0.11]
	Prop. Mediated	$0.32^{*}$	[0.17,  0.52]

 $<sup>^*</sup>p < 0.05$ . This table presents the causal mediation analyses results for the effect of our treatments on approval of the FAA's handling of its system malfunction, as mediated by perceptions of the FAA's legitimacy, in the FAA experiment. Any differences between the treatment effects in Figure 1 and the corresponding average total effects in this table are a consequence of a small number of respondents who did not provide answers for both the outcome question and the two questioned used to construct the legitimacy scale and thus drop out of the analysis. We conducted these analyses with 1000 simulations. 95% confidence intervals obtained through nonparametric bootstrap procedure (percentile method).

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