

The Implications of *Loper Bright* for Bureaucratic Human Capital

David Ryan Miller[†] and Daniel M. Butler[‡]

Abstract

While the Supreme Court's ruling in *Loper Bright* has immediate implications for administrative rulemaking, it may also have deleterious consequences for bureaucratic human capital. We argue constrained discretion and increased uncertainty may make bureaucrats less likely to remain in government and develop expertise. We assess the short-term effects of *Loper Bright* on with a priming experiment conducted with state-level bureaucrats. While we find no evidence of immediate effects of *Loper Bright* on turnover intention or willingness to invest in expertise, human capital may erode as bureaucrats internalize how *Loper Bright* hampers their ability to perform their jobs in the long-term.

[†]Assistant Professor of Government, American University, 4400 Massachusetts Avenue NW, Washington, DC 20016, (202) 885-6284, dmiller@american.edu

[‡]Professor of Political Science, Washington University in St. Louis, One Brookings Drive, St. Louis, MO, 63130, daniel.butler@wustl.edu

The survey experiment presented in this manuscript was pre-registered through the Open Science Framework (https://osf.io/rpqtw/?view_only=21d9dc3afccb4736acf45569886ecc9b). We thank Nicholas Bednar for helpful feedback.

When the US Supreme Court issued its ruling in *Loper Bright Enterprises v. Raimondo* in June 2024, many political elites, scholars, and the media pointed to its practical implications for the federal rulemaking process (Comer 2024; Liptak 2024; Walker 2024). Before *Loper Bright*, the Supreme Court’s ruling in *Chevron v. National Resources Defense Council* had shaped administrative law for forty years. In *Chevron*, the Court decided judges would defer to agencies’ “reasonable” interpretations of ambiguous statutes—a practice referred to as “*Chevron* deference.” Many people expect the removal of this deference will curtail agencies’ ability to promulgate rules and prompt legal challenges for many existing rules, thereby creating substantial regulatory uncertainty.

Several scholars and practitioners have also called attention to the potential for *Loper Bright* to directly impact agency employees themselves—the human capital upon which agencies rely to fulfill their missions. Indeed, because this deference has been in place for forty years, almost all bureaucrats currently working for the federal government have only ever worked in a system where judges relied on *Chevron* in formulating and implementing rules and were broadly deferential to bureaucrats.¹ Speculating on how the Court would ultimately rule earlier in 2024, partners at Morgan Lewis predicted “agency morale may be undermined” if *Chevron* were overturned because “regulators’ expertise and decisions [would be] second-guessed and criticized” (Sanzo et al. 2024). Former federal agency employees expressed similar concerns after the Court’s ruling that the end of *Chevron* deference will make civil servants feel “undervalued... [because] the level of

¹ In his survey of federal workers, Walker (2015) finds that those involved in agency rule drafting list *Chevron* as the interpretive tool they use most commonly in the drafting process.

expertise and intelligence that you bring... is not a priority” (“So Long, Chevron” 2024; see also Orme-Zavaleta and Carter 2024). These sentiments echoed those expressed by legal scholars in the years prior to the overturning of *Chevron*, such as Craig Green’s warning that if the Court fundamentally altered *Chevron* deference, “the quality and morale of government servants will be diminished” (Green 2021: 697).² Overall, these and other voices suggest that *Loper Bright* may degrade the human capital of bureaucratic agencies.

We outline how the Court’s reversal of *Chevron* may harm the human capital of the bureaucracy. *Chevron* deference provided important discretion to civil servants that motivated them to enter and stay in public service and develop expertise in their roles (Gailmard and Patty 2012). However, *Loper Bright* may change the incentive structure for civil servants such that they become less likely to remain in their roles and invest in expertise. Specifically, *Loper Bright* brings three potential downsides. First, removing *Chevron* alters the institutional design of agencies by stripping bureaucrats of interpretive discretion, which may discourage skilled civil servants from pursuing careers in the bureaucracy. Second, the decision risks exacerbating politicization within the bureaucracy. *Loper Bright* may make it harder for bureaucrats to make decisions based on expertise rather than political pressure, which could make civil service less attractive. Finally, *Loper Bright* heightens the uncertainty surrounding agency authority by opening bureaucratic decisions to greater legal scrutiny. This increased ambiguity may deter civil servants from

² Separately, in speculating on a proposed alteration to *Chevron* deference made by Justice Antonin Scalia that would require agency leaders to ratify actions taken by subordinates in their agencies (*United States v. Mead* (2001), *dissenting*), David Barron and future Supreme Court Justice Elena Kagan suggest leaders would be hard-pressed to reject the actions of subordinates because they “may think that a reversal will lead to a decline in the moral and loyalty of employees” (2001: 259).

investing in expertise, as the prospect of their decisions being overturned discourages commitment to specialized knowledge. Together these three factors could lead to a less skilled and less motivated bureaucracy, ultimately undermining the institutional capacity of government agencies to deliver effective services and implement policy.

We also provide results from a survey experiment of state bureaucrats fielded just before the *Loper Bright* decision was announced that considers how the potential reversal of *Chevron* affects turnover intention and willingness to invest in expertise. While the Court wrote its ruling in *Loper Bright* to apply only to the federal government, such that states were not directly affected, the scope of the ruling was not known when the survey was fielded and it may still impact state-level bureaucrats because state courts often draw on federal rulings for guidance and the ruling will likely inspire state-level activists to challenge deference standards in the states. While we find no evidence that the prospect of reversing *Chevron* prompts bureaucrats to express interest in leaving their jobs or expending less effort on expertise in the short-term, we discuss in our conclusion why *Loper Bright* may still exact long-term costs on government agencies' stocks of human capital.

Practical Implications and Judicial Interpretation of Deference for Civil Servants

In a complex and quickly-evolving modern society like the contemporary United States, bureaucratic discretion is “both necessary and problematic” (West 1984). Bureaucratic agencies must have discretion to adapt their work because policy circumstances can become complicated and change more rapidly than Congress and the president can update laws and guidance. However, as agencies gain discretion, their ability to enact and implement policies that deviate from the preferences of their political

principals increases, posing challenges for accountability. Despite this risk, bureaucratic organizations in the United States have long enjoyed substantial discretion at many stages of the policymaking process, including making rules to govern how legislation will be implemented, choosing recipients of grant programs created by political principals, and determining how policies will be administered by street-level civil servants (Resh and Zook 2018). While the opportunity for bureaucratic shirking with respect to principals always looms, these grants of discretion can also enhance bureaucratic performance by encouraging agencies to build expertise and innovate (Carpenter 2002) as well as to adapt its activities to represent the constituents it serves (Marvel and Resh 2015; Meier and Bohte 2001; Sowa and Selden 2003).

Beyond the benefits discretion offers to bureaucratic agencies at the macro-level, discretion also helps agencies recruit and retain dedicated and skilled workers, who in turn improve the quality of agency policymaking and implementation. Civil servants choose to enter government for a variety of reasons. As with any form of employment, civil servants seek pecuniary rewards, such as salary and benefits, that enable them to maintain their standard of living. For many, serving the public through their employment provides an intrinsic benefit in and of itself and motivates them to work for the government (e.g., Houston 2000; Perry and Wise 1990). Relatedly, some public employees also derive satisfaction from influencing public policy in ways that bring policy outcomes closer to their own preferences (Gailmard and Patty 2012). Those civil servants who place high value on their ability to influence policy—who Gailmard and Patty (2012) label as “zealots”—are highly motivated to serve in government and acquire expertise when they expect to have

sufficient discretion over policy to apply their expertise to policy formulation and implementation. When bureaucratic institutions provide this discretion, the ratio of zealots to slackers—civil servants who do not value influence over policy and therefore do not invest in expertise—increases. With more bureaucrats investing in expertise and working hard in their jobs, the performance of the bureaucracy improves (Andersen and Moynihan 2016; Bednar 2024; Carpenter 2002; Gailmard and Patty 2012; Stephenson 2019).³

Reflecting on how the American bureaucracy has many design elements that promote discretion, Gailmard and Patty highlight *Chevron v. National Resource Defense Council* 467 U.S. 837 (1984) as a “signal example of [judicial] deference” (2012: 69). In *Chevron*, which concerned how the Environmental Protection Agency interpreted what constitutes a “source” of air pollution under the Clean Air Act, the Court ruled ambiguity in statutes can constitute implicit delegation to agencies to interpret those statutes and such interpretations are lawful so long as they are “permissible” or “reasonable.” In its reasoning, the Court highlighted the importance of agency expertise, writing that while “judges are not experts” in the policy areas agencies regulate, it is reasonable to assume Congress expects agency officials “with great expertise and charged with responsibility for administering [a] provision” to be best equipped to interpret ambiguous language (467 U.S. 837, 865 (1984)). The practical effect of *Chevron* was to expand and solidify the discretion

³ More broadly, Gailmard and Patty (2012) argue that zealots compose a larger proportion of the bureaucratic workforce when their expectation that they will be able to influence policy is high and highlight two institutional design features that increase that expectation: discretion and civil service protections. Because *Chevron* deference and its reversal only affects discretion, we limit our focus to that design feature in the present manuscript. However, other potential changes to the design of American bureaucratic institutions that would affect civil service protections, such as Donald Trump’s proposed Schedule F that would reclassify many federal employees such that they would no longer enjoy the same employment security, could also discourage zealots from public service (Moynihan 2022).

courts afforded to federal agencies when formulating and implementing policies in the rulemaking process, thus making those institutions more conducive to the recruitment and retention of zealots motivated to invest in expertise. Beyond the federal level, *Chevron* deference or a similar standard prevails in half of US states, affording agencies in those states similar institutional design benefits (Kinsella and Lerude 2023).

Chevron prevailed as the legal standard for federal agencies until June 2024, when the Supreme Court overturned this precedent in *Loper Bright v. Raimondo* 603 U.S. ____ 16 (2024). In the majority opinion, Chief Justice John Roberts argues that, under the Administrative Procedure Act, Congress did not intend for courts defer to agency interpretation of statutes, but rather “incorporates the traditional understanding of the judicial function, under which courts must exercise independent judgment in determining the meaning of statutory provisions” (603 U.S. ____ 16 (2024)). In practice, the Court’s decision in *Loper Bright* had at least two important implications for federal agencies and civil servants. First, in overturning *Chevron* and asserting that judges need not defer to agency interpretations of ambiguous statutes, the Court reduced the discretion bureaucrats wield. Moving forward, agencies and civil servants cannot expect their interpretations of statutes to stand on their own, but rather must anticipate judges can exercise broader *ex post* review. Second, the Court injected substantial uncertainty into the federal rulemaking process by not explicitly elucidating a new standard for review of agency actions in *Loper Bright*. Consequently, public officials and legal scholars have expressed confusion and alarm as to how agencies and stakeholders should navigate the legal landscape; while some speculate agencies should now expect *Skidmore* deference,

whereby agencies' interpretations receive deference from judges according to the persuasiveness of their reasoning and analysis, others suggest the Court has made agency interpretations subject to *de novo* review, or provide no deference whatsoever to agency interpretations (Deacon 2024; Walker 2024). Ultimately, how *Loper Bright* reframes the degree of discretion agencies enjoy will not become clear until a new judicial consensus emerges through future litigation. In the meantime, agencies and bureaucrats will need to grapple with both the loss of broad discretion they enjoyed under *Chevron* and the uncertainty about *what* degree of discretion they now possess.

Potential Effects of *Loper Bright* on Bureaucratic Human Capital

How the Court's reversal of *Chevron* deference will ultimately affect agencies and federal civil servants is an open question; not only do we lack a counterfactual bureaucracy in which *Chevron* was not overturned for comparison, but the Court's decision in *Loper Bright* prompts "fundamental change" in rulemaking that will "confine" the scope of policies agencies can regulate and likely "shift [power]... from the executive to the judicial branch" (Merrill 2024: 271-272). However, in recognizing the key changes *Loper Bright* effectuates for federal agencies—decreased discretion and increased politicization and uncertainty—we can draw on existing scholarship that focuses on similar institutional features in other settings and use those conclusions to speculate about the likely consequences of *Loper Bright* for bureaucratic human capital. In the following subsections, we use prior research in political science and public administration on these three subjects—institutional design, politicization, and uncertainty—to formulate expectations for how *Loper Bright* may affect bureaucratic human capital going forward.

Institutional Design

Loper Bright is fundamentally a change to the institutional arrangements governing the bureaucratic rulemaking process, and thus studies that consider how institutional design elements affect the degree of discretion afforded to civil servants influence human capital can inform expectations about the implications of the reversal of *Chevron*.

Gailmard and Patty (2012) develop a formal model that concludes that institutional features that enhance discretion will incentivize zealots to remain in public service and to invest in developing expertise. The negative version of their argument suggests that if an institution is structured to constrain discretion, zealots will be less likely to stay in the bureaucracy and cultivate expertise, leaving a higher proportion of slackers who will exert less effort and perform lower-quality work. Carpenter's theory of bureaucratic autonomy produces related expectations; as increased autonomy afforded by political principals creates conditions conducive to the development and retention of expertise, the erosion of autonomy disincentivizes civil servants with those skills from entering and remaining in the bureaucracy (2002: 29; see also Carpenter and Krause 2012).

Other recent research provides considerable evidence for the relationship between the degree of discretion institutions provide civil servants and those bureaucrats' likelihood of turnover. For instance, several studies focus on civil servants' perceptions of their discretion and influence over policymaking. Kim and Fernandez (2017) draw on a survey of US federal civil servants to demonstrate that those who report higher levels of empowerment—of which discretion is a key component—are more satisfied with their jobs and less likely to consider leaving. Similarly, drawing on a survey of Texas state government

employees, Moynihan and Landuyt (2008) report that those who express higher levels of empowerment are more likely to remain in their jobs (see also Kang et al. 2022).

Research also shows a strong relationship between discretion and the development of expertise. Andersen and Moynihan (2016) find in a field experiment that when Danish school principals were given more discretion over how to implement a co-teaching grant program, they were more likely to acquire expertise by seeking out information about the performance of their school and other schools. Additionally, Stephenson (2007) develops a formal model showing that, under certain conditions, agencies and their employees can be disincentivized from developing expertise if their political principals increase the enactment cost agencies must bear to make policy, such as increasing the level of judicial scrutiny agencies must satisfy. Taken together, this extant work suggests that by increasing the constraints on agency discretion, the reversal of *Chevron* deference may make bureaucrats more likely to leave public service and less likely to invest in expertise.

Politicization

Beyond shaping the institutional structure of the bureaucracy, principals can also reduce discretion through politicizing those institutions by enhancing the degree of influence they exercise over career civil servants (Moe 1985). Principals can use various means to politicize agencies including appointing allies to leadership positions, changing agency decision-making processes to allow them and their appointees to intervene, and creating environments in which bureaucrats alter their behavior in anticipation of intervention (Limbocker et al. 2022; Peters and Pierre 2004). Through these mechanisms, principals' goal is to shift discretion away from career civil servants and to themselves.

Much of the scholarship on politicization focuses on how changes in the partisan or ideological character of principals influences civil servants' turnover and interest in acquiring expertise. For instance, Bolton et al. (2021) find that when presidential transitions occur, federal bureaucrats are more likely to leave their jobs, especially if their agencies are ideologically misaligned with the incoming president and therefore most likely to be targeted for politicization efforts (see also Doherty et al. 2019). Again, in the Canadian context, Cooper et al. (2022) assert that when a new governing party assumes power, more turnover in deputy ministers—those holding the top administrative posts in each ministry—emerges from appointing people from outside government than when the governing party remains constant but the first minister changes because a new governing party is less trustful of existing bureaucrats. Relatedly, Cameron and de Figueiredo (2020) argue with a formal model that when presidents shift discretion away from bureaucrats by actively intervening in administrative policymaking, shifts in control of the White House between ideologically extreme presidents leads zealots—especially moderate zealots—to be more likely to resign their positions to avoid implementing policies they oppose, leaving larger proportions of slackers exerting lower levels of effort in the workforce.

Other work on politicization and bureaucratic behavior utilizes bureaucrats' perceptions of their relationships with their principals. For example, Richardson (2019) uses a survey of senior federal civil servants to demonstrate that bureaucrats are more likely to intend to leave their jobs and less likely to invest effort in acquiring expertise if they perceive political appointees have more influence over agency decision-making than career civil servants (see also Bertelli and Lewis 2012). Relatedly, in the European context,

Kim et al. (2022) find that when bureaucrats perceive that political principals do not respect their technical expertise, they express lower levels of job satisfaction and organizational commitment—both of which are antecedents to turnover and lower levels of effort exerted. Further, in the Iranian context, Peters et al. (2022) find that experts broadly agree that heightened politicization of the bureaucracy through partisan control of appointments has deleterious effects on civil servants’ motivation, job satisfaction, and creativity and innovation (4.48, 4.62, and 4.00, respectively, on five-point scales).

Much of this work on politicization focuses on principals in the executive and legislative branches, which may make its link to the judicial reversal of *Chevron* deference look tenuous. However, findings from scholarship on politicization is relevant because *Loper Bright* augments the ability of judges, who are formal principals of bureaucrats, to constrain the discretion exercised by agencies, and bureaucrats’ anticipation of heightened judicial intervention may disincentivize them from expending effort or encourage them to leave their agencies. Therefore, this work suggests that empowering judges to exert greater influence over agencies may have deleterious implications for bureaucratic human capital.

Uncertainty

The Supreme Court’s ruling in *Loper Bright* also overturned a standard central to the administrative policymaking process that had been in effect for 40 years without explicitly replacing it with a new standard. Further, even if the Court elucidates a new standard of deference in a future case, the new standard will likely make bureaucrats more uncertain about whether their decisions will withstand judicial scrutiny than they did under *Chevron*. For example, some have suggested the new standard will be based on *Skidmore v. Swift &*

Co. (e.g., Deacon 2024), which only recognizes agency interpretations as “a body of experience and informed judgments to which courts and litigants may properly resort for guidance” and allows judges to determine “the weight of such a judgment in a particular case” (323 U.S. 134, 140 (1944)). Consequently, under *Skidmore* deference, bureaucrats would face uncertainty concerning whether the actions they take when making a given policy would garner “weight” from judges reviewing it in the future.

Like changes to institutional design and politicization, extant research suggests higher levels of uncertainty are harmful for the civil service by leading bureaucrats to play-it-safe and be less innovative. For instance, when the duties and responsibilities of a civil servant’s job are ambiguous, such that she “does not know what [she] has the authority to decide, what [she] is expected to accomplish, and how [she] will be judged, [she] will hesitate to make decisions... be dissatisfied with [her] role... and will thus perform less effectively” (Rizzo et al. 1970: 151). Given the ambiguity in how their decisions will be treated, bureaucrats will be much less likely to adopt innovative approaches or make discretionary judgements if they expect they will be overturned. This may lead them to be cautious and sometimes not act even in urgent matters.

Further, *Loper Bright* creates uncertainty about the scope of civil servants’ policymaking authority and the standards for judicial review when they exercise that authority, which can subsequently erode bureaucrats’ job satisfaction and interest in continuing their employment and exerting effort (Green and Rossler, 2019; Hassan 2013). Relatedly, when an agency’s goals or policy objectives are ambiguous, the agency’s productivity and work quality can decline (Chun and Rainey 2005), and its employees can

experience higher levels of role ambiguity (Davis and Stazyk 2015; Pandey and Wright 2006) and face fewer incentives to invest in expertise (Gilad 2015). *Loper Bright* could also increase goal ambiguity if agencies are uncertain whether they have the legal authority to pursue standing goals if doing so would require them to interpret ambiguous statutes. This may cause stress as they must balance concerns about legal compliance with a desire to implement effective policies. Thus, by increasing uncertainty in the administrative policymaking environment, the Court's reversal of *Chevron* may increase turnover rates and depress bureaucrats' willingness to invest in expertise.

Near-Term Effects of the Reversal of *Chevron*: Results from an Experiment of State Bureaucrats

While extant research suggests reversing *Chevron* will degrade the federal bureaucracy's human capital, the unprecedented nature of the institutional change makes it difficult to predict its magnitude. Additionally, because *Loper Bright* affects the entire federal government simultaneously, it will be difficult to isolate a causal effect of the decision on changes in civil servants' turnover rates and levels of effort exerted from other institutional and environmental factors present simultaneously, such as proximity to a presidential election which led to a switch in which party controls government.

Anticipating these challenges, we embedded a pre-registered priming experiment on a survey of bureaucrats fielded just before the Court issued its ruling in *Loper Bright* to assess whether the potential reversal of *Chevron* would influence their outlook on their jobs. While this experiment can provide insight only on near-term effects prompted by the *prospective* reversal of *Chevron*, it enables us to isolate a causal effect if one exists. If our

experiment finds a detectable negative effect of that pending reversal on bureaucrats' attitudes towards their careers, it would serve as an early warning of long-term effects.

Research Design

We embedded our priming experiment in a survey of bureaucrats in 9 US states fielded between May 31 and June 26, 2024.⁴ Of the 9 states sampled, 5 maintained *Chevron* or *Chevron*-like deference standards when the survey was fielded (Connecticut, Illinois, New Hampshire, Oregon, and Vermont), while the other 4 provided a more limited degree of deference (North Carolina) or afforded agency interpretation of state statutes no judicial deference (Florida, Indiana, and Nebraska).⁵ While *Loper Bright* as written applies only to federal agencies, what the Court would rule and to which governmental entities it would apply was not known until the majority opinion was issued on June 28; thus, the priming experiment prompts state bureaucrats to consider a feasible scenario in which a *Chevron* reversal could affect them in the near future. Additionally, even though *Loper Bright* ultimately applied only to federal agencies, the majority opinion's legal reasoning is "likely to apply" to the deference standards in many states and state-level legal challenges seeking to limit deference to agencies are "almost guaranteed" (Rollo et al. 2024).⁶ Thus,

⁴ Our pre-registration documentation is available through the Open Science Framework (https://osf.io/rpqtw/?view_only=21d9dc3afccb4736acf45569886ecc9b). Please see the Supplemental Information for details about our sampling procedure, response rate, and sample demographic characteristics.

⁵See Kinsella and Lerude (2023). Subsequent to the publication of this *State Court Report* analysis but before we fielded our survey, the legislatures in Indiana and Nebraska passed new laws repealing requirements that state courts afford agency interpretations of statutes any deference (Canaparo and Sampson 2024). Our main analyses exclude respondents from Florida, Indiana, Nebraska, and North Carolina. We present the results obtained when including respondents from all states, which are substantively similar to those presented below, in Supplemental Information Section C.

⁶ Indeed, when the US Supreme Court issued its ruling in *Loper Bright*, the Hawaii Supreme Court was considering a case challenging the state's own *Chevron*-like deference standard. Its ruling in *Rosehill v.*

while the Court’s decision did not have immediate direct implications for those working for state agencies, it may extend to state-level deference standards in the future and makes the reactions of state bureaucrats to the prospective reversal of *Chevron* relevant to understanding the consequences of *Loper Bright* on bureaucratic human capital.

[INSERT TABLE 1 HERE]

Approximately 1,200 respondents in the 5 states with *Chevron* or *Chevron*-like deference participated in our experiment. These respondents answered a series of demographic questions to capture information about their personal and professional characteristics. Table 1 presents the distribution of respondent characteristics for four professional attributes that could inform their attitudes towards discretion: their years of experience in state government, whether they are civil servants or political appointees, and how frequently they perform policymaking or implementation tasks as part of their jobs (see Table SI.2 for the distributions of other characteristics). In terms of experience and whether respondents are civil servants, the modal respondent has worked in state government for 5-10 years, and the vast majority of respondents (84.0%) are civil servants, meaning that they have considerable experience with the bundle of pecuniary and non-pecuniary benefits that can make discretion an important dimension of their jobs. Further, most of our respondents report that they perform implementation tasks “very” or “somewhat” frequently in their jobs (81.4%), and some report performing policymaking tasks “very” or “somewhat” frequently (30.5%), such that the civil servants in our sample

Hawai’i 154 HI ____ (2024), the court upheld the state’s level of deference for bureaucrats’ interpretations of ambiguous statutes.

have experience in roles that often provide them important opportunities to exercise the discretion that *Loper Bright* aims to constrain. Thus, our sample is attuned to the discretion considerations that our experiment seeks to probe.

Upon entering the module containing our experiment, respondents were randomly assigned to be asked the following question to prime considerations of the potential reversal of *Chevron*, to which they could respond “yes” or “no”:

The Supreme Court is expected to issue a ruling this year that would eliminate the *Chevron* doctrine, which would make it so that courts will no longer defer to government agencies when interpreting how ambiguous laws are implemented. Have you heard much about this potential change?

Respondents who were not randomly assigned to receive this question were presented no additional text. This approach to priming civil servants’ considerations with a short, minimally invasive priming question minimizes the extent to which respondents suspect that the prompt is a manipulation and mirrors similar designs in other recent public administration scholarship (e.g., Mikkelsen et al. 2022; Sigman et al. 2022).

Next, we asked respondents two questions about their outlooks on their jobs in the following year. First, we measure respondents’ turnover intention by asking them to indicate on an eleven-point scale how likely it is that they will be working for their state’s government by the end of 2025. Second, we measure respondents’ planned investment in developing expertise by asking respondents to indicate on a five-point scale the degree of effort they will exert on developing expertise in their subject area in 2025 relative to 2023.

Given our foregoing theoretical discussion, we pre-registered two expectations concerning how increasing the salience of *Chevron* in respondents’ minds would affect

their turnover intention or planned investment in expertise. First, we expect respondents primed to think about the reversal of *Chevron* would express a higher likelihood of leaving government service and less interest in acquiring expertise. Second, because bureaucrats who appreciate their ability to influence policy place more value on discretion (Gailmard and Patty 2012), we expect the negative effect of our *Chevron* prime to be larger among those with higher levels of public service motivation (PSM), which has been proposed and used as a measure of bureaucrats' zealotry in previous work (e.g., Gailmard 2010; Gailmard and Patty 2012; Yu 2023). To test this second expectation, we measured respondents' PSM using the five-question battery in Wright et al. (2013) and interact PSM with our treatment indicator. While this experimental design does not enable us to discern the relative importance of the three theoretical perspectives we posit above—institutional design, politicization, and uncertainty—it does allow us to evaluate the veracity of the common expectations of those perspectives—that priming the reversal of *Chevron* deference makes bureaucrats less willing to remain in their jobs and to invest effort in acquiring expertise.

Results

We use linear regression to assess the effect of our *Chevron* prime on respondents' turnover intention and expected investment in expertise. We present our main analyses in Table 2. Columns 1 and 2 show null effects for our *Chevron* treatment on turnover intention. The average treatment effect presented in column 1 is negative, as expected, but is close to zero (-0.01). Differently, the coefficients in column 2 suggest the prime made respondents *more* likely to remain working for the state government and that this positive

effect lessened as respondents' PSM increases, but the conditional average treatment effect is not statistically distinguishable from zero.

[INSERT TABLE 2 HERE]

We also observe the *Chevron* prime had a null effect for investing in expertise with a positive but substantively small coefficient (0.03) in column 3. Differently, turning to our assessment of the conditional average treatment effect of our prime and respondents' PSM, we observe a statistically distinguishable effect consistent with respondents in the treatment condition expressing *more*, rather than *less*, willingness to expend effort on developing expertise than those in the control condition as PSM increases. However, as we discuss in Supplemental Information Section C, the data underlying our model is not compatible with the classic linear interaction effect assumption, and, when we reanalyze the data with alternative estimation strategies, such as a binning estimator, this interactive effect is no longer statistically distinguishable (Hainmueller et al. 2019).

One potential explanation for our null results could be that some respondents in the sample are not members of the relevant target population—civil servants who have experience with and value discretion. If such respondents exist in the sample and react to the treatment more weakly than those in the relevant target population, our estimates are attenuated. To explore this possibility, we repeat our analyses in Tables SI.4 and SI.5 with only those respondents who reported “very” or “somewhat” frequently performing policymaking or implementation tasks as part of their jobs, respectively, as performing those tasks expose respondents to situations in which they wield discretion and are more likely to appreciate the implications of that discretion narrowing. The results from these

exploratory analyses are substantively similar to those presented here, such that there are no distinguishable, robust effects of our prime on turnover intention or expected investment in expertise. Taken together, the results from our experiment provide no evidence that reversing *Chevron* discretion harms bureaucrats' willingness to continue in public service or invest in acquiring expertise in the short-term.

Conclusion

Much of the attention paid to the reversal of *Chevron* has focused on its implications for the federal regulatory process; as agency discretion decreases, agencies may be less equipped to keep pace with societal changes, develop innovative policies, and provide representation to constituents (Carpenter 2002; Meier and Bohte 2001; West 1984). However, the Supreme Court's decision to narrow bureaucrats' discretion and increase uncertainty is also likely to have negative implications for bureaucrats themselves. *Chevron* deference had been in place for forty years, meaning that almost everyone working in federal agencies has only ever worked under the prior system. As civil servants experience a constrained and opaque ability to make and implement policy and an increased number of legal challenges, they may question whether their jobs provide sufficient discretion to motivate them to develop expertise and even whether continuing in their positions provides more utility than moving to the private sector. Ultimately, this turnover—especially among zealots whose benefits of employment were most eroded by *Loper Bright*—could undermine bureaucratic performance at the macro-level.

While our priming experiment yielded null results, it may be that respondents did not fully comprehend how different the regulatory environment may work once *Chevron* is

reversed, and that once constrained discretion and increased uncertainty manifest they might internalize these changes more strongly. As the federal bureaucracy moves into a post-*Chevron* world and agencies in states with *Chevron*- or *Chevron*-like deference face challenges to their deference standards, the adverse effects on bureaucratic human capital we draw from related extant scholarship may begin to manifest. We encourage scholars to continue to monitor civil servants' turnover patterns, willingness to invest in expertise, and related workplace behaviors and perceptions as the post-*Chevron* regime takes form and bureaucrats learn about its ramifications for their jobs first-hand.

Understanding the effects of *Loper Bright* on the behavior of individual bureaucrats is important because of the potential implications for bureaucratic capacity. In order to perform the vital functions assigned to them, from managing air traffic to maintaining the safety of the food supply and delivering unemployment benefits, government agencies need qualified and motivated civil servants (Stephenson 2019). Given that a main draw of working in the bureaucracy is the prospect of influencing the policymaking process to manifest one's own vision of the "best" or their "most preferred" policy (Gailmard and Patty 2012), limiting discretion poses threats to bureaucratic capacity by demotivating current employees from exerting effort and developing expertise, making private sector options relatively more attractive for current employees, and hampering recruitment efforts by limiting the job benefits associated with proximity to the policymaking process—all implications which can erode bureaucratic capacity. Should the reversal of *Chevron* ultimately prove to not only make administrative policymaking unworkably burdensome, but also erode agencies' ability to cultivate the capacity they need to fulfill their charges,

lawmakers will need to consider ways to augment bureaucrats' discretion or pecuniary benefits that enable agencies to recruit, retain, and motivate their employees.

References

- Andersen, Simon C., and Moynihan, Donald P. 2016. "Bureaucratic Investments in Expertise: Evidence from a Randomized Controlled Field Trial." *Journal of Politics*, 78(4): 1032-1044.
- Barron, David J., and Elena Kagan. 2001. "Chevron's Nondelegation Doctrine." *The Supreme Court Review*, 201-265.
- Bednar, Nicholas R. 2024. "Bureaucratic Autonomy and the Policymaking Capacity of United States Agencies, 1998–2021." *Political Science Research and Methods*, 12(3): 652-665.
- Bertelli, Anthony M., and Lewis, David E. 2012. "Policy Influence, Agency-Specific Expertise, and Exit in the Federal Service." *Journal of Public Administration Research and Theory*, 23(2): 223-245.
- Bolton, Alexander, De Figueiredo, John M., Lewis, David E. 2021. "Elections, Ideology, and Turnover in the US Federal Government." *Journal of Public Administration Research and Theory*, 31(2), 451-466.
- Cameron, Charles M., and de Figueiredo, John M. 2020. "Quitting in Protest: Presidential Policymaking and Civil Service Response." *Quarterly Journal of Political Science*, 15(4): 507-538.
- Canaparo, GianCarlo and Sampson, Caleb. "Chevron in the States: Where is Deference Still in Effect, and How Can States Eliminate It?" *The Federalist Society*, October 3,

2024, <https://fedsoc.org/commentary/fedsoc-blog/chevron-in-the-states-where-is-deference-still-in-effect-and-how-can-states-eliminate-it>.

Carpenter, Daniel. 2002. *The Forging of Bureaucratic Autonomy: Reputations, Networks, and Policy Innovation in Executive Agencies, 1862-1928*. Princeton University Press.

Carpenter, Daniel P., and Krause, George A. (2012). Reputation and public administration. *Public Administration Review*, 72(1): 26-32.

Chun, Young Han, and Rainey, Hal G. 2005. "Goal Ambiguity and Organizational Performance in US Federal Agencies." *Journal of Public Administration Research and Theory*, 15(4), 529-557.

Comer, James. "Comer Calls on Federal Agencies to Rein in Regulatory Overreach in Wake of Supreme Court Decision," *House Committee on Oversight and Accountability*, July 10, 2024, <https://oversight.house.gov/release/comer-calls-on-federal-agencies-to-rein-in-regulatory-overreach-in-wake-of-supreme-court-decision%EF%BF%BC/>

Cooper, Christopher A., Patrik Marier, and Ali Halawi. 2022. "The Politics of Senior Bureaucratic Turnover in the Westminster Tradition: Trust and the Choice between Internal and External Appointments." *Public Policy and Administration* 37(2): 179-202.

Davis, Randall S., and Stazyk, Edmund C. 2015. "Developing and Testing a New Goal Taxonomy: Accounting for the Complexity of Ambiguity and Political Support." *Journal of Public Administration Research and Theory*, 25(3): 751-775.

- Deacon, Daniel. "Loper Bright, Skidmore, and the Gravitational Pull of Past Agency Interpretations." *Yale Journal on Regulation*, June 30, 2024, <https://www.yalejreg.com/nc/loper-bright-skidmore-and-the-gravitational-pull-of-past-agency-interpretations/>.
- Doherty, Kathleen M., Lewis, David E., and Limbocker, Scott. 2019. "Executive Control and Turnover in the Senior Executive Service." *Journal of Public Administration Research and Theory*, 29(2): 159-174.
- Gilad, Sharon. 2015. "Political Pressures, Organizational Identity, and Attention to Tasks: Illustrations from Pre-crisis Financial Regulation." *Public Administration*, 93(3): 593-608.
- Houston, David J. 2000. "Public Service Motivation: A Multivariate Test." *Journal of Public Administration Research and Theory*, 10(4): 713-728.
- Hainmueller, Jens, Mummolo, Jonathan, and Xu, Yiquing. 2019. "How Much Should We Trust Estimates from Multiplicative Interaction Models? Simple Tools to Improve Empirical Practice." *Political Analysis*, 27(2): 163-192.
- Gailmard, Sean. 2010. "Politics, Principal-Agent Problems, and Public Service Motivation." *International Public Management Journal*, 13(1): 35-45.
- Gailmard, Sean and Patty, John W. 2012. *Learning While Governing: Expertise and Accountability in the Executive Branch*. University of Chicago Press.
- Green, Craig. 2021. "Deconstructing the Administrative State: Chevron Debates and the Transformation of Constitutional Politics." *Boston University Law Review*, 101: 619-704.

- Green, Emilee, and Rossler, Michael T. 2019. "Examining Job Satisfaction among Analysts: The Impact of Departmental Integration, Role Clarity, and IT Responsibilities." *International Journal of Police Science & Management*, 21(2): 108-115.
- Hainmueller, Jens, Mummolo, Jonathan, and Xu, Yiquing. 2019. "How Much Should We Trust Estimates from Multiplicative Interaction Models? Simple Tools to Improve Empirical Practice." *Political Analysis*, 27(2): 163-192.
- Hassan, Shahidul. 2013. "The Importance of Role Clarification in Workgroups: Effects on Perceived Role clarity, Work Satisfaction, and Turnover Rates." *Public Administration Review*, 73(5): 716-725.
- Kang, M. Minsung, Park, Soohyun, and Sorensen, Lucy C. 2022. "Empowering the Frontline: Internal and External Organizational Antecedents of Teacher Empowerment." *Public Management Review*, 24(11): 1705-1726.
- Kim, Hyunjung, Jung, Haeil, and Kim, Sun Young. 2022. "Does Politicization Influence Senior Public Officials' Work Attitudes? Different Forms and Effects of Politicization in the Civil Service." *Public Management Review*, 24(7): 1100-1123.
- Kim, Sun Young, and Fernandez, Sergio. 2017. "Employee Empowerment and Turnover Intention in the US Federal Bureaucracy." *American Review of Public Administration*, 47(1): 4-22.
- Kinsella, Martha and Lerude, Benjamin. "Judicial Deference to Agency Expertise in the States." *State Court Report*, October 26, 2023, <https://statecourtreport.org/our-work/analysis-opinion/judicial-deference-agency-expertise-states>.

- Limbocker, Scott, Richardson, Mark D., and Selin, Jennifer L. 2022. "The Politicization Conversation: A Call to Better Define and Measure the Concept." *Presidential Studies Quarterly*, 52(1): 10-37.
- Liptak, Adam. "Justices Limit Power of Federal Agencies, Imperiling an Array of Regulations." *The New York Times*, June 28, 2024, <https://www.nytimes.com/2024/06/28/us/supreme-court-chevron-ruling.html>
- Marvel, John D., and William G. Resh. 2015. "Bureaucratic Discretion, Client Demographics, and Representative Bureaucracy." *The American Review of Public Administration* 45(3): 281-310.
- Meier, Kenneth J., and John Bohte. 2001. "Structure and Discretion: Missing Links in Representative Bureaucracy." *Journal of Public Administration Research and Theory*, 11(4): 455-470.
- Merrill, Thomas W. 2024. "The Demise of Deference—and the Rise of Delegation to Interpret?" *Harvard Law Review*, 138: 227-272.
- Mikkelsen, Kim Sass, Schuster, Christian, Meyer-Sahling, Jan-Hinrik, and Wettig, Magdalena Rojas. 2022. "Bureaucratic Professionalization is a Contagious Process Inside Government: Evidence from a Priming Experiment with 3,000 Chilean Civil Servants." *Public Administration Review* 82(2): 290-302.
- Moe, Terry M. 1985. "The Politicized Presidency." In *The New Direction in American Politics*, eds. Chubb, John E. and Peterson, Paul E., 235-271. Brookings Institution.

- Moynihan, Donald P. 2022. "Public Management for Populists: Trump's Schedule F Executive Order and the Future of the Civil Service." *Public Administration Review*, 82(1): 174-178.
- Moynihan, Donald P., and Landuyt, Noel. 2008. "Explaining Turnover Intention in State Government: Examining the Roles of Gender, Life Cycle, and Loyalty." *Review of Public Personnel Administration*, 28(2): 120-143.
- Orme-Zavaleta, Jennifer and Carter, Jacob. "Beyond Regulations - How Chevron will Impact Agency Science." *SciLight*, July 5, 2024, <https://scilight.substack.com/p/beyond-regulations-how-chevron-will>.
- Pandey, Sanjay K., and Wright, Bradley E. 2006. "Connecting the Dots in Public Management: Political Environment, Organizational Goal Ambiguity, and the Public Manager's Role Ambiguity." *Journal of Public Administration Research and Theory*, 16(4): 511-532.
- Perry, James L., and Wise, Lois R. (1990). "The Motivational Bases of Public Service." *Public Administration Review*, 50(3): 367-373.
- Peters, B. Guy, Hassan Danaeefard, Abdolali Ahmadzahi Torshab, Masoumeh Mostafazadeh, and Mortaza Hashemi. 2022. "Consequences of a Politicized Public Service System: Perspectives of Politicians, Public Servants, and Political Experts." *Politics & Policy* 50(1): 33-58.
- Peters, B. Guy, and Pierre, Jon. 2004. "Politicization of the Civil Service: Concepts, Causes, Consequences." In *The Politicization of the Civil Service in Comparative Perspective*, 13-25. Routledge.

- Resh, William G. and Zook, Haram Lee. 2018. "Public Administration as a Function of Executive and Legislative Power." In *The Handbook of American Public Administration*, 50-66. Eds. Edmund C. Stazyk and H. G. Frederickson. Edward Elgar Publishing.
- Richardson, Mark D. 2019. "Politicization and Expertise: Exit, Effort, and Investment." *Journal of Politics*, 81(3): 878-891.
- Rizzo, John R. House, Robert J., and Lirtzman, Sidney I. 1970. "Role Conflict and Ambiguity in Complex Organizations." *Administrative Science Quarterly*, 15(2): 150-163.
- Rollo, Marc, Dennen, Charles, and Tyrrell, Thomas. "Impact of the 'Loper Bright' Decision on New Jersey State Deference." *New Jersey Law Journal*. August 8, 2024, <https://www.law.com/njlawjournal/2024/08/08/impact-of-the-loper-bright-decision-on-new-jersey-state-deference/>.
- Sanzo, Kathlene M., Etzel, Gregory N., Kimbrell. Maarika L., West, Tesch Leigh, and Silva, Angela. "US Supreme Court Hears Oral Arguments in Challenge to Chevron Deference." *Morgan Lewis*, January 24, 2024, <https://www.morganlewis.com/blogs/asprescribed/2024/01/us-supreme-court-hears-oral-arguments-in-challenge-to-chevron-deference>.
- Sigman, Rachel, Harris, Adam S., Meyer-Sahling, Jan-Hinrik , Mikkelsen, Kim Sass, and Schuster, Christian. 2022. "Do Bureaucrats Contribute to the Resource Curse? Evidence from a Survey Experiment in New Oil States." *The Journal of Development Studies* 58(4): 639-655.
- "So Long, Chevron." *Civics 101: A Podcast*, August 20, 2024, <https://www.civics101podcast.org/civics-101-episodes/chevron>.

- Sowa, Jessica E., and Sally Coleman Selden. 2003. "Administrative Discretion and Active Representation: An Expansion of the Theory of Representative Bureaucracy." *Public Administration Review* 63(6): 700-710.
- Stephenson, Matthew C. 2007. "Bureaucratic Decision Costs and Endogenous Agency Expertise." *Journal of Law, Economics, & Organization*, 23(2): 469-498.
- Stephenson, Matthew C. 2019. "The Qualities of Public Servants Determine the Quality of Public Service." *Michigan State Law Review*, 1177-1210.
- Walker, Christopher J. 2015. "Inside Agency Statutory Interpretation." *Stanford Law Review* 67: 999-1079.
- Walker, Christopher J. "What Loper Bright Enterprises v. Raimondo Means for the Future of Chevron Deference." *Yale Journal on Regulation*, June 28, 2024, <https://www.yalejreg.com/nc/what-loper-bright-enterprises-v-raimondo-means-for-the-future-of-chevron-deference/>.
- West, William F. 1984. "Structuring administrative discretion: The pursuit of rationality and responsiveness." *American Journal of Political Science*, 28(2): 340-360.
- Wright, Bradley. E., Christensen, Robert K., and Pandey, Sanjay K. 2013. "Measuring Public Service Motivation: Exploring the Equivalence of Existing Global Measures." *International Public Management Journal*, 16(2): 197-223.
- Yu, Jinhai. 2023. "Agency Autonomy, Public Service Motivation, and Organizational Performance." *Public Management Review*, 25(3): 522-548.

Table 1: Respondent Professional Demographic Characteristics

Characteristic	# (%) of respondents	Characteristic	# (%) of respondents
<u>Years of Experience in State Government</u>		<u>Frequency of Policymaking Duties</u>	
Less than 5 years	282 (22.9%)	Very frequently	115 (9.3%)
5-10 years	352 (28.5%)	Somewhat frequently	261 (21.2%)
11-15 years	164 (13.3%)	Not very frequently	430 (34.8%)
16-20 years	153 (12.4%)	Never	428 (34.7%)
More than 20 years	282 (22.9%)	NA	0 (0.0%)
NA	1 (0.1%)	<u>Frequency of Implementation Duties</u>	
<u>Job Selection Method</u>		Very frequently	730 (59.2%)
Appointed by elected official	41 (3.3%)	Somewhat frequently	274 (22.2%)
Hired/promoted through civil service system	1037 (84.0%)	Not very frequently	116 (9.4%)
Other	155 (12.6%)	Never	111 (9.0%)
NA	1 (0.1%)	NA	3 (0.2%)

This table provides information about four professional demographic characteristics of the respondents from the five states in the sample with *Chevron* or *Chevron*-like deference standards as of May 2024. Please see Table SI.2 for information about more demographic characteristics of our respondents (e.g., ideology).

Table 2: Effect of Chevron Treatment on Turnover Intention and Investment in Expertise

	(1) Likelihood of Remaining in Job	(2)	(3) Effort Invested in Expertise	(4)
Intercept	8.55 *	7.46 *	3.22 *	2.37 *
	(0.11)	(0.60)	(0.04)	(0.21)
<i>Chevron</i> Treatment	-0.01	0.87	0.03	-0.66 *
	(0.15)	(0.85)	(0.05)	(0.30)
Public Service Motivation		0.27 *		0.21 *
		(0.15)		(0.05)
<i>Chevron</i> Treatment: Public Service Motivation		-0.22		0.16 *
		(0.21)		(0.07)
Num. obs.	1232	1225	1228	1222

Models are estimated with ordinary least squares regression. * denotes statistical significance at the $p < 0.05$ level (one-tailed). The dependent variable for the first and second models is respondents' likelihood of remaining in the employ of their state's government by the end of 2025 as indicated on an eleven-point scale, and the dependent variable for the third and fourth models is respondents' intended level of effort they will exert on developing expertise in 2025 relative to 2023 as expressed on a five-point scale. These analyses include only respondents from the five states in the sample with *Chevron* or *Chevron*-like deference standards as of May 2024.

Supplemental Information

Section A: Preregistration

We preregistered our experimental design through the Open Science Framework on May 18, 2024 (https://osf.io/rpqtw/?view_only=21d9dc3afccb4736acf45569886ecc9b). As we analyzed our survey responses, we made two deviations from our preregistered design concerning which potential respondents in the sampling frame to solicit to participate in the survey and which states we include in the analysis, which we describe in detail here.

1. The survey in which this experiment was embedded was sent to bureaucrats in nine states: Connecticut, Florida, Illinois, Indiana, Nebraska, New Hampshire, North Carolina, Oregon, and Vermont. Because Florida repealed judicial deference to agency interpretations of statutes by ballot initiative in 2018, we preregistered that we would only utilize data from the remaining eight states. However, after the survey was fielded, we learned that the standards of judicial deference to agency interpretations of statutes in North Carolina are markedly lower than a *Chevron* or *Chevron*-like standard and that judicial deference to agency interpretations in Indiana and Nebraska had been reversed by the states' legislatures shortly before we fielded the survey.^{1,2} Because bureaucrats in those states consequently would have no

¹ Kinsella, Martha and Lerude, Benjamin. "Judicial Deference to Agency Expertise in the States." *State Court Report*, October 26, 2023, <https://statecourtreport.org/our-work/analysis-opinion/judicial-deference-agency-expertise-states>.

² Subsequent to the publication of this *State Court Report* analysis but before we fielded our survey, the legislatures in Indiana and Nebraska passed new laws repealing requirements that state courts afford agency interpretations of statutes any deference (Canaparo, GianCarlo and Sampson, Caleb. "*Chevron* in the States: Where is Deference Still in Effect, and How Can States Eliminate It?" *The Federalist Society*, October 3, 2024, <https://fedsoc.org/commentary/fedsoc-blog/chevron-in-the-states-where-is-deference-still-in-effect-and-how-can-states-eliminate-it>).

expectation that the level of deference they experience would change if the Supreme Court reversed *Chevron*, they should also be excluded from the analysis, and we have implemented that exclusion criterion for our analysis in the main paper.

We provide the analysis for the full sample (minus Florida, which we preregistered that we would not include) in Supplemental Information Section C.1; the substantive results when using this full sample are largely consistent with those obtained with the constrained sample with the exception of the interaction effect detected in the main analysis concerning respondents' willingness to invest in acquiring expertise (but see Supplemental Information Section C.2).

2. In our preregistration, we planned to randomly sample 25% of the email addresses we obtained from state employee directories. We chose this approach to balance both power considerations for all of the modules on the survey while not overburdening public employees.³ The size of our random sample anticipated a response rate of between 5% and 10%, as reported in recent studies utilizing survey experiments with other elite populations (e.g., e.g., Furnas and LaPira 2024; Miller 2022), which would have yielded us approximately 2,172 to 4,345 responses

³ Starting with the initial sample of 253,344 emails across the nine states, we considered two factors that would inform our expected response rate: 1) the expected turnover of state employees between the time the emails were collected in 2023 and the survey was fielded in 2024 and 2) observed response rates in other recent samples of political elites. First, based on reported turnover rates of states in our sample, we expected approximately 16% of employees in our sample to no longer be employed by their state rendering their email address invalid. Second, examining recent survey experiments of political elites, such as congressional staff and federal lobbyists, we anticipated a response rate of between 5% and 10% (e.g., Furnas and LaPira 2024; Miller 2022). Given these factors, we expected to collect approximately 2,600 to 5,200 responses.

(excluding respondents from Florida). However, 24 hours after distributing email invitations to the random sample, we observed a response rate of lower than 1%, which prompted concern that we would not obtain enough responses to conduct sufficiently powered analyses.⁴ Accordingly, we decided to send email invitations to all state government employees for which we collected email addresses.

Section B: Survey Protocol

Section B.1: Sampling Procedure

The sampling frame for the survey in which the *Chevron* priming experiment was embedded was all state government employees in the following eight states whose email addresses were posted publicly in the employee directories of those states: Connecticut, Illinois, Indiana, Nebraska, New Hampshire, North Carolina, Oregon, and Vermont.^{5,6} In the first half of 2023, one of the authors and student research assistants collected the emails from the directories of these states and formatted them into comma-separated files.

⁴ While it is difficult to understand systematic reasons for non-response, anecdotally we believe state government employees are not as responsive as other recently studied elite populations because they have been trained to be cautious when opening and interacting with emails sent from unfamiliar sources. Many potential respondents emailed the author who facilitated survey distribution asking for confirmation and/or evidence that the survey invitation was legitimate, and officials from the information technology (IT) offices of several state agencies called the author to assess whether the emails were associated with a cybersecurity risk. Additionally, several potential respondents informed the author that the policies set forth by their IT offices prevented them from participating, and others indicated that their IT offices send similar messages to “test” the employees’ compliance with agency policies. Separately, several potential respondents also told the author that their agency barred employees from completing outside surveys or participating in academic research unless the activities were pre-approved by the agency head.

⁵ The survey was also distributed to state government employees in Florida, but we excluded respondents from Florida in our preregistered design (see Supplemental Information Section A).

⁶ In late 2021, one of the authors surveyed the employee directories of all fifty states to determine whether the state posted publicly the email addresses of its employees publicly. At that time, 25 states provided such information publicly. From those 25 states, one of the authors selected a subset of states where it was most feasible to collect the email addresses given the formatting of each state’s directory and such that the subset would be representative across important state-level characteristics, such as geographic location and partisanship.

The total number of unique email addresses collected from these eight states is 172,868. Initial email invitations were sent to all unique email addresses between May 31 and June 3, 2024, and reminder emails were sent to all respondents that had not yet completed the survey on June 11 and June 18, 2024. Response collection ceased at the end of the day on June 26, 2024, at which point 2,434 respondents had provided an answer to at least one of the two outcome questions in the *Chevron* priming experiment. Subtracting from the 21,944 emails which were returned as undeliverable, the response rate for this module is approximately 1.6% ($\frac{2434}{150924}$).

After responding to a series of pre-treatment questions, respondents were randomly assigned to be in one of two conditions for our *Chevron* priming experiment. Those in the “treatment” condition were presented with a short prompt about the Supreme Court’s expected reversal of *Chevron* deference and what the implications might be for employees in state governments (see Section B.2 for full wording). After reviewing this prompt, respondents in the treatment condition were asked to answer our two outcome questions concerning their likelihood of remaining in state government in 2025 and the effort they expect to invest in acquiring expertise in 2025 relative to 2023. Meanwhile, those in the “control” condition were not provided with a prompt before seeing the two outcome questions.

Section B.2: Respondent Demographic Characteristics

The only systematic information we were able to collect about state government employees in the full sampling frame was their names, email addresses, and the states by

which they were employed.⁷ We present information about survey responsiveness by state in Table SI.1.

For respondents who participated in our *Chevron* priming experiment, we collected information on a range of demographic characteristics pre-treatment. We provide information about the characteristics of our sample of respondents in Table SI.2.

Table SI.1: Sampling Frame Response Rates by State

State	# of respondents	# of employees invited to participate	Response rate
Connecticut	226	11,929	1.9%
Illinois	30	1,840	1.6%
Indiana	184	27,168	0.7%
Nebraska	383	12,701	3.0%
New Hampshire	25	8,898	0.3%
North Carolina	633	48,283	1.3%
Oregon	843	36,460	2.3%
Vermont	110	3,645	3.0%
TOTAL	2,434	150,924	1.6%

Table SI.2: Respondent Demographic Characteristics

	# (%) of respondents
Gender	
Male	1111 (45.6%)
Female	1263 (51.9%)
Something else/Other	28 (1.2%)
Prefer not to say	28 (1.2%)
NA	4 (0.2%)
Age	
18-29	129 (5.3%)
30-49	1113 (45.7%)
50-64	1023 (42.0%)
65 or older	168 (6.9%)
NA	1 (0.0%)
Income	

⁷ For some states, we were also able to collect information about the agency and/or office in which they worked and the physical address of their workplace. However, this information was not provided by all states and is not presented in a uniform format across states, so we are not able to use it in assessing sample representativeness.

Less than \$25,000	20 (0.3%)
\$25,000-\$49,999	167 (6.9%)
\$50,000-\$74,999	411 (16.9%)
\$75,000-\$99,999	464 (19.1%)
\$100,000-\$199,999	1052 (43.2%)
\$200,000 or more	313 (12.9%)
NA	20 (0.8%)

Education

Some high school, or less	1 (0.0%)
High school graduate or GED	86 (3.5%)
Some college, no 4-year degree	352 (14.5%)
College graduate	862 (35.4%)
Post-graduate degree	1128 (46.3%)
NA	5 (0.2%)

Race

American Indian or Alaska Native	15 (0.6%)
American Indian or other Pacific Islander	10 (0.4%)
Asian	55 (2.3%)
Black or African American	179 (7.4%)
Native Hawaiian or Pacific Islander	5 (0.2%)
Other	137 (5.6%)
White	2017 (82.9%)
NA	16 (0.7%)

Hispanic

Yes	142 (5.8%)
No	2260 (92.9%)
Prefer not to say	27 (1.1%)
NA	5 (0.2%)

Party Identification

Strong Democrat	712 (29.3%)
Not a very strong Democrat	333 (13.7%)
Lean Democrat	290 (11.9%)
Independent	252 (10.4%)
Lean Republican	155 (6.4%)
Not a very strong Republican	196 (8.1%)
Strong Republican	263 (10.8%)
Other/NA	233 (9.6%)

Ideology

Very liberal	264 (10.8%)
Liberal	605 (24.9%)
Slightly liberal	322 (13.2%)
Moderate	611 (25.1%)
Slightly conservative	186 (7.6%)

Conservative	328 (13.5%)
Very conservative	107 (4.4%)
NA	11 (0.5%)
<u>Years of Experience in State</u>	
<u>Government</u>	
Less than 5 years	581 (23.9%)
5-10 years	702 (28.8%)
11-15 years	300 (12.3%)
16-20 years	290 (11.9%)
More than 20 years	558 (22.9%)
NA	3 (0.1%)
<u>Job Selection Method</u>	
Appointed by elected official	89 (3.7%)
Hired/promoted through civil service system	1961 (80.6%)
Other	381 (15.7%)
NA	3 (0.1%)
<u>Frequency of Policymaking Duties</u>	
Very frequently	193 (7.9%)
Somewhat frequently	442 (18.2%)
Not very frequently	836 (34.3%)
Never	963 (39.6%)
NA	0 (0.0%)
<u>Frequency of Implementation Duties</u>	
Very frequently	1406 (57.8%)
Somewhat frequently	564 (23.2%)
Not very frequently	225 (9.2%)
Never	234 (9.6%)
NA	5 (0.2%)

Section B.3: Question Wording

[THE FOLLOWING QUESTION WAS SEEN ONLY BY TREATMENT GROUP RESPONDENTS]

Under the *Chevron* doctrine, courts at the federal level and in many states must defer to government agencies' reasonable interpretations of ambiguous statutes.

The US Supreme Court is expected to issue a ruling this year that would eliminate the *Chevron* doctrine, which would limit the ability of agencies in many states to use ambiguous statutes as the basis of their decisions.

Have you heard much about this potential change?

- Yes
- No

What is the likelihood that you will be working for the [STATE] government at the end of 2025?
[0-10 SLIDER SCALE WITH “Not at all likely” LABEL AT 0 AND “Extremely likely” LABEL AT 10]

As a government employee, you can put in extra effort to develop policy expertise in your area of specialization. How much effort do you expect to put into developing policy expertise in 2025 relative to 2023?

- A lot less effort in 2025 relative to 2023
- Somewhat less effort in 2025 relative to 2023
- The same amount of effort in 2025 relative to 2023
- Somewhat more effort in 2025 relative to 2023
- A lot more effort in 2025 relative to 2023

Section C: Empirical Analysis

Section C.1: Analysis with Full Sample

Table SI.3: Effect of Chevron Treatment on Turnover Intention and Investment in Expertise (Full Sample)

	(1)	(2)	(3)	(4)
	Likelihood of Remaining in Job		Effort Invested in Expertise	
Intercept	8.28 *	6.90 *	3.19 *	2.14 *
	(0.08)	(0.43)	(0.03)	(0.15)
<i>Chevron</i> Treatment	0.12	0.92	-0.01	-0.17
	(0.11)	(0.62)	(0.04)	(0.22)
Public Service Motivation		0.35 *		0.26 *
		(0.11)		(0.04)
<i>Chevron</i> Treatment: Public Service Motivation		-0.20		0.03
		(0.15)		(0.05)
Num. obs.	2423	2410	2425	2413

Models are estimated with ordinary least squares regression. * denotes statistical significance at the $p < 0.05$ level (one-tailed). The dependent variable for the first and second models is respondents' likelihood of remaining in the employ of their state's government by the end of 2025 as indicated on an eleven-point scale, and the dependent variable for the third and fourth models is respondents' intended level of effort they will exert on developing expertise in 2025 relative to 2023 as expressed on a five-point scale. These analyses include only respondents from the five states in the sample with *Chevron* or *Chevron*-like deference standards as of May 2024 and who reported "very" or "somewhat" frequently performing policymaking tasks as part of their jobs.

Section C.2: Analysis with Respondents Who Frequently Perform Policymaking and Implementation Tasks

Table SI.4: Effect of Chevron Treatment on Turnover Intention and Investment in Expertise (Policymaking Experience)

	(1)	(2)	(3)	(4)
	Likelihood of Remaining in Job		Effort Invested in Expertise	
Intercept	8.33 *	7.72 *	3.32 *	2.80 *
	(0.19)	(1.20)	(0.07)	(0.40)
<i>Chevron</i> Treatment	0.33	0.87	0.24 *	-0.48
	(0.27)	(1.78)	(0.09)	(0.60)
Public Service Motivation		0.15		0.13
		(0.28)		(0.10)
<i>Chevron</i> Treatment: Public Service Motivation		-0.14		0.16
		(0.42)		(0.14)
Num. obs.	376	373	375	372

Models are estimated with ordinary least squares regression. * denotes statistical significance at the $p < 0.05$ level (one-tailed). The dependent variable for the first and second models is respondents' likelihood of remaining in the employ of their state's government by the end of 2025 as indicated on an eleven-point scale, and the dependent variable for the third and fourth models is respondents' intended level of effort they will exert on developing expertise in 2025 relative to 2023 as expressed on a five-point scale. These analyses include only respondents from the five states in the sample with *Chevron* or *Chevron*-like deference standards as of May 2024 and who reported "very" or "somewhat" frequently performing implementation tasks as part of their jobs.

Table SI.5: Effect of Chevron Treatment on Turnover Intention and Investment in Expertise (Implementation Experience)

	(1)	(2)	(3)	(4)
	Likelihood of Remaining in Job		Effort Invested in Expertise	
Intercept	8.53 *	7.05 *	3.28 *	2.64 *
	(0.12)	(0.69)	(0.04)	(0.24)
<i>Chevron</i> Treatment	0.04	0.71	-0.01	-0.72 *
	(0.16)	(0.98)	(0.06)	(0.35)
Public Service Motivation		0.37 *		0.16 *
		(0.17)		(0.06)
<i>Chevron</i> Treatment: Public Service Motivation		-0.17		0.17 *
		(0.23)		(0.08)
Num. obs.	1002	997	999	995

Models are estimated with ordinary least squares regression. * denotes statistical significance at the $p < 0.05$ level (one-tailed). The dependent variable for the first and second models is respondents' likelihood of remaining in the employ of their state's government by the end of 2025 as indicated on an eleven-point scale, and the dependent variable for the third and fourth models is respondents' intended level of effort they will exert on developing expertise in 2025 relative to 2023 as expressed on a five-point scale. These analyses include respondents from all eight states included in our preregistration documentation.

Section C.3: Linear Interaction Effect Assumption and Alternative Specifications

One of the four empirical models presented in our main analysis—the interactive model in column 4 where our *Chevron* prime is interacted with respondent PSM—suggests a statistically distinguishable effect of our treatment on respondents' interest in investing more effort in acquiring expertise in 2025 relative to 2023, such that respondents in the treatment condition are more willing to invest in expertise relative to those in the control condition as PSM increases.

This interactive effect relies on a linear interactive effect (LIE) assumption, whereby we assume the effect of our moderator changes linearly and at a constant rate (Hainmueller et al. 2019). In exploring our analysis, we discovered that the distribution of the moderating variable—PSM—among respondents in our sample is decidedly left-skewed, such that most respondents express high levels of public service motivation (mean=4.03, median=4.60) and we lack common support at lower values of PSM, which can lead to LIE assumption

violations. Accordingly, following Hainmueller et al. (2019), we first created Linear Interaction Diagnostic (LID) plots to assess the linearity of the relationship between X and Y across the control and treatment conditions.⁸ These LID plots, presented in Figure SI.1, indicate minor deviations from linearity at the lowest values of PSM.

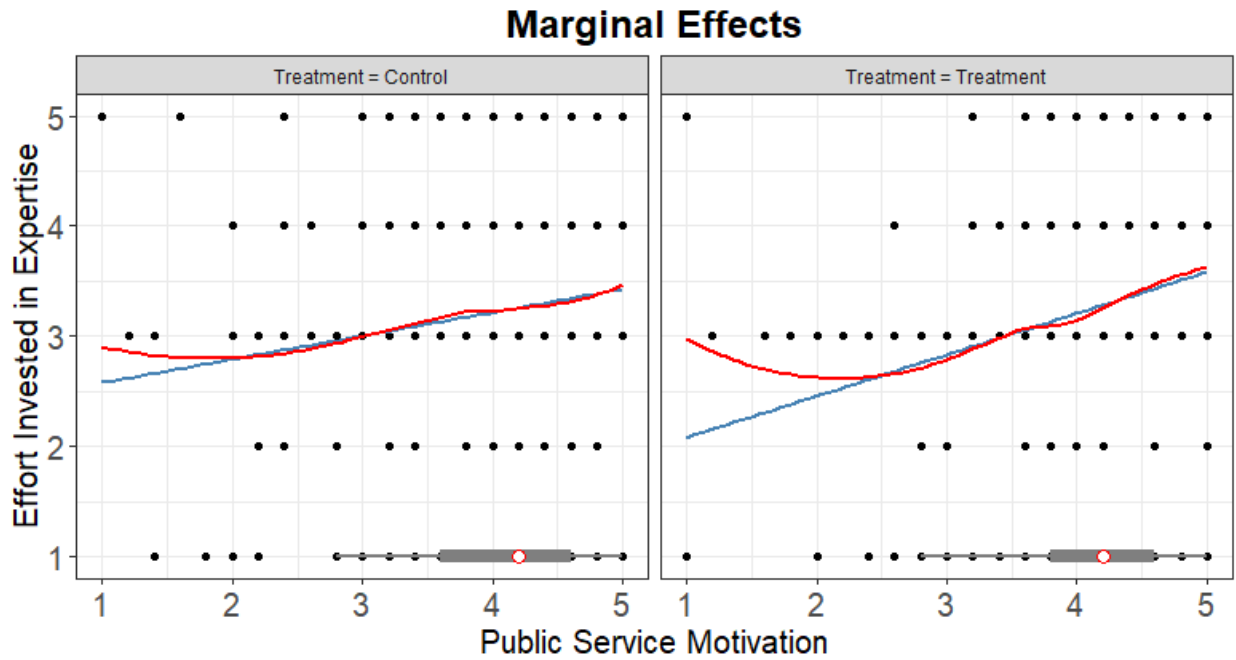


Figure SI.1: Linear Interaction Diagnostic Plots. These diagnostic plots correspond with the interactive model presented in column 4 of Table 1 in the main paper.

Given the known left-skewedness of PSM among our respondents, we also proceeded to use an alternative estimation strategy that relaxes the LIE assumption. Specifically, we used a binning estimator, which estimates the marginal effect of the moderator for a set number of bins. Following Hainmueller et al. (2019), we specify three bins to represent the effect of the moderator on the treatment effect at low, moderate, and

⁸ All analyses presented in this subsection were conducted using the `interflex` package in R.

high levels, and present the visual representation of the binning estimator in Figure SI.2.⁹ Both the histogram of PSM along the x-axis of the plot as well as the large width of the confidence interval at lower levels of PSM highlight the lack of common support across the range of our moderator. The confidence intervals for the estimated interactive effect in each of our three bins include zero, suggesting that the interactive effect we initially detected was an artifact of functional form.

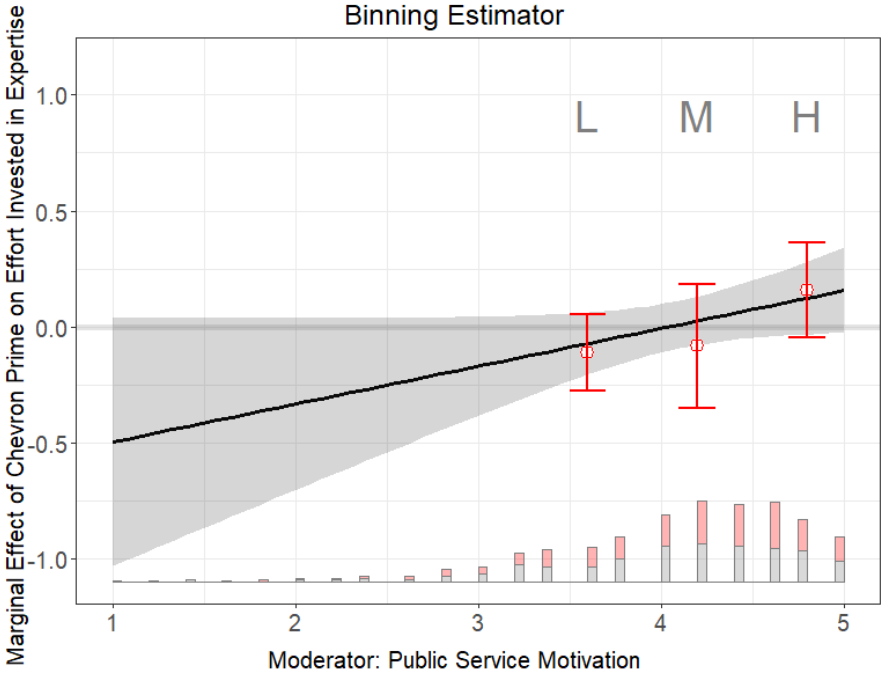


Figure SI.2: Binning Estimator. This binning estimator plot corresponds with the interactive model presented in column 4 of Table 1 in the main paper.

References

⁹ We also re-estimated the model using a kernel estimator, which yielded results similar to those obtained with the binning estimator.

Furnas, Alexander C., and Timothy M. LaPira. 2024. "The People Think What I Think: False Consensus and Unelected Elite Misperception of Public Opinion." *American Journal of Political Science*, 68(3): 958-971.

Hainmueller, Jens, Mummolo, Jonathan, and Xu, Yiquing. 2019. "How Much Should We Trust Estimates from Multiplicative Interaction Models? Simple Tools to Improve Empirical Practice." *Political Analysis*, 27(2): 163-192.

Miller, David R. "On Whose Door to Knock? Organized Interests' Strategic Pursuit of Access to Members of Congress." *Legislative Studies Quarterly*, 47(1): 157-192.