Outsourced Congress: How Congress Relies on Outside Organizational Policy Information

by

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DEDICATION

This dissertation is dedicated to:

my parents, Maria Slowiaczek and George Furnas, who taught me about inquiry and empathy,

my wife, Amy Cesal, whose love, support, and inspiration allow me to be a better person and scholar,

all the would-be scholars without the advantages I've had, whose dissertations we will never get to read.

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A dissertation is a substantial undertaking - a project to prove my professional *bona fides*, before being officially credentialed as a researcher. But completing a dissertation proves a lot more than professional *bona fides*, because a project of this scope and duration can't be completed—or at least I couldn't have completed it—without support. As much as this is a product of my ability as a political scientist, it is a product of the people that have supported me: my family, friends, advisors, mentors, colleagues, co-authors, and my University.

I write this as a pandemic is sweeping the globe, as there is righteous anger over police murders of black and brown people, and as a presidential election nears in which the peaceful and legitimate transmission of power is uncertain. I write this more aware than ever of my incredible privilege. I am safe and secure, both physically and economically. I have spent my life inside institutions designed to work for me: a cisgender straight white man. I grieve the injustice of these institutions, and strive to change them; but without a doubt I have benefited from them. Before I thank the individual people, who made me who I am and helped me along the way, I would be remiss if I didn't acknowledge one of the most important reason why I've gotten to where I have; I'm incredibly lucky. Graduate school is hard and humbling, for everyone. But even when it was its hardest and most frustrating, nobody has ever made me feel like I don't belong. I've always gotten the benefit of the doubt not afforded so many of my colleagues.

In addition to the immense systemic and individual privilege I've benefitted from,

I've also been incredibly lucky to be surrounded by kind, generous, and supportive people. I've had people in my life that understand me, push me, and inspire me. I am so grateful for them, and for what they have enabled me to do.

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ABSTRACT

In recent decades, in-house policy experience and expertise within Congress has fallen as members of Congress have shifted resources towards constituent-casework, communications and leadership functions and away from personal office or committee policy staff. Headcounts in the legislative support agencies at Congress's disposal have shrunk by over 40 percent since 1979. At the same time, American politics has seen an explosion of activity by policy demanding groups, and privately funded policy research and planning organizations. These organizations are able to serve as auxiliary service bureaus to staffers and members of Congress, strategically providing legislative subsidy in the hopes of affecting policy outcomes.

In this dissertation, I develop a micro-level theory of information processing in Congress, in which individual congressional staffers serve as agents of members tasked with the challenge of learning about policy issues and making recommendations to their bosses in complex information environments. It is these individual staffers, I argue, that mediate the institution's need for policy relevant information and these potential sources of outside subsidy.

Though dedicated public servants, congressional staffers are generally under-resourced, over-stretched, and frequently on the losing end of an information asymmetry with the policy-demanders that they meet and interests they must rely on for legislative subsidy. As a result, staffers serve less as policy or subject matter experts in their own right, and more as gatekeepers or selective aggregators, engaged in a process of search and evaluation of policy expertise produced by outside interests. The implication of this theory is that members of Congress rely on biased sets of information

produced by outside, often ideological interests, and selected for them by constrained and bias-prone staffers.

Using original survey data from the 2017 and 2019 Congressional Capacity Surveys, comprising the largest academic survey sample of congressional staff gathered to date, I investigate how congressional staff evaluate privately provisioned, outside policy information depending on the ideological nature of the information source. This work highlights the importance of these ideological networks of outside information purveyors. Finally, I use IRS 990 data from Washington D.C.-based think tanks to map the network of coordination between these subsidy providing organizations that is implied by their interlocking directorates.

This dissertation contributes to a broader understanding of Congress by presenting and testing a micro-level theory of information evaluation within the institution, highlighting the importance of individual staffers and their motivations in the collective functioning of the institution. In doing so, it offers a theoretical bridge between scholars of the political organizations that produce these subsidies, and the scholars of Congress, as an institution which relies on them.

CHAPTER I

Introduction

> Patterns of organizational innovation and change [are] highly dependent on the perspectives of those responsible for the search function. It is not that their expertise and professional ability are unimportant; it is rather that other characteristics of the seekers and transmitters of information-their inclinations and incentives to undertake "high-intensity searches," the goals they bring to the search, and the point at which they perceive a satisfactory "equilibrium" between aspiration and reality, the way they communicate their findings and employ them in devising plans of action-will be equally if not more important.
>
> — Price 1971

Set against the backdrop of "alternative facts," and competing narratives, effective governance is, at its core, a monumental information processing undertaking. Governance requires: gathering information about the state of the world; assessing and prioritizing problems that may require policy responses; compiling, developing and evaluating policy alternatives; and ultimately, collective choices over which issues to address and how to address them. As Hayek (1945) famously noted, knowledge about the state of the world is unevenly and widely distributed. Relevant information about real world conditions, the needs and preferences of constituents and policy-impacts are not immediately evident to lawmakers. Rather, lawmakers, their staffs, and the institutions they constitute, must strive to solve this problem of distributed information. In this dissertation, I focus primarily on a micro-level theory of

information processing in Congress, in which individual congressional staffers serve as agents of members, tasked with the challenge of learning about policy issues and making recommendations to their bosses in complex information environments. I argue that staffers, though dedicated public servants, generally are under-resourced, over-stretched, and frequently on the losing end of an information asymmetry with the policy demanders that they meet, and interests they must rely on, for legislative subsidy. As a result, staffers serve less as policy or subject matter experts in their own right, and more as gatekeepers or aggregators, engaged in a process of search and evaluation of policy expertise produced by outside interests.

1.1 Organizational Context of Outside Information Production

Fundamentally, this dissertation addresses how Congress, as an institution comprised of individual staffers, engages with interest groups that seek to influence policy by providing policy relevant information. Interest group activity is pervasive in Congress. Since the 1990s, contributions from interest groups' political action committees (PACs) to federal candidates have tripled,[1] and now regularly total nearly half a billion dollars per election cycle. Perhaps more importantly, interest groups' disclose more than three billion dollars a year spent on lobbying activity, paying more than eleven thousand registered lobbyists, numbers which almost certainly under-count the true scope of lobbying activity due to the rise of so-called "shadow lobbying"(Thomas and LaPira 2017). The provision of favorable policy information is a well-established influence strategy (Hall and Deardorff 2006; Drutman 2015) in this sphere. This multi-billion dollar industry funds the production and dissemination of policy information, which congressional staffers rely on as they make sense of policy issues and brief their bosses.

1. www.opensecrets.org

The existence of this privately provisioned network of organizations which produce policy subsidy is not necessarily anathema to democratic governance or legitimacy, of course. These organized interests may help non-specialist lawmakers translate the grievances of a diverse public into concrete policy changes (Salisbury et al. 1987). Insofar as all interests are weighed fairly, such activity beneficially aids governing institutions in their collection and processing of dispersed information and diverse preferences. Indeed, mid-twentieth-century pluralist scholars argued that diverse political voices were well represented in government precisely because of how interest activity interacted with institutions such as federalism, political liberty (Truman 1951), and multiple modes or avenues of influence (Dahl 1961). Prominent critiques of this view, of course, argued that some interests are better "heard" than others, as the resources and ability to organize and mobilize are unequally distributed (Schattschneider 1975; Olson 1965; Walker 1983).[2] This inequality of organizational resources is significant, in part, because it implied an inequality of information production, with more and better financed institutions generating policy subsidies for some sets of interests or positions than others (Hall and Deardorff 2006). Debates over the breadth and scope of interest group representation in politics should be understood as the organizational backdrop for the production and dissemination of outside policy information (Salisbury 1984; Sorauf 1992; Schlozman and Tierney 1983, 1986; Schlozman, Verba, and Brady 2012; Drutman 2015; Hacker and Pierson 2010; Hertel-Fernandez 2019; Bonica 2013, 2014, 2016; Crosson et al. 2020a).

1.2 Information Use in Congress

The study of information in Congress is not a new pursuit, to be sure. Indeed, Krehbiel (1992) famously argues that Congress is organized into committees with power over specific policy jurisdictions precisely to incentivize legislators to invest in

2. See Crosson, Furnas, and Lorenz (2020) for a more thorough review.

the necessary expertise and knowledge gathering to effectively legislate on complex issues. Through much of the post-war era, the United States Congress was viewed as a model information gathering institution (Kelly 2012). However, despite this apparent strength of institutional design, recent decades have been marked by a steady decline in investment in legislative staff with substantive expertise (Crosson et al. 2020a). Since 1993, total staff within congressional support agencies has dropped approximately 38 percent, while stagnant wages and high turnover limit retention (Roberts 2019; Furnas and LaPira 2020). In interviews conducted as part of the Congressional Capacity Project — a collaborative research effort on which I was a co-PI — legislative staffers described how it was rare to have in-house expertise and that instead they needed to know where to find policy relevant expertise outside of Congress.

Scholars have devoted considerable attention to how legislators make voting or cosponsorship decisions based on logics of bounded rationality, and cue-taking (e.g., Kingdon 1989, or more recently, Box-Steffensmeier, Christenson, and Craig 2019). A host of important legislative activity, however, happens prior to these sorts of position-taking decisions by legislators, in the form of issue prioritization and agenda setting (Hall 1996). Members of Congress delegate the vast majority of the information processing—and communication with relevant interests that underpin this activity—to their professional staff (Whiteman 1995; Salisbury and Shepsle 1981b). However, to date there is little empirical research on how staffers evaluate information and how their activities and cognitive processes shape which sources are trusted, what information is used, and ultimately, how the Congress as a policy making institution is able to engage in sense-making.

In this dissertation, I explore how congressional staffers evaluate policy information—much of it produced outside of the institution—as they try to meet Congress's information needs despite the apparent contraction of in-house resources. Previous work

has tended to focus on information and policy-change either within Congress, or from the perspective of interest groups (Krehbiel 1992; Baumgartner et al. 2009). In my view, understanding how Congress uses information requires an integrated perspective, blending congressional, interest group and party-network scholarship. Interest groups and lobbyists fill the information needs of under-resourced offices by providing information goods such as research, talking points, speech text, policy memos and draft legislation that function as a form of legislative-subsidy (Hall and Deardorff 2006). As a result, congressional staffers often serve as gatekeepers to legislators, as they may choose selectively what to include in briefing materials and upon which subsidies to rely. At the same time, the proliferation of external, interested sources producing policy information offers staffers a set of subsidy choices of previously unimaginable breadth (Rich and Weaver 2000; McGann 2016). It matters greatly, then, how staffers evaluate the information sources available to them. The particular heuristics that these staffers rely on, limitations in their information search and evaluation processes, and their resultant cognitive biases can have profound impact on congressional representation and policy-making.

Information overload faced by individual staffers in this complex decision-making environment heightens the likelihood that they will rely on partisan or ideological heuristics (Lau and Redlawsk 2001). I develop and test a theory in which the use of outside information in Congress is driven by individual staffers' cognitive and behavioral responses to their competing incentives for information that is accurate versus information that conforms with their partisan or ideological positions. As a result, staffers often end up choosing information that confirms their ideological priors, rather than compiling a full and accurate picture of the state of the world. Ultimately, members of Congress rely on biased sets of information produced by outside, often ideological interests, and selected for them by constrained and bias-prone staffers.

Prior research on the psychology of political decision-making structures my ex-

pectations over staffers' use of information. Kunda (1990) captures the competing incentives between accuracy and ideological (directional) goals. Research on confirmation bias suggests that staffers seek out information that aligns with their predispositions (Taber and Lodge 2006; Petersen et al. 2013; Taber 2013). Similarly, research on motivated skepticism suggests that those with strong partisan goals construct counter-arguments in order to dismiss information that might challenge their preferred outcome (Fiske, Kinder, and Larter 1983; Taber and Lodge 2006; Nyhan and Reifler 2010).

1.3 Dissertation Roadmap

This dissertation is comprised of three separate studies, which address the role of outside organizational information in the congressional policy-making process. Across these studies, I focus particularly on congressional staffers and ideological think tanks.

In Chapter 2, I develop and present a theory of congressional information processing in which staffers act as information gate-keepers whose own ideological preferences shape the picture of the world that they present to their bosses. This represents the first systematic empirical test of three competing perspectives on congressional staffer behavior: staffers as faithful agents, staffers as independent agents and staffers as motivated reasoners. I adjudicate between these perspectives using original survey data from the 2017 Congressional Capacity Survey. I find strong evidence that 1) rather than simply selecting sources that are attitudinally-aligned with their bosses, staffers' own attitudes shape how they evaluate and use information, 2) staffers trust and use attitudinally-aligned information sources at far higher rates than attitude incongruent sources, 3) this relationship is more pronounced among more ideologically extreme staffers, 4) there is considerable asymmetry in the relationship between ideological extremism and evaluations of internal sources for conservatives and liberals, 5) at least some of these effects appear to be driven by cognitive biases rather than strategic ac-

tion intended to advance staffers' positions. Together, these results show substantial support for the proposition that staffers act as largely independent agents, exercising considerable leeway to present a biased selection of information to their bosses.

In Chapter 3, I build on the theory and findings from Chapter 2, reporting the results of two survey experiments that I fielded on samples of congressional staffers in 2017 and 2019. In the first experiment, staffers are presented with a hypothetical lobbying vignette in which I manipulate the identity of an individual making a legislative request, the substance of the request, and the supporting evidence being offered.[3] Several response variables are included to test how likely staff are to take a meeting, to use the information being offered, and to recommend taking a position consistent with the request, as well as whether they perceive the request to be congruent with constituent preferences. This study reveals that bringing aligned policy information to a meeting is important in shaping how that meeting request is evaluated, and the actions that a staffer is likely to take in response. In the second experiment, I employ a conjoint design in which staffers are forced to choose between two hypothetical white papers from think tanks, in which I randomized information source and policy valence. This design allows me to estimate the average marginal component effects (ACME) of a white paper coming from a think tank with a well-established ideological identity, and conservative or liberal policy content (Hainmueller, Hopkins, and Yamamoto 2014). Together, these results shed light on how the ideology of outside information sources substantively shapes important representational decisions by congressional staffers.

The research presented in Chapters 2 and 3 highlight the importance of information providers outside of the institution of Congress. The implication of these findings, in my view, is that scholars of Congress and of policymaking should adopt

3. This experiment was conducted in conjunction with Timothy LaPira, Alexander Hertel-Fernandez, Lee Drutman and Kevin Kosar. This experiment is currently written up as a working paper, (Furnas et al., n.d), which Chapter 3 draws heavily from with the permission of my co-authors.

a broader view of the policymaking process, encompassing the full ecosystem of elite institutions and actors involved in agenda-setting and legislative subsidy creation, consonant with the emerging school of American Political Economy (Hacker et al., n.d). Indeed, recent work has revealed the role of private, ideological infrastructure in policy creation and legitimation that underpin the rightward shift in state policy (Hertel-Fernandez 2019), how think tanks set party agendas (Fagan 2019), and how they are cited in speeches and called to testify in Congress (Lerner 2018). In Chapter 4, I add to this nascent literature on think tanks by mapping the Washington, D.C. policy-planning network. I examine the community structure of organizations involved in policy knowledge production and map the ideological and partisan coalitions of research organizations. Following a rich tradition in organizational sociology (Mizruchi 1996), I use shared membership on think tank boards as a measure of coordination between organizations. Using digitized IRS 990 tax records, I construct and analyze a board inter-lock network of 277 public policy research organizations, the largest analysis of its kind to date. While this undertaking is primarily descriptive, I view it as necessary context setting for the further study of this community of privately provisioned policy production. In this analysis, I find substantially stronger evidence for issue-based rather than ideology based coordination, as well as evidence consistent with existing organizational sociology theories of resource seeking and risk-mitigation.

Ultimately, this dissertation investigates a fundamental function of American representative democracy by focusing on the implications of ideological information processing by congressional staff. While recent work has begun to investigate the importance of congressional staff (Montgomery and Nyhan 2017; LaPira, Drutman, and Kosar 2020; Hertel-Fernandez, Mildenberger, and Stokes 2019; Crosson et al. 2020a; Furnas and LaPira 2020), there have been no systematic studies of the policy-making ramifications of how staffers navigate the complex, often-overloaded information envi-

ronments they inhabit. The proliferation of outside information providers has created a wider array of options available to serve the information needs of Congress than ever before. This research demonstrates that legislators' knowledge about important policy issues are subject to selection effects introduced by staffers' biased cognitive processes and strategic considerations in choosing which information sources to use. Furthermore, institutional reliance on these outside sources creates new avenues for interest group influence as the strategic creation of legislative subsidy becomes a central locus of partisan and ideological activity.

CHAPTER II

Biasing Their Bosses: Staff Ideology and the Distortion of Information in Congress

2.1 Introduction

In the representational, democratic system of the United States, legislators are tasked with identifying and addressing policy problems through three fundamental types of activity: legislation, oversight and constituent service. Each of these activities requires legislators to gather and synthesize widely dispersed information about the state of the world, and map potential actions onto outcomes. Accordingly, when developing national policies, Congress must understand and act on a wide array of complex issues often on short notice. To meet the challenging informational needs that this entails, members of Congress delegate to their staffers. This delegation empowers staffers to act as information gate-keepers and, as such, they may have the ability to bend the entire legislative process to meet their own preferences. Such delegation puts staffers in a position of extraordinary power, giving them the ability to shape their bosses' perspectives on issues, policies, and political incentives. Concentration of such power in the hands of unelected staffers is fundamentally at odds with our conventional wisdom of representation by democratically elected legislators (Malbin 1980).

In this chapter, I investigate the understudied role of congressional staffers as critical mechanisms of information processing, potentially evaluating and selecting information according to their own goals. The central questions I address are fundamental to representation: whether and how staffers select information in a manner which may bias their bosses' understanding of politics and policy. Scholars have devoted considerable attention to other mechanisms that may bias legislator behavior, such as money in politics, gerrymandered districts, institutional features of Congress, and interest group activity. Despite the obvious importance of information in congressional policy-making, and the clear role that congressional staff play as information gatekeepers and filters, there has been no large-n empirical analysis of how staffers select information and the biases their selection processes may create. Consequently, we have little sense of the depth of involvement that staffers have on legislative outcomes.

I begin to fill this gap by examining how congressional staffers — ostensibly as agents of their bosses — evaluate, process, and rely on different sources of information. The study of the information processing of congressional staff is important for several reasons. First, assessing the state of the world and evaluating potential policy alternatives is necessarily antecedent to actual policy-making, but this information gathering and evaluation is carried out almost exclusively by congressional staff. Second, while scholars and reformers have paid close attention to the potential for interest group influence through campaign influence or lobbying activity, this influence is largely mediated by staffers who may be more or less receptive to influence and information from the sources depending on their own predispositions. Lastly, that staffers ultimately can shape policy, with very little oversight, interferes with the accountability and responsiveness of an elected government to its citizens. Ultimately, it is critical that we understand how staffers engage in information evaluation and selection in order to evaluate the impact they may have on legislative behavior and policy outcomes. I present three different theories of congressional staff behavior

that each imply distinct patterns of staffers' evaluations of information sources: 1) staffers as faithful agents, 2) staffers as independent agents, acting according to their own priorities, and 3) staffers as motivated reasoners.

This chapter makes three important contributions to our collective understanding of legislative behavior and representation. First, I present a new theory of congressional information processing that centers the role of staffers in the institution's ability to meet its core functions. This theory allows me to articulate clear theoretical expectations over how we should expect staffers to wield their information gate-keeping authority, based on longstanding but untested concerns from the literature on congressional staff. Second, I bring a social psychological perspective to the question of congressional staff. I argue that staffers are in a decision-making environment that is conducive to motivated reasoning and as a result, staffers' evaluations of information may be driven by cognitive bias.

Finally, this chapter makes use of original survey data with responses from over 550 active congressional staffers. Congressional staffer survey response data enables me to evaluate the longstanding, but previously untestable assumptions about legislator-enterprises that underpin much of our contemporary understanding of legislative behavior. In addition to collecting this survey data, I conducted a series of interviews with congressional committee staff, to ground my theories of staffer evaluation of information in the lived-experience of actual staffers. Together, these novel contributions suggest that the member-centric focus of legislative studies is seriously underestimating the impact that individual staffers, their ideologies and their incentives may have in shaping policy outcomes.

Using the in-person interviews and original survey data I collected as part of the 2017 and 2019 Congressional Capacity Surveys (Drutman, Furnas et al., 2017; Furnas and LaPira 2019), I find that staffers can and do influence information selection used in congressional policymaking. First, I find strong evidence that staffers do not evalu-

ate information neutrally with respect to the ideology of an information source, as we might expect from an idealized objective staffer, nor do they function as perfect agents of their bosses, as the literature to date has canonically assumed, both explicitly and implicitly, as I describe in the next section. Instead, congressional staffers' behavior is substantially shaped by their own personal ideological perspectives. Staffers act as imperfect agents, responding both to their bosses' preferences and their own in how they evaluate and select information. More ideologically extreme staffers tend to report higher levels of trust and more frequent use of external sources with which they are ideologically aligned than their more moderate counterparts. This is true among both liberal and conservative staffers. I also find evidence of ideological asymmetry, with stronger ideological selection effects among more conservative staffers. Lastly, I present additional evidence that suggests that staffers' selection of ideologically consonant information sources is driven, at least in part, by motivated reasoning rather than simply the rational actions of rogue agents.

2.2 Theories of congressional staff behavior

The Legislative Reorganization Act of 1946 initiated a fundamental change to Congress as an institution, increasing staff sizes and budgets across personal and committee offices in both chambers (Galloway 1951; Polsby 1968). As the size and scope of congressional staffs grew, scholars began to question the implications of this increased capacity on member behavior and institutional output (Kofmehl 1962; Fox and Hammond 1977; Malbin 1980). These early canonical treatments of congressional staff were largely descriptive, providing demographic, background, career trajectory and limited time use data on congressional staffers (Fox and Hammond 1977; Kofmehl 1962). They highlight the transformative role that staffers played in expanding the range of activities undertaken by members, but critically, with the exception of Malbin (1980), they ignored the representational implications of that extensive delegation.

Salisbury and Shepsle (1981b) offer a corrective to prior work on Congress that helps integrate staff, arguing that Congress should be understood as a collection of semi-independent enterprises led by members of Congress. The focus of Salisbury and Shepsle's 1981 legislators-as-enterprises insight is the manner in which these enterprises enable members to pursue an expanded range of goals and activities. Further, they posit that as the enterprises grow, staff themselves serve as a source of "substantial guidance" for legislators. However, they leave unexamined the extent to which the delegation this entails results in meaningful agency loss as staffers' actions deviate from their bosses' goals.

Within these enterprises, staffers serve as the primary actors engaged in communicating with interest groups, stakeholders and experts, and serve as the main pathway by which external policy and political information is transmitted to members (Fox and Hammond 1977; Whiteman 1995; Weiss 1989; Patashnik and Peck 2016). Staffers also serve as the primary conduit of information from congressional support organizations like the Congressional Research Service (CRS) (Kosar 2018). However, unless we understand how staffers use the independence they may be afforded within legislator-enterprises, it is impossible to know how much legislator behavior should be attributed to the legislators, and how much is, instead, the outcome of a complex decision-making process, shaped by individual staffer motivations within the enterprise. While recent work has begun to emphasize the role that staffers play in member behavior—including legislative effectiveness, voting patterns, and perceptions of constituent opinion (Montgomery and Nyhan 2017; Crosson et al. 2020b; Hertel-Fernandez, Mildenberger, and Stokes 2019)—we still have no empirical evidence about whether staffers are responsive to their own preferences or those of their bosses.

While the legislator-as-enterprise theory has informed subsequent scholarship, especially regarding the expansion of individual legislator capabilities, it has not been

taken as a call to unpack the internal dynamics of the enterprise (c.f. Crosson et al. 2020b). The legislator-staffer relationship can be understood within the framework of a principal-agent problem[1], in which the legislator (the principal) seeks to induce behavior from their agents (their staffers). However, while principal-agent relationships have captured the attention of scholars in many arenas, the relationship between legislator and staffer in Congress has gone largely unexamined.

In this chapter, I focus specifically on how staffers evaluate information, as an arena in which to assess the principal-agent coupling between legislator and staffer. As Frances Lee puts it, "information is a powerful weapon" in Congress (Lee 2009, p. 121). Information and its control has the power to impact the balance of institutional power, agenda setting, and critical votes in Congress (Lee 2009; Baumgartner and Jones 2015; Curry 2015; Patashnik and Peck 2016). Indeed, projections from the Congressional Budget Office (CBO), meaningfully shape the course of debate and fortunes of a bill (Joyce 2011; Patashnik and Peck 2016). For example, when the Republican majority sought to undo the Affordable Care Act and pass various versions of so-called "repeal and replace," policies, after an initial extremely negative assessment by the CBO, their proposal was seen as largely dead on arrival. Weiss (1989) and Patashnik and Peck (2016) find that members tend to use information to support positions that they already hold, using evidence to bolster their case rather than identify other alternative solutions or new problems. These findings make clear that a responsive staffer would evaluate information and select in accordance with their boss's prior beliefs.

In the subsequent sections, I present two possible versions of this principal-agent relationship and their implications for staffer behavior and information processing: 1) staffers as faithful agents and 2) staffers as independent agents. The principal-agent framework suggests that staffers make information choices rationally, according to the incentive structure around them. Insofar as legislators are effective principals, we

1. (see Holmstrom and Tirole 1989; Sappington 1991)

should expect staffers to select information according to their bosses' preferences. If legislators are not able to incentivize their staff to act faithfully, we should expect staffers to more readily use information that aligns with their own preferences.

Both of these possible outcomes implied by the principal-agent framework, assume that staffers are rationally selecting information sources according to various incentives. Well-known findings from political psychology suggest that this may not be true. In this chapter, I incorporate a third perspective on staffer information processing outside of the principal-agent framework, which has so far been absent from the literature on congressional staff. Staffers may be engaged in motivated reasoning, and will trust and use information that accords with their prior beliefs and attitudes, despite potential losses to the accuracy of conclusions they draw or their incentives to faithfully respond to their bosses.

In the next sections, I describe these three views of staffer information processing in more detail.

2.2.1 Staff as Faithful Agents

The predominant view among scholars of Congress, whether endorsed explicitly or not, is that staffers by and large act as faithful agents of their bosses. The standard response to concerns over agency loss within congressional enterprises is that employment is at-will; members may simply fire any rogue or shirking agents within their offices (Salisbury and Shepsle 1981b; Weiss 1989; Whiteman 1995). There are no civil service protections for staff in Congress, and the continuing existence of staffers' jobs is dependent on their bosses' re-election. According to the faithful agent view of congressional staff, these conditions lead staffers to quickly internalize strong professional norms of responsiveness to their members (Romzek and Utter 1997; Weiss 1989). Ultimately, Salisbury and Shepsle (1981 p. 568) suggest that these professional incentives select for staffers they call "politicos," whose primary concern is neither to

provide professional expertise, nor to pursue specific policies they care about, but rather is "the career of the member who heads the enterprise." They argue that while staff may fill different roles and "pursue multiple policy objectives, [...] these are always subordinate to the needs of the member" (p. 568). Salisbury and Shepsle (1981a) interpret the fact that individual staffers' careers and turnover seem to track those of their bosses, especially among personal office staff, as suggestive evidence of staffers' personal loyalty. This scholarship argues that because of a combination of sufficiently similar preferences between legislators and their staffs and staffers' self-motivated interest in their bosses' re-elections, staffers either naturally seek to pursue their bosses' goals, or, through fear of monitoring and dismissal, are induced to do so.

While this largely untested expectation that staffers simply serve their bosses faithfully is common in the descriptive literature, it has been unquestioningly incorporated into the majority of the theoretical and formal literature on legislator behavior and policy-making. For example, foundational theories of member behavior focus on individual legislator incentives (e.g. Mayhew 1974; Fenno 1978). These theories disregard the fact that members' understanding of their districts, the political context, interest group priorities, and even their evaluations of plausible activities may be fundamentally shaped by the gatekeeping behavior of their staffers (see Hertel-Fernandez, Mildenberger, and Stokes 2019).

Moreover, canonical formal models of vote choice (Kingdon 1977; Krehbiel 1998), agenda setting (Romer and Rosenthal 1978), oversight (McCubbins and Schwartz 1984; Ferejohn and Shipan 1990), distributive politics (see Collie 1988), and legislative organization (Gilligan and Krehbiel 1990) all rest on an assumption of members as unitary strategic actors (see Shepsle and Weingast 1995, for review). This foundational assumption of rational choice theory does not sit well with the insight that legislative behavior is better understood as the output of an enterprise comprised of

dozens.[2] This literature implicitly builds the assumption — that staffers act as faithful agents of their bosses — into the rest of our understanding of legislator behavior.[3]

2.2.2 Staff as Independent Agents

Although scholars have been attentive to the role of principal-agent problems in policy delegation and the development of expertise in other institutional contexts (e.g. Gailmard and Patty 2007), it remains unexamined within legislative enterprises in Congress. Traditionally, representatives are viewed as accountable to their constituents through the electoral connection (Mayhew 1974), and thus their actions are understood to be democratically legitimate. However, if principal agent problems abound inside legislative enterprises, we cannot view legislative behavior as necessarily driven by representatives' calculations about their district, grounded in their reelection concerns. Rather, legislator actions should be understood as mediated by their staffers, who may be acting according to their own, rather than their members', goals.

The independent agent view recognizes that staffers have considerable autonomy within legislator-enterprises (Salisbury and Shepsle 1981b). Staffers often are in a position to engage in information search processes with little to no direction, and determine which information is important (Salisbury and Shepsle 1981b; Romzek and Utter 1996, 1997). Romzek and Utter (1997) note the limits of legislators as supervisors in ensuring staffer accountability. Members of Congress have "limited time, inclination, and ability to discern when staff have deployed their expertise in

2. These enterprises range from roughly 18 staffers (the cap for a House personal office), to several hundred for committee or leadership in the Senate.

3. It is commonplace in formal literature to represent large bodies of actors as a single actor by black boxing the decision-making process within that body, and to understand that representation as the body's decision maker. For example, this is what we do when representing different institutions by the location of their pivotal actors. Representing the legislative enterprise, with the preferences of the legislator themselves is fine if they are in fact the decision-maker within their enterprise. This is what the faithful agent hypothesis describes. However, if staffers are not faithful agents, then legislators are not actually the true decision-makers within their own enterprise and this formal simplification obscures the biases that unfaithful agents may induce.

ways that undermine institutional purposes" (Romzek and Utter 1997, p. 1254).

Where previous studies of congressional staff were satisfied that staffers' personal loyalty led staff to be highly responsive to members' interests (c.f. Price 1971), Malbin (1980) raises the specter of democratic illegitimacy in which the "unelected representatives" (staffers) unduly influence the elected ones (legislators). Malbin's 1981 careful case study of information provision in four committees in Congress highlights the influence that various key staffers can have on outcomes from allocating agenda space to bill passage. His concern is that these entrepreneurial staffers may use this power in pursuit of their own policy motivations (see also Price 1971). Staffers may have their own ideological or issue motivations, aside from their bosses, or may act in service of particular constituencies to increase future employment opportunities for themselves.

The concern raised by this view is that staffers' preferences diverge from the legislators they work for, and they may exercise the autonomy provided by the legislator-enterprise context to act according to their own, rather than their bosses' preferences. In this chapter, I test for this possibility in the information selection choices of staffers.

2.2.3 Staff as Motivated Reasoners

Both the faithful- and independent-agent perspectives described above implicitly assume that staffers rationally select information according to either their principals' or their own interests. However, as the contemporary understanding of political decision-making makes clear, this may not be the case because motivated reasoning is widespread (see Taber 2013). In this section, I bring insights from the political psychology literature to the question of congressional staff behavior. I argue that staffers' information evaluations are, in fact, subject to their own cognitive biases. I then detail how we should expect staffers who are engaged in motivated reasoning to behave differently from either the faithful or independent agents theorized above.

Staffers' decision-making environments map closely to those studied by cognitive

and political psychologists. Staffers are highly politically sophisticated, and operate under time and resource constraints in complex information environments; often they are tasked with multiple issues or bills at the same time under pressing deadlines. In such environments, constraints of circumstance and human cognition force people to satisfice rather than optimize, and rely heavily on cognitive heuristics and shortcuts in complex information environments (Simon 1955; Tversky and Kahneman 1974; Lupia 1994). Lau and Redlawsk (2001) argue that people rely more on heuristics in more complex information environments, and find that among political sophisticates, endorsement and ideology serve as particularly strong cues.

While canonical findings about political information processing were demonstrated in the general public, there is good reason to believe that they should hold among an elite population like congressional staffers. Motivated reasoning effects are commonly conditioned on the interaction between political knowledge (or sophistication) and ideology (or partisanship) (Taber 2013). Political sophisticates are more likely to have strong and coherent prior ideological commitments (Converse 1964), and thus tend to have stronger ideological goals driving their reasoning. They are also more likely to process information schematically (Lodge and Hamill 1986). Indeed, Fiske, Kinder, and Larter (1983) show that experts are *actually more able* to come up with counter-arguments to counter-attitudinal information, while they accept attitude-confirming information uncritically.

By the standards of the general public, staffers are highly knowledgeable, politically sophisticated, and tend to have strong partisan identities and coherent ideological commitments. As such, there is every reason to believe that staffers are subject to the same tendencies to trust and use attitude-confirming information over counter-attitudinal information as the general public.

Kunda (1990) shows that when people have directional goals—preferences in one direction or another over the outcome of a question— they engage in information

search and evaluation processes that tend to arrive at the conclusions favored by their prior attitudes. To some degree this is constrained by their ability to construct seemingly reasonable justifications for their conclusions (Kunda 1990). This result is particularly relevant for the representational implications of outside information. I argue that by producing and disseminating ideologically driven information, outside groups can alter the distribution of information over which staffers aggregate. The existence of more extreme ideological information may provide ideologically driven staffers the necessary rationalizations that underpin their motivated reasoning.

People with ideological goals are subject to both confirmation and disconfirmation (Taber and Lodge 2006). When given a range of information options, individuals select information that is likely to confirm their pre-existing attitudes at much higher rates than counter-attitudinal information. Additionally, they are selectively skeptical, subjecting counter-attitudinal information to a higher degree of scrutiny than information that supports their prior beliefs. Nyhan and Reifler (2010) find that corrective information is often ineffective at countering a pro-attitudinal misperception.

There is a key distinction between the view that staffers are independent agents with instrumental preference for information that favors their preferences, and the theory I present above, that staffers are cognitively biased in favor of pro-attitudinal information: the former view is strategic, while the latter is largely sub-conscious. This fact reveals a crucial difference between the observable implications of independent agent staffers and motivated reasoning staffers. If staffers operate largely as independent agents, we should expect the degree to which they select according to their own preferences to vary depending on the incentives they face, since they are operating strategically. However, if staffers' bias towards pro-attitudinal information is subconscious, as the cognitive perspective would suggest, we should observe staffers engaging in this sort of selection regardless of how their institutional circumstance alters their incentives. In the next section, as I lay out hypotheses that distinguish be-

tween the three theoretical perspectives detailed here, I specify in more detail how this difference can be leveraged to differentiate the motivated reasoning view of staffers from the independent agent view.

2.2.4 Evaluating theories of staff behavior

The three perspectives described above provide clear, testable implications regarding staffer selection of information sources. In this section, I describe several observable implications which should distinguish between staffers as faithful, independent, or motivated reasoning agents. I focus particularly on the ideological dimension of staffer information selection and gatekeeping, and test expectations about the ideological valence of sources that staffers select, which we should expect to differ depending on which of these three theories of staff behavior obtains.

Faithful Agents

Recalling Weiss (1989) and Patashnik and Peck's (2016) findings that members seek information that support their prior policy positions, we should expect staffers to select information that is aligned with their bosses' ideologies if they were truly acting as faithful agents. This expectation yields the *Faithful Agent Hypothesis*. This Hypothesis, H1, is the most simple and direct test of the theory of staffers as faithful agents, described in the prior section.

Hypothesis 1 (H1): Faithful Agent Hypothesis

Staffers with more conservative (liberal) bosses will be more likely to trust and use information from conservative (liberal) sources.

In general, internal information sources like the Congressional Research Service (CRS), Government Accountability Office (GAO), and Congressional Budget Office

(CBO) are considered to be highly credible among members and staff.[4] However, these sources are constrained in their ability to take political or ideological positions by strong professional norms of objectivity and impartiality (Kosar 2018; Joyce 2011). Because of this, responsive staffers who work for members of Congress with more extreme ideological positions will have a greater need to seek out external, ideological sources to meet the needs of their bosses. This intuition leads to the *Principal Extremism Hypothesis*, which is also a test of staffers as faithful agents.

Hypothesis 2 (H2): Principal Extremism Hypothesis

Staffers with more ideologically-extreme bosses will report higher levels of trust and use of external information sources that are ideologically-aligned with their bosses than their counterparts with more moderate bosses.

H2 differs from H1 in that the relationship between ideological alignment and trust and use of an information source should be particularly stronger among the most extreme staffers—and may differ depending on whether staffers are extreme on the left or right ideologically.

Independent Agents

If, as Price (1971) argues, staffers are "policy entrepreneurs" driven by their own policy goals, then Malbin's 1980 representational concerns are well founded. The independent agent perspective suggests that supervision by members of Congress is not an effective accountability mechanism for staff, and that staffers exploit this agency slack to select sources for their bosses that accord with their own, instead of their bosses' preferences. In order to test the staffers as independent agents perspective, I introduce the *Independent Agent Hypothesis*.

Hypothesis 3 (H3): Independent Agent Hypothesis

4. This was a repeated theme in the in-person interviews that I conducted with committee staffers in October 2018.

More conservative (liberal) staffers will be more likely to trust and use information from conservative (liberal) sources.

For the same reason that I expect faithful agents of more extreme principals to rely more heavily on external ideological sources, independent agents with more extreme ideologies themselves should display a similar increased preference for ideologically aligned external sources. Because of this analogous reasoning—more extreme staffers will need to find more extreme sources to support their prior positions—the *Independent Agent Extremism Hypothesis* takes a similar form to the *Principal Extremism Hypothesis*.

Hypothesis 4 (H4): Independent Agent Extremism Hypothesis

More ideologically-extreme staffers will report higher levels of trust and use of ideologically aligned external information sources than their more moderate counterparts.

Hypotheses one through four, articulated above, are intended to adjudicate whether or not staffers operate as faithful agents of their bosses by selecting information sources that are consonant with their bosses' ideological positions. A lack of support for hypotheses one and two coupled with evidence in support of hypotheses three and four would be strong evidence that staffers are not effectively constrained by their bosses, instead selecting information according to their own attitude. However, such a result would do little to clarify whether the agency loss in the legislator-staffer relationship is the result of intentional agent shirking (pursuing their own policy goals), or potentially unintentional bias in agents' selection process due to ideological motivated reasoning.

Both an independent agent instrumentally selecting information to advance their own policy goals, and a motivated reasoning agent subject to subconscious bias would select information in line with their own, rather than their principal's beliefs. This makes it difficult to distinguish between these two possible theories of congressional staff behavior. However, there are a few points of leverage that I exploit.

Motivated Reasoners

First, one of the recurring themes in the early literature on congressional staff is that staffers are loyal and responsive to their bosses, because their career fortunes are tied to their bosses' political success (Salisbury and Shepsle 1981b; Weiss 1989; Romzek and Utter 1997). If a member loses a bid for re-election, many of her staffers lose their jobs as well (Salisbury and Shepsle 1981a). Because of this, we may expect staffers who work for members of Congress who are more electorally vulnerable, to be more responsive to their bosses than those in safe seats. In the language of the principal-agent model, when the principal is electorally vulnerable, career self-interest should align the incentives of the principal and the agent, and we should expect less shirking by the agent (a switch from an independent to a faithful type). I call this expectation the *Vulnerable Principal Hypothesis*. Importantly, this result should only obtain if staffers are operating according to the principal-agent paradigm. If, instead, staffers favorable evaluations of ideologically consonant information sources is the result of largely subconscious cognitive biases, they will not respond strategically to the vulnerability of their principals.

Hypothesis 5 (H5): Vulnerable Principal Hypothesis

Staffers of legislators from competitive districts or states will trust and use information according to their own ideology less than staffers of legislators with safe seats.

Support for this hypothesis would indicate that staffers are using information aligned with their own preferences strategically and, that sufficient motivation (in the form of an electorally vulnerable boss) induces them to act as faithful agents. This result would suggest that the rest of the time staffers act relatively independently, according to their own ideologies. On the other hand, if there is no observable difference between staffers of vulnerable and safe legislators it would suggest that the

effects of individual staffers' ideologies on the information they trust and use is the product of subconscious bias or motivated reasoning.

Together, these hypotheses represent testable implications of the three different theoretical perspectives on congressional staff behavior that I have offered. Evaluating these expectations represents a substantial step forward in understanding the fundamental role that staffers play in the representational process. If staffers that frequently behave as independent or motivated reasoning agents within legislator-enterprises, it calls into question the democratic legitimacy of actions taken by legislators insofar as their actions may be informed and shaped by staffers not pursuing the interests of their legislator principals. As such, findings contrary to the faithful agent hypotheses should represent a substantial concern for both scholars and practitioners.

2.3 Congressional staff interviews

To qualitatively evaluate the plausibility of the theory of staffers as information gate-keepers and potentially biased aggregators that I have advanced above, I conducted a series of interviews between October 8th and October 24th, 2018, with congressional committee staffers. However, these interviews should not be viewed as dispositive evidence capable of adjudicating between the alternate models of staffer behavior. Rather, they provide valuable context, detailing the decision environment and competing incentives that shape staffer behavior. While I rely on large-n survey data to test my hypotheses more fully in subsequent sections, my conversations with these 16 staffers lend texture and facial plausibility to the hypotheses I have proposed.[5] It is also worth noting that I interviewed staffers in committee staff, who, compared to their personal office counterparts have more time and attention to devote to particular issues and develop substantive expertise (Malbin 1980; Krehbiel 1992;

5. I conducted 16 interviews during this period with current and former members of committee staff in both the House and Senate, on the Republican and Democratic side. I interviewed members of both authorizing and appropriating committees.

Hall 1996). Because of this, committee staffers may be under less pressure than personal office staff to rely on heuristics, and may tend to have weaker directional goals. This makes committees a "least likely case" for detecting information environments most conducive to motivated reasoning (Eckstein 2000).

Despite this, the staffers I interviewed described a set of constraints and pressures much in line with the sorts of work environments I expected, and which may lead to motivated reasoning. They frequently detailed working on multiple issues or bills simultaneously, often under pressing deadlines. In many cases they were the only staffer assigned to handle a particular hearing, bill, or issue. While interviewees tended to view themselves as having the resources necessary to complete their jobs, one staffer highlighted the effects of the resource and time constraints they operate under: "I think there's a lot of mistakes that occur in terms of data and people's information flow. Just because they don't have time to really sit down and learn more about things and figure out what they should be trusting and who they should be trusting.[...] [Y]ou start making lower quality choices about your data and information" (Anonymous, personal communication, October, 2018). Several committee staff I spoke with viewed this problem as particularly pronounced in the House and in personal offices. In short, staffers make decisions in an environment which is conducive to high levels of reliance on heuristics and prior attitudes. This lends plausibility to the concern that staffers may act as motivated reasoners.

The need to be responsive to their bosses, as we might expect from a faithful agent, was a recurring theme across multiple interviews. "[W]e obviously work for members of Congress who ... have certain stances on issues. And sometimes those bear on what we find out about how money is being spent." The staffers I spoke with are in a position where they need to be responsive to partisan or ideological agendas, but also have a real interest in understanding the link between policy tools and the outcomes over which they have preferences.

A professional staffer for the minority on an authorizing committee in the Senate noted, "We absolutely still work for [the Ranking Member] at the end of the day. [When...] working on [a] bill, I'm going to make sure that it reflects the interests of [his/her] constituents and [state]." Another staffer remarked that "[M]y boss is my subcommittee ranking member [and is] very active in [the] immigration front. [S/he] is [v]ery close to the immigration advocacy community. I can't look at my job that way. I can't be an advocate. [...] But, because I know that my person I work for is sympathetic to the approach that these folks have, I mean, that certainly makes a difference versus somebody who might come in from the other side of that issue." Another interview subject described their committee chair as constraining them such that they are only being able to stray so much from the chair's preferred outcome. For them, this meant that certain sources are not useful.

Several spoke about this pressure being in tension with their desire to get the best information possible to evaluate policy options. One staffer noted,"you want a good piece of legislation, you want it right, you want to make sure it's not doing things that you're not expecting. You want that legislation to carry out the policy you're trying to implement." The incentive for accuracy fits with existing theoretical expectations. Esterling (2004) suggests that risk averse legislators have an incentive to rely on research to implement socially efficient policies; that is, the ultimate fear of electoral repercussions from failed policies induces an accuracy goal in legislators. Another staffer described how their concern over unintended consequences induced accuracy goals as well, stating, "I do not want to cherry pick information, that ends up with bad policy and we get unintended consequences no matter what, we get way more if we don't know what we're actually walking into."

Of course this desire to "get it right" leaves the unanswered question of *how* staffers evaluate which information is trustworthy. In interviews several staffers highlighted how they and others use ideological or partisan cues in their evaluation of information

sources. As one Democratic staffer put it:

> All institutions sort of have a focus or an area of concern or way they think about things. So I'm aware of that and some are more aligned with Democratic ways of thinking and some are less aligned so that is taken into account [...] I'm like 'What is this person's bias and where do I think they've got it right and where do I think they've got it wrong, what is their overall policy agenda, to shrink government?' [...] I would think that the [Republican] majority doesn't particularly go to the Center on Budget Policy Priorities website because the Center on Budget is focused on insuring benefit rights for people who need them and that's not usually the main focus of the majority so they wouldn't be using their material to advance their positions.

Another Democratic staffer offered a similar perspective on ideological selection of their outside information sources.

> We look a lot at studies, for example, from Brookings Institution, which I find great. But I think Brookings tends to be viewed as [a] more left, left-ish think tank by some folks. And the same way I would view something from American Enterprise Institution. I tend to think of that as a right-wing institution. So you kind of have to think of the biases when you're taking in this data.

A Republican committee staffer highlighted the usefulness of outside sources as partisan signals on policy. "I need an answer quickly, I know the Republican Party's answer is probably close to what someone at AEI or Heritage is saying. And vice versa. That's true for every issue and every political stripe. [P]eople have their kind of go-to where they know people most closely."

However, he cautioned that ideological information sources can trigger skepticism from non-aligned minority staffers that he may be working with in committee, noting, "[I]f I cite even good work that's happening at Heritage or AEI and I'm presenting that to someone from the other side, they're going to immediately discount it [...] People are very quick to dismiss what you're saying because of who you're citing [...] [I]t happens quite a bit."

The impression given by the staffers I interviewed was one that is largely consistent with the gate-keeping view of staffers that I advance in this chapter. Staffers work under considerable constraints to find sources that provide information about issues and policies they are tasked with evaluating, and use this information to inform their bosses. However, they face competing pressures as they do this. Staffers report pressure to be responsive to their bosses' needs, but must also rely on their individual judgements about sources. A frequent refrain was reliance on their personal, individual understandings of the credibility of sources, often influenced by their perception of those sources' ideologies or partisan affiliation. In short, the three alternative frameworks I propose in this chapter, all seem plausible given my conversations with staffers. In order to assess their merit, I turn to analyses of staffers' evaluations of information sources that I have collected through the CCS.

2.4 Survey Data

I evaluate the competing theories of staffer behavior presented above using original survey data that I collected as part of the Congressional Capacity Survey (CCS).[6] The 2017 CCS was a joint survey venture between New America and R Street, conducted by Tim LaPira, Lee Drutman, Alex Hertel-Fernandez, Kevin Kosar and myself.[7] This

6. The Congressional Capacity Surveys (2017, 2019) have been supported by the Hewlett Foundation's Madison Initiative, Democracy Fund, and the Center for Effective Lawmaking.

7. The questions measuring the use of, and trust in, a battery of information sources were designed by me and included in the survey at my request. I have received agreement from my co-PIs on the CSS to use these data in my dissertation and to publish on results based on these data in a solo-

represents the largest academic survey of congressional staffers to date. It was fielded between August 9 and November 4, 2017. Using a complete census of congressional staffers purchased from LegiStorm, we identified 8,485 prospective respondents who worked in D.C. offices whose primary responsibility was to contribute to legislative operations, as broadly construed as possible.[8] The survey was sent to the full sample of identified staffers using their congressional email addresses. Staffers and offices were contacted by a variety of outside validator organizations to encourage them to participate in the survey.[9] Recipients were reminded to participate in the survey two times following initial outreach.[10]

Overall, the final response rate of the survey was 5.2 percent (441 of 8,485). These data are the largest and most comprehensive existing dataset of congressional staffer attitudes towards information sources. The final sample used in the analysis is well over three times the size of the recent similar staff survey conducted by Hertel-Fernandez, Mildenberger, and Stokes (2019). The difficulty surveying this population and scarcity of data of this kind have made direct study of congressional staff behavior a comparative blind spot in the study of Congress. These data are the best currently available to assess these fundamental questions of representation, information processing, and policy-making by congressional staffers.

However, low survey response rates are concerning as non-representativeness in the sample can present significant challenges to inference. The sample is actually quite representative of the overall population of congressional staffers, and I take several additional steps to address the challenges to inference presented by possible

authorship capacity.

8. We excluded staffers that worked in offices with strictly administrative, facilities, or maintenance missions (such as House Office of Logistics and Support and Senate Office of Printing, Graphics and Direct Mail).

9. Validators included LegBranch.com, the R Street Institute, PopVox, Congressional Management Foundation, Pew Charitable Trusts, Bipartisan Policy Center, Stennis Center, and various congressional staff.

10. More details on the survey timeline and outreach procedure can be found in the 2017 CCS methodological addendum, reproduced in Appendix D.

selection and non-response bias. The CCS respondents comprise a diverse and largely representative sample of congressional staff on observables. These responses come from staffers in 133 House personal offices, 27 House committee or leadership offices, 60 Senate personal offices, and 24 Senate committee or leadership offices. Figure D.1 in Appendix D, shows the unweighted difference in means between the survey respondents and a separate random selection sample of 450 non-respondents for whom complete career history data was purchased from LegiStorm. In general, balance is very strong on career trajectory covariates (number of prior employers, tenure, salary), several key institutional covariates (party, chamber), and the party and ideology of their bosses. I report detailed balance statistics in Appendices C and D.[11]

Finally, throughout the analyses I report below, I use several approaches to address non-response bias. All respondents were given inverse probability weights using a post-stratification procedure conditioning on the joint distribution of chamber, office type (personal, committee, other), and party (Democratic, Republican, other) in the population, using the sampling frame purchased from LegiStorm (Lumley et al. 2004; Lumley 2017). The maximum weight applied to any case was 4.82, and the minimum 0.749. Comprehensive balance tests, both pre and post-weighting can be found in the 2017 CCS Methodological Appendix (Furnas & LaPira, 2018), which is reproduced in full in Appendix C. Because the application of these post-stratification weights improves balance generally, I use them in all of the subsequent analyses in this chapter. Additionally, all of the econometric models reported here use a two-stage Heckman selection procedure in an attempt to account for selection bias in who chooses to respond to the survey. There is more detail about this procedure in the Methods section of this chapter, and an example stage-one model is reported in Appendix A.

11. Additionally, rates are consistently low for this type of survey. In recent years major public opinion firms routinely receive response rates of between 5 and 7 percent to their telephone surveys, and social scientists routinely rely on these data to estimate public opinion. e.g `https://news.gallup.com/opinion/methodology/225143/listening-state-telephone-surveys.aspx` and `http://www.pewresearch.org/fact-tank/2019/02/27/response-rates-in-telephone-surveys-have-resumed-their-decline/`

This chapter is concerned with how staffers' incentives and attitudes influence their behavior as information gate-keepers. To evaluate this, I turn to questions I asked on the 2017 CCS in which staffers were asked to report their level of *trust* in a variety of information sources and the frequency with which they *use* these information sources when they make recommendations to their bosses.[12] These ratings of the trustworthiness and frequency of use of different categories of information sources are the primary dependent variables for the analyses in this chapter.

The primary constructs of interest are staffers' ideologies and the ideology of the Members of Congress they report to. I measure *Staffer Ideology* as a latent variable derived from a five question battery taken from Heinz (1993), validated by Esterling (2018). I use the items in this battery to create an ideal point estimate for each staffer using a Partial Credit Model (PCM), a Rasch model extension of item-response theory (IRT) that is appropriate for ordinal variables (Fischer and Molenaar 2012; Mair and Hatzinger 2007).[13] I standardize this ideology score to have a mean of 0 and a standard deviation of 1. For more information on the structure of the questionnaire and question wording see Appendix B. The ideology of the Member of Congress the staffer reports to, *Boss Ideology*, is captured by the first dimension of DW-Nominate (Poole and Rosenthal 2000), which has also been standardized to a mean of 0 and a standard deviation of 1. In several sets of models, the absolute value of these scores are used as measures of extremism.

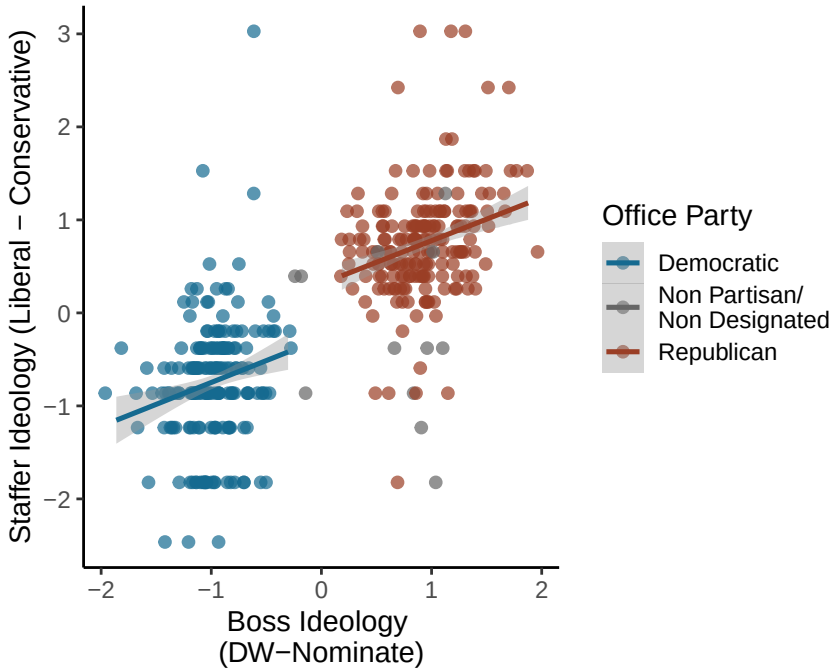
It is important to note that, at least descriptively, there appears to be substantial

12. It is worth noting that in the subsequent empirical analysis, I use survey responses from staffers regarding their perception of the trustworthiness of and their frequency of use for a variety of information sources. Because these questions were asked in close proximity to each other, it is difficult to disentangle the extent to which they are truly measuring different concepts. Put another way, I expect staffers to report higher likelihood of using information sources that they report trusting and vice versa. A staffer rating a source as one they use frequently may experience a demand effect to also then rate that source as something they find trustworthy. As such, I expect most of the hypotheses enumerated above to apply to both the reported trust and use of information sources, even if conceptually we might expect them to differ in some cases.

13. Results were substantively the same using a simple additive index of the ideology battery question items.

variation between staffer's ideology and the ideology of the Member of Congress they report to. These two ideology measures are not jointly scaled, so direct tests of absolute differences between a staffer's ideology and their boss's are not possible. However, as Figure 2.1 shows, the relationship between the ideology of a staffer and that of their boss is by no means perfectly predictive. Overall, the two measures display a Spearman rank correlation of 0.752. However, within party the correlation between staffers' and their bosses' ideologies are much lower, 0.256 among Republicans and 0.338 among Democrats. Staffers have a strong tendency to work for Members of Congress on the same "side" as them politically, with left-of-center staffers working for left-of-center Members of Congress and vice versa.

Figure 2.1: **Staffer and Boss Ideology is Weakly Correlated Within Party**



This Figure shows the relationship between staffers' ideology and the ideology of the members of Congress they report to. Within party rank correlations are low to moderate. Both measures are standardised to mean = 0, SD = 1 to aid comparison.

2.5 Evaluating staffer trust and use of individual sources

In this section, I present a series of statistical models aimed at testing the relationship between *Staffer Ideology*, their *Boss's Ideology* and a staffer's reported level of *Trust* and frequency of *Use* of six information sources of interest: left-of-center think tanks, right-of-center think tanks, university researchers, Congressional Research Service (CRS), Congressional Budget Office (CBO), and the Government Accountability Office (GAO).

2.5.1 Tests of principal and agent ideology (H1 & H3): Methods

The single biggest threat to inference presented by the data used in this chapter is the potential for non-response bias, which is exacerbated by the comparatively low response rate of the CCS. This limitation of the survey data collected is a critical factor in the methodological approach I take in this study. While this is a potential problem in all survey research, I take care to address this issue insofar as it is possible with existing data. In addition to using post-stratification weights based on the joint distribution of chamber, office type, and party, each model is estimated using a two-stage Heckman selection model (**Heckman1977sample**). The first stage uses a probit regression to model the probability of response in the dataset comprised of 441 survey respondents and 450 randomly selected non-respondents with multiple imputation for missing data (Honaker, King, Blackwell, et al. 2011). The inverse Mills ratio, or non-selection hazard, from this first stage probit model was then included as an independent variable in the second stage model to account for individual staffers' likelihood of not responding to the survey (**Heckman1977sample**).

Because the dependent variables used in this study are likert-type survey questions, with four categories of "trustworthiness" and three categories of "frequency of use," I opt against using an ordinary least squares in the second stage of the selection models. Instead, I use ordinal logistic regression models with a cumulative (logistic)

link function (Greene 2003). This better captures the structure of the dependent variable.[14] Finally, I use multiple imputation to account for low levels of missing data in independent variables from the survey responses (Honaker, King, Blackwell, et al. 2011).

In order to appropriately propagate the uncertainty of the non-selection hazard (estimated in the first stage) and the imputation procedure, I use a repeated sampling and model averaging approach. I generate 1000 imputed datasets using `Amelia II` (Honaker, King, Blackwell, et al. 2011). For each imputed dataset, I predict each respondent's non-selection hazard using a selection dataset resampled with replacement. I then run an ordinal logistic regression including the non-selection hazard as an independent variable to model respondents' reported level of *trust* in or *use* of each information source in each imputed dataset and then combine the results using Rubin's rules as implemented by Lumley (2006).

In the first, and simplest, set of models I estimate *Staffer Ideology* and the ideology of their boss, *Boss Ideology*, as separate ratio-scale independent variables. These models are intended to test hypotheses 1 and 3. I estimate models with these two key independent variables on both the *Use* and *Trust* dependent variables. These models test the relationship between an agent's (staffer) ideology and their trust and use of a source, and their principal's ideology and that agent's trust and use of a source.

Each model uses the following functional form, where Y_i is the ordinal response category of J categories of the dependent variables (Agresti 2003).[15]

14. Results are substantively similar when estimated with OLS.

15. These models are replicated in Appendix F using Ordinary Least Squares as the second stage. Results are substantively the same.

$$logit(P(Y_i < j)) = \theta_j + \beta_1(\texttt{Staffer Ideology}_i) + \beta_2(\texttt{Boss Ideology}_i) + \boldsymbol{\beta}(\mathbf{X_i})$$
$$i = 1, ..., n \quad j = 1, ..., J-1 \tag{2.1}$$

In these models, $\mathbf{X_i}$ represents a vector of individual conditioning variables :

- *Tenure*, a sum of the number of years the staffer has worked in Congress.
- *log(Salary)*, the natural log of the staffer's yearly salary.
- *Seniority*, a three category ordinal variable.
- *Office Type*, which captures whether a staffer is a member of a personal, committee, or leadership office.
- *Chamber*, a dummy variable for the chamber in which the respondent works.
- *Issue*, a dummy variable for which issue battery the respondent was asked to evaluate sources under.
- *IMR*, the inverse Mills ratio (non-selection hazard) estimated in the first stage model.

These control variables are chosen to account for other potential factors that may shape how staffers view different information sources. Staffers who have served in the institution for longer may have developed different relationships with these sources, or have similar patterns of source trust or use based on being socialized into the institution when internal knowledge providers were more prevalent. Staffers with higher salaries or those in more senior roles may have more responsibility, operate under more extreme time constraints, and need to rely on different cues or shortcuts in their evaluation of information sources. A categorical variable for the issue about

which the information source questions were asked is included to account for the fact that certain information sources may be viewed as more trustworthy or useful on some issues than others. For example, we might imagine that staffers report higher levels of trust and use of the Congressional Budget Office when asked about making recommendations on budgetary issues than when asked about making recommendations on national security issues. Dummy variables for chamber and office type help account for the different information environments and imperatives of staffers within different institutional settings. Finally, the inverse Mills ratio is included to condition on the individual respondent's propensity to have responded to the survey as estimated from the first stage regression model. [16][17]

If staffers aggregate in a politically or ideologically unbiased fashion — that is, ideology, both their own and their bosses', is not associated with selection of information — β_1 and β_2 should not be distinguishable from 0 even at very generous levels, as we should not expect staffer or boss ideology to play a role in the selection process. On the other hand, if staffers act as faithful agents, we should expect their bosses' ideology to be a strong determining factor in the information sources they report trusting and using, as Hypothesis 1 (Faithful Agent Hypothesis) articulates. Finally, if staffers act according to their own preferences, we should expect staffer ideology to have a strong association with staffer's judgements of these sources as detailed in Hypothesis 3 (Independent Agent Hypothesis).

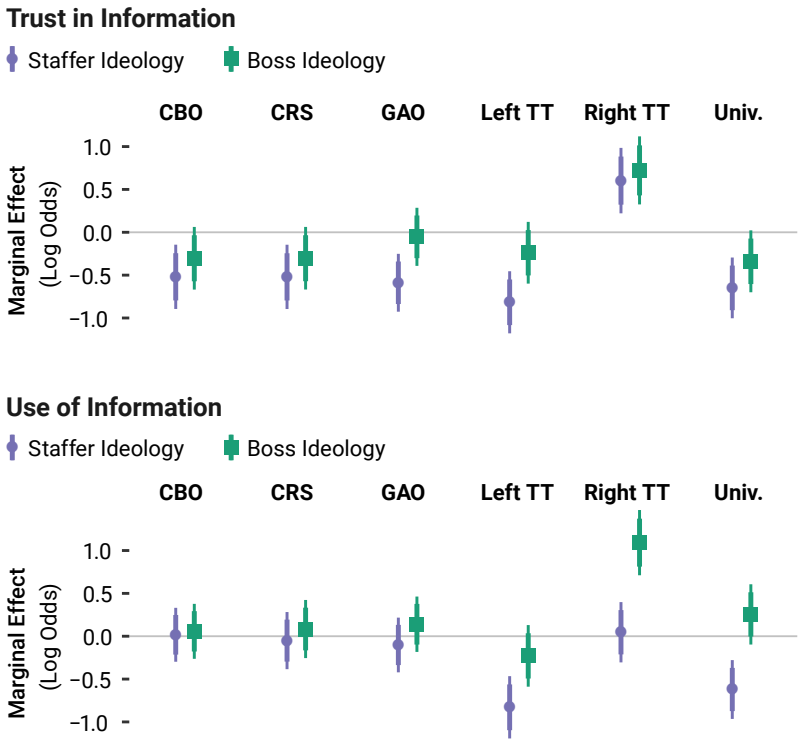
16. A reasonable reader may be concerned that this particular collection of conditioning variables was selected in order to bolster the desired results. However, these conditioning variables were selected for both theoretical reasons, and their availability in the CCS dataset, and no alternative collections of control variables was tested.

17. Results were also estimated without the Inverse Mills ratio using only a single stage cumulative logistic regression. These results were substantively the same as those that include the non-selection hazard estimate.

2.5.2 Results: evaluating hypotheses 1 and 3

In this section, I report the results from the models detailed above. For ease of interpretation, the coefficient estimates for the independent variables of interest are presented graphically in Figure 2.2, with the full regression results in Appendix A, Tables A.1 and A.3.

Figure 2.2: **Faithful vs. Independent Agent Results**



Effect of boss and staffer ideology on information trust and use. Ninety-five and eighty-five percent confidence intervals shown around coefficient estimates.

Figure 2.2 shows results which demonstrate that staffer ideology corresponds with differing levels of trust across sources. For example, conservative staffers tend to report lower levels of trust in the CBO, CRS, GAO, left-of-center think tanks, and university researchers than more liberal staffers. On the other hand, more conservative staffers are considerably more likely to report higher levels of trust in right-of-center think tanks than their liberal counterparts. That conservative staffers trust right-of-

center think tanks more and liberal staffers trust left-of-center think tanks more is not surprising on its face. Furthermore, the models of trust in the CRS, GAO and CRS demonstrate that conservative staffers are less likely to trust these highly-regarded, independent, internal sources than liberal staffers.

It is especially significant that this strong correspondence between staffer ideology and evaluations of information sources is this pronounced *in models which are also conditioning on the ideology of these staffers' bosses*. Irrespective of the ideologies of their principals, staffers appear to evaluate information sources largely according to their own personal preferences.

In more substantive terms, the effects represented in Figure 2.2 show that a one standard deviation more conservative staffer is 183 percent more likely to report a higher level of trust in a right of center think tank than a staffer with the mean ideology score, and only 44 percent as likely to report a higher level of trust in a left-of-center think tank than a staffer with the mean ideology score. Additionally a one standard deviation more conservative staffer is between 59 and 55 percent as likely to report a high level of trust in the internal government sources than a staffer with the mean ideology score. To be clear, these results are reported as the effect of a more conservative staffer (or boss) because the positive end of the ideology scale is associated with conservatism, not because there is anything special about conservatives in these models. These are linear results, and a staffer one standard deviation to the left would be associated with a commensurate, but opposite increase in trust.

On the other hand, the ideology of the member that the staffer reports to has a much less consistent relationship to the staffer's trust of the source. Having a one standard deviation more conservative boss is associated with a staffer being 206 percent more likely to report higher levels of trust in right-of-center think tanks. However, while the estimated association between boss ideology and staffer trust

of a source is in the same direction across all six sources, the relationship is not statistically distinguishable at conventional (alph = .05) levels for any source except right-of-center think tanks.

There is no discernible effect of staffer ideology overall on the use of the internal sources tested. This suggests that while more conservative staffers may trust these sources less, and thus potentially put less weight on the results of these reports, the conclusions of these highly regarded internal sources cannot be ignored. Despite their lower relative levels of trust, more conservative staffers still use these materials when they make recommendations to their bosses.[18] For external sources (left-of-center think tank, right-of-center think tank and university research), the use results are consistent with the trust results. Conservative staffers tend to report lower levels of use for left-of-center think tanks and university research. In contrast to other sources, staffers use right-of-center think tanks more when they have a more conservative principal, whereas more conservative agent (staffer) ideology is not distinguishably associated. This unexpected finding may reflect that conservative members of Congress have particularly strong preferences about this specific category of sources.

Together these results suggest strong evidence for the independent agent hypothesis, and mixed to weak evidence in favor of the faithful agent hypothesis. It is clear that staffer ideology is strongly associated with staffers' evaluations of information sources, even when conditioning on the ideology of their bosses. On the other hand, the relationship between a staffer's boss and that staffer's evaluations of different information sources tends to be weaker and less consistent, obtaining in just three of 12 models estimated here.

18. Of course, the manner in which they use the sources may differ because of that lower level of trust, but I do not test that possibility here.

2.5.3 Tests of principal and agent extremism (H2 & H4): Methods

Next, I turn to evaluating hypotheses 2 (Extreme Principal Hypothesis) and 4 (Independent Extreme Agent Hypothesis). These hypotheses suggest that staffer and member ideology have a more complex relationship with staffers' evaluations of information sources than the simple linear one assumed by the test I've just presented above.

Hypotheses 2 and 4 suggest that more extreme staffers should engage in ideological evaluation of sources more strongly than more moderate sources. I have operationalized this test of the relationship between extremism and source evaluation to allow for the association to differ depending upon whether the staffer (or boss) are left- or right-of-center. This is particularly important because we should expect differential results depending on the valence of the source and its alignment with the staffer and boss. In order to test this, I create *Staffer Extremism* and *Boss Extremism* measures by taking the absolute value of their respective ideology scores. I then interact these extremism variables with a dummy variable indicating whether the staffer (or boss) is left-of-center.[19] These models are estimated on both the *Use* and *Trust* dependent variables, use the identical imputation and two-stage selection approach described above, and take the functional form shown below, where Y_i is the ordinal response category of J categories of the dependent variables (Agresti 2003).[20]

19. Distributions of these ideology scores and the relationship between staffer and boss ideology can be found in Appendix B.

20. These models are replicated in Appendix F using Ordinary Least Squares as the second stage. Results are substantively the same.

$$logit(P(Y_i < j)) = \theta_j + \beta_1(\texttt{Staff Extremism}_i) + \beta_2(\texttt{Boss Extremism}_i) + \beta_3(\texttt{Staff Left}_i)$$
$$+\beta_4(\texttt{Boss Left}_i) + \beta_5(\texttt{Staff Left}_i \times \texttt{Staff Extremism}_i)$$
$$+\beta_6(\texttt{Boss Left}_i \times \texttt{Boss Extremism}_i) + \boldsymbol{\beta}(\mathbf{X_i})$$
$$i = 1, ..., n \quad j = 1, ..., J-1 \tag{2.2}$$

In these models, $\mathbf{X_i}$ represents the same vector of the conditioning variables as those detailed above.

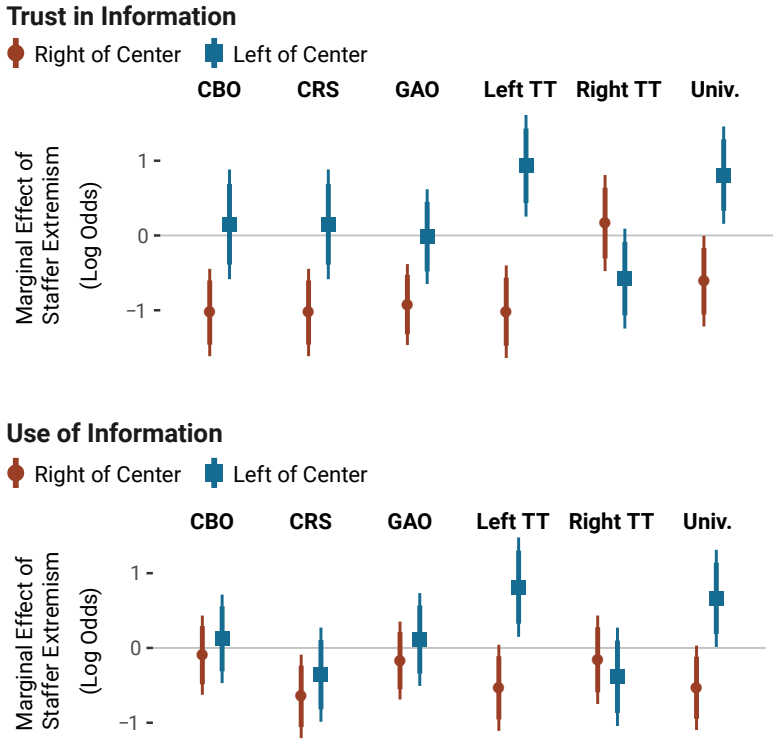
2.5.4 Results: evaluating hypotheses 2 and 4

Estimates of coefficients for the effect of *Staffer Extremism*, conditional on whether that staffer is left-of-center or not are shown in Figure 2.3; full regression results are available in Appendix A, Tables 3 and 4. As Brambor, Clark, and Golder (2006) suggest, I plot the marginal effects of the interaction terms for these models.

These results indicate some asymmetric effects of staffer ideological extremism depending on whether a staffer is liberal or conservative. In five of the six sources investigated, the difference between the effect of increased ideological extremism in a liberal staffer was statistically distinguishable from the effect of increased ideological extremism in a conservative staffer, as indicated by their non-overlapping 85 percent confidence intervals (Payton, Greenstone, and Schenker 2003).

As staffers who are left-of-center become more extreme ideologically they are statistically distinguishably more likely to trust left-of-center think tanks and university produced research than their more moderate counterparts, and less likely to trust right-of-center think tanks. The pattern of ideological selectivity is even starker among staffers who are ideologically right-of-center. Among right-of-center staffers,

Figure 2.3: **Agent Extremism Results**



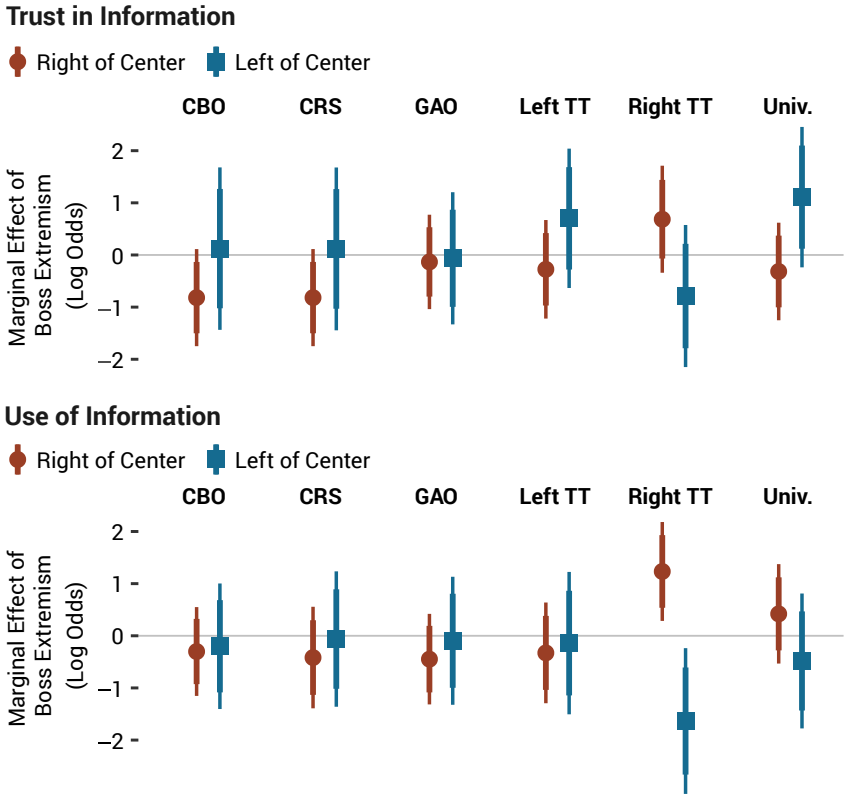
Effect of **staffer extremism** on information trust and use. Ninety-five and eighty-five percent confidence intervals shown around coefficient estimates.

those who are more extreme ideologically actually tend to trust *all sources except for right-of-center think tanks* less than their more moderate right-of-center counterparts. More extreme staffers are less likely to trust the GAO, CRS, and CBO, three highly-regarded non-partisan government sources of information, as well as left-of-center think tanks and university researchers. These models suggest extremely strong support for ideological selectivity in the sources that staffers tend to trust.

Turning to reported levels of use of these information sources, I find similar, albeit less pronounced, patterns of ideological selectivity among more extreme staffers. The results from the models of information use are shown in the bottom panel of Figure 2.2. More extreme liberal staffers are more likely to use information from left-of-center think tanks and university researchers than their more moderate counterparts.

Ideologically conservative staffers, on the other hand, are less likely to report using university research, information from left-of-center think tanks, or the Congressional Research Service than more ideologically moderate conservative staffers. Here too, staffer ideology does not appear to be associated with differential rates of use of right-of-center think tanks.[21] In general, staffer ideology is less strongly associated with use than it is with trust.

Figure 2.4: **Boss Extremism Results**



Effect of **boss extremism** on information trust and use. Ninety-five and eighty-five percent confidence intervals shown around coefficient estimates.

Figure 2.4 shows the marginal effects of the interaction between staffers' bosses' ideology and an indicator variable for whether their boss is left- or right-of-center. There are no statistically distinguishable relationships between boss extremism and staffer trust or use in 11 of the 12 models. Boss extremism is a strong predictor of

21. A VIF test does not reveal problems of multicollinearity in these models.

reported levels of use of right-of-center think tanks.

The main result from these models is a strong association between staffer ideology and trust in information. There is a consistent, but weaker, relationship between staffer ideology and their reported levels of use of information from these sources. In particular more extreme ideologues selectively trust and, to a lesser extent, use sources that are more likely to be aligned with their preconceptions, and that they do so independent of the ideological positions of their bosses. These results are particularly strong among conservative staffers. These results support the extreme independent agent hypothesis (H4), but, with exception of use of right of center think tanks, offer little support to the extreme principal hypothesis (H2).

2.5.5 Analysis of variance

A core question this chapter seeks to address is whether staffers' ideologies or their bosses' ideologies have greater explanatory power over staffers' evaluations of information sources. I further assess this question by conducting an analysis of variance (ANOVA) on separate models of each information source. For these models, I use two-stage Heckman selection models to account for potential non-response bias, and robust linear regression in the second stage. Other than modeling the dependent variable as ratio rather than ordinal scale, these models take the same form as those presented above.

Across all information sources tested, staffers ideology explains *much more* variance in how trustworthy staffers rate information sources than their bosses ideology. This difference ranges from 7.4 times as much variance explained for the CRS to 21.3 times the variance explained for left-of-center think tanks. This is strong evidence in favor of the independent agent thesis of staffer information evaluation.

Percent of Variance Staffer's Trust in Information Explained

Source	Staff Ideology	Boss Ideology	p
CRS	8.33	1.11	0.01
CBO	8.28	1.11	0.01
GAO	9.67	0.37	<0.00
Right TT	22.56	2.72	<0.00
Left TT	22.93	1.08	<0.00
Univ.	15.38	1.08	<0.00

Note: p = proportion of 10,000 bootstrapped `rlm` replicationa in which Staff Ideology explains more variance than Boss Ideology.

Table 2.1: **Staff and Boss Ideology ANOVA**

2.6 Evaluating the effect of source alignment

In this next section, I evaluate whether *Staffer Extremism* and *Boss Extremism* is associated with how a staffer evaluates ideologically aligned or non-aligned sources. This analysis is a useful and necessary addition to the single source models I have reported above. First, by estimating models on a pooled dataset in which staffers' evaluations of different sources are included as separate rows allows me to evaluate the relative levels of trust and use, which previous single source models could not. Secondly, this pooled dataset can be thought of as a repeated-measures design which produces multilevel structure that has some beneficial properties for empirical modeling. I discuss the approach I take in the section below.

2.6.1 Methods: multilevel models of staffer evaluation of (non)aligned sources

The models which follow use staffers' responses to multiple information sources: left-of-center think tank, right-of-center think tank, CRS, CBO, and GAO (Agresti 2003; Christensen 2018).[22] This can be thought of as a repeated measures design. I code each source according to two sets of dummy variables, indicating whether either

22. I have excluded responses to the university researcher source, because I wanted to use these models to compare explicitly ideological outside information to internal government sources.

is aligned or not aligned with a staffer or boss. Staff and Boss alignment variables are measured dyadically. A staffer-source dyad is coded as *Staff Aligned* if the source is a left-of-center (right-of-center) think tank and the staffer has an ideology score left (right) of zero. The dyad is coded as *Staff Non-aligned* if the source is a right-of-center (left-of-center) think tank and the staffer has an ideology score left (right) of zero. The coding of *Boss Aligned* and *Boss Non-aligned* follows the same pattern as coding for the staff variable, but the dyadic alignment is based on whether the source and the staffer's boss are on the same side of the ideological spectrum. This multilevel design allows me to include a mixed effect for each respondent, and each source type (left- and right-of-center think tanks, CBO, CRS and GAO). This helps account for unobserved staffer and information source effects.

For these models, I follow the same two-stage process with 100 separate multiply imputed datasets of respondents, each with their own set of inverse Mills ratios separately estimated from a bootstrap resampled selection dataset in stage one.

I estimate the following model where Y_{ik} is the ordinal response category of i respondent, on k information source, over J categories of the dependent variable.

$$\begin{aligned} logit(P(Y_{ik} < j)) = \theta_j + \beta_1(\texttt{Staff Extremism}_i) + \beta_2(\texttt{Boss Extremism}_i) + \beta_3(\texttt{Staff Aligned}_{ik}) + \\ \beta_4(\texttt{Staff Non-aligned}_{ik}) + \beta_5(\texttt{Staff Aligned}_{ik} \times \texttt{Staff Extremism}_i) + \\ \beta_6(\texttt{Staff non-Aligned}_{ik} \times \texttt{Staff Extremism}_i) + \beta_7(\texttt{Boss Aligned}_{ik} \times \texttt{Boss Extremism}_i) + \\ \beta_8(\texttt{Boss Non-aligned}_{ik} \times \texttt{Boss Extremism}_i) + \boldsymbol{\beta}(\mathbf{X_i}) - u(\texttt{staffer}_i) - u(\texttt{source}_k) \\ i = 1, ..., n \quad k = 1, ..., 6 \quad j = 1, ..., J-1 \end{aligned} \tag{2.3}$$

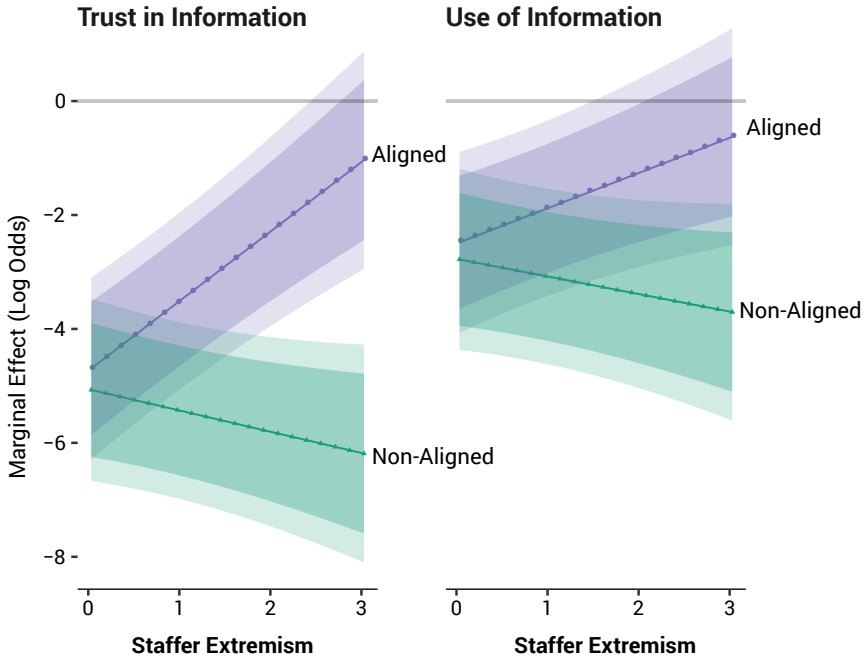
I estimate this model on both the *trust* and the *use* dependent variable. The independent constructs of interest are captured by the interaction between *Staffer*

Extremism, *Boss Extremism* and the indicator variables for whether the staffer or their boss are aligned with the source. Additionally, $\mathbf{X_i}$ represents a vector of the additional respondent specific control variables used in the prior models, and $\boldsymbol{\beta}$ their coefficient estimates. Finally, to account for the repeated measure design, I include staffer level random effects, $u(\texttt{staffer}_i)$, and information source random effects $u(\texttt{source}_k)$. Post-stratification weights, `psweight`, from CCS 2017 are used in all analyses.

2.6.2 Results: the effect of ideological extremism and source alignment

The marginal effects of staffer extremism are shown in Figure 2.5, while the full model results are shown in Table A.5 of Appendix A.

Figure 2.5: **Staff Extremism and Source Alignment**



Effect of **staffer extremism** on information *trust* and *use* of aligned and non-aligned sources. Ninety-five and eighty-five percent confidence intervals shown around coefficient estimates.

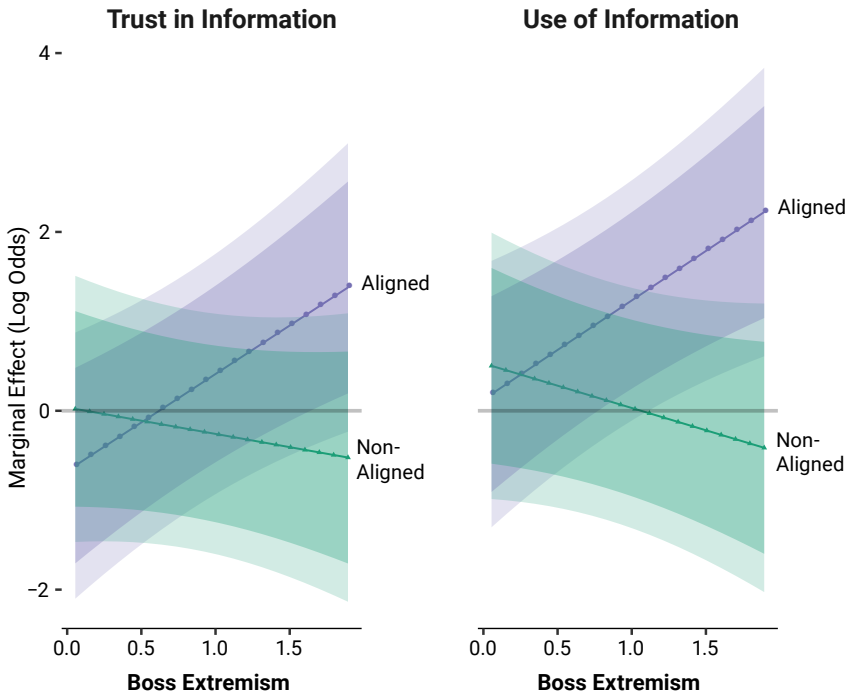
When interpreting these results, it is important to bear in mind that the refer-

ence category – that is, the set of sources which are coded as neither aligned nor non-aligned, is the group of internal government sources, the CBO, CRS and GAO. The first thing these results make clear is that internal sources are highly trusted, regardless of staffer or boss ideology. In general, staffers trust outside sources less than they trust internal sources. For the most moderate staffers, there is no appreciable difference between aligned and non-aligned sources, as both are trusted much less than internal sources. However, among more extreme staffers there is an enormous difference in the level of trust that staffers are likely to report for aligned and non-aligned sources. The odds of most extreme staffers saying that they completely trust (as opposed to mostly, somewhat or not at all) an aligned source is roughly 50 percent of the odds they would report complete trust in internal sources, although this effect is not statistically distinguishable from no difference in trust between internal and aligned external sources. On the other hand, the odds of the most extreme staffers saying they completely trust (as opposed to mostly, somewhat or not at all) non-aligned external sources is 365 times less likely than reporting internal government sources as completely trustworthy.

This effect is more muted when it comes to staffer use of information. For most of the range of staffer extremism, the association between source alignment and staffer extremism is smaller. There is no statistically discernible difference between *Use* of aligned and non-aligned sources for most of the range of staffer extremism. However, among the most extreme staffers we are able to distinguish between aligned and non-aligned sources. Additionally, the most extreme staffers report rates of use of aligned sources that is indistinguishable from internal government sources. This is a particularly important result theoretically, as it demonstrates that the most extreme staffers find aligned sources to be as trustworthy as *highly reputed bipartisan expertise from the CRS, GAO and CBO*. In this regard, ideologically extreme staffers view the world quite differently from their moderate counterparts.

The effect of boss extremism on staffers' evaluations of information sources follow a similar pattern to the results shown above.

Figure 2.6: **Boss Extremism and Source Alignment**



Effect of **boss extremism** on information trust and use of aligned and non-aligned sources. Ninety-five and eighty-five percent confidence intervals shown around coefficient estimates.

There is no discernible effect of boss extremism on staffers reporting higher levels of trust of either aligned or non-aligned information sources. The marginal effect of boss extremism on staffer use is only statistically distinguishable among staffers that work for the most extreme members of Congress. In all other instances, the effects are not discernible from each other.

These results again provide more support for the independent agent hypotheses, than the faithful agent hypotheses. In the various models tested here, there is a persistent relationship between staffer ideology (and extremism) and the evaluations that staffers report about sources of information. These relationships exist indepen-

dent of the ideology (or extremism) of the member that a staffer reports to, while the members' ideology does not, in most cases, have a strong association with staffers' trust or use of information.

2.7 Evaluating the Vulnerable Member Hypothesis

The prior results suggest that staffers do not act as faithful agents of their bosses. However, they do not help distinguish between whether staffers are functioning as rational rogue agents, or if the impact of their own preferences on their judgements is the result of cognitive biases on their part. To distinguish between these possibilities, I turn to the vulnerable member hypothesis. This hypothesis holds that staffers should be more responsive to their bosses if those bosses' seats are in districts or states which will be competitive in the next election, as fear for their career futures induces them to act as more faithful agents. If we observe this to be true, it follows that staffers who act independently in other circumstances are doing it intentionally rather than as the result of subconscious motivated reasoning. This finding would support the notion that staffers are independent agents at the expense of the view of staffers as motivated reasoners. I categorize staffers into those who work for vulnerable or safe members depending on the Cook Political Report rating for competitive seats which was current in the middle of fielding the 2017 CCS (Sept 18th for the House, Sept 23rd for the Senate). Only senators up for election in 2018 were considered as potentially vulnerable, and any member or senator that was not seeking re-election was coded as safe, even if their district would be competitive.

2.7.1 Methods: evaluating the vulnerable member hypothesis

To test this hypothesis I use the same multilevel models on the pooled sources, and use the same functional form of the models. However, I re-estimate these models on the subset of staffers who work for members of Congress from safe seats. Ideally,

I would like to estimate the models separately on staffers with bosses in safe and vulnerable seats, but because of small sample size (66 staffers) and perfect collinearity between the alignment variables in the vulnerable seat subset, these models are not estimable. Instead, I compare the results of the models estimated on the safe seat subset with the models estimated on the full dataset. If the vulnerable member hypothesis were true, we should expect the inclusion of staffers who work for vulnerable members to be attenuating the results in the models estimated on the full dataset. Models estimated only on staffers with bosses in safe seats should show *more pronounced* staffer selection effects according to ideological alignment.

2.7.2 Results: vulnerable member hypothesis

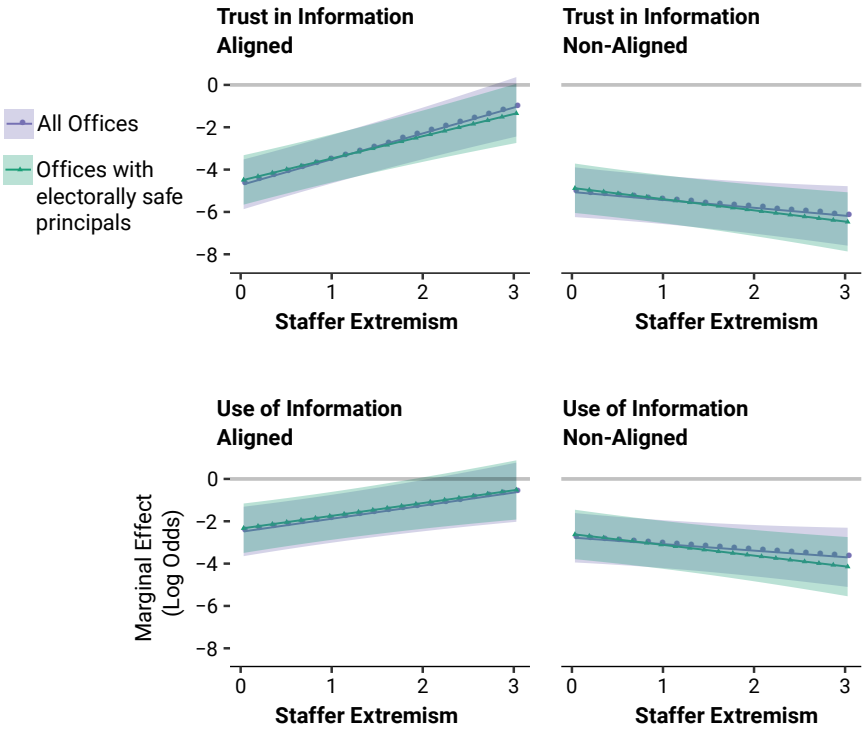
Figure 2.7 shows the marginal effect of staffer extremism on trust by whether the sources are aligned or non-aligned with the staffer. Full model results are in Table A.5 of Appendix A. There is no association between safe seats and whether staffers select information according to their own or their bosses' preferences.

This Figure makes clear that there are no discernible differences between these estimates for staffers in all offices and the estimates for staffers in electorally safe offices. Staffers do not appear to exhibit a stronger propensity for trusting or using ideologically aligned information when they don't fear for their bosses' political futures.

Similarly, staffers do not appear to be any less responsive to their bosses' ideological preferences when their bosses are electorally safe.

The estimates of the marginal effect of boss extremism conditional on source alignment are indistinguishable between staffers in all offices and staffers in offices of safe members. In addition to these results, I present additional evidence in support of the view that staffers act, at least in part, as motivated reasoners from a conjoint survey experiment from Chapter 3. These results suggest that in addition to evaluating the

Figure 2.7: **Vulnerable Member Hypothesis: Staff Extremism Effects**

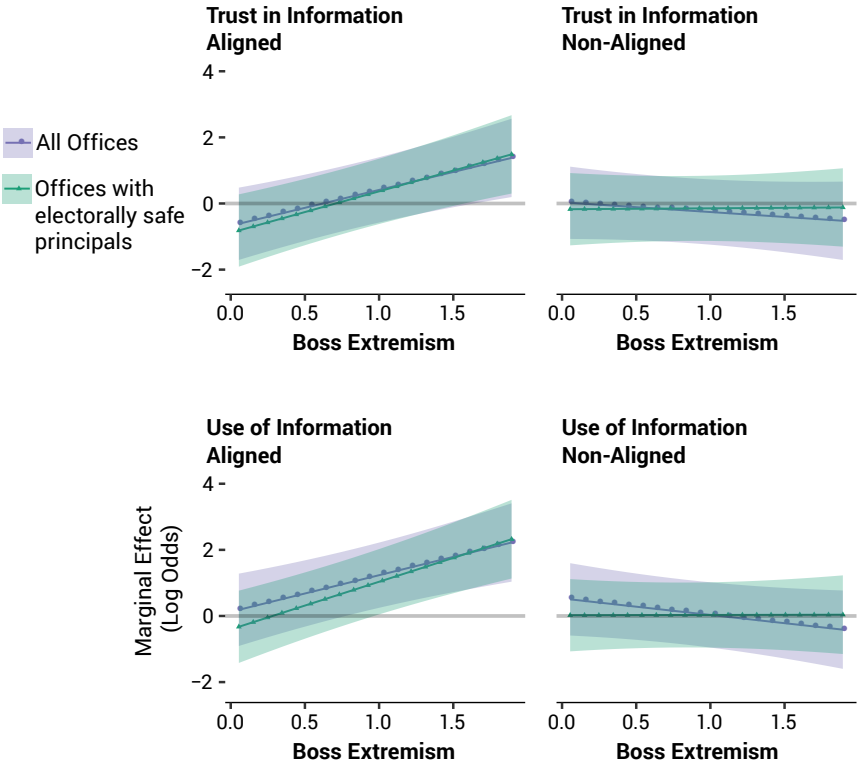


Comparison of effects of **staff extremism** on aligned and non-aligned sources, for all offices and safe seat offices. Eighty-five percent confidence intervals shown around coefficient estimates.

ideology of content in policy proposals, staffers rely heavily on the ideology heuristic provided by the source of policy information.

These results provide no evidence for the vulnerable member hypothesis. This lends credence to the notion that staffers act as motivated reasoners, because we would expect strategic, independent agents to be more responsive to their bosses when their bosses are vulnerable politically. Instead, it suggests that staffers evaluate ideologically consonant sources more positively because they believe them to contain the best and most useful information.

Figure 2.8: **Vulnerable Member Hypothesis: Member Extremism Effects**



Comparison of effects of **boss extremism** on aligned and non-aligned sources, for all offices and safe seat offices. Eighty-five percent confidence intervals shown around coefficient estimates.

2.8 Discussion

Prior to this study, the central functional assumption of legislative behavior—that staff action is interpretable as action by the legislator—had been largely untested. Both theoretical and empirical scholarship on Congress and legislator behavior took as a matter of faith that staffers act as faithful agents of their bosses. At the root of this assumption, was the notion that the at-will employment of staffers was sufficient to curtail the possibility of agency loss within legislator-enterprises. Notably, some scholars questioned whether members of Congress had sufficient resources and time to engage in the necessary agent selection or oversight to ensure fidelity (Malbin 1980; Romzek and Utter 1997; Price 1971). This chapter is the first to systematically test

this assumption that congressional staffers act as faithful agents of their bosses.

I test this assumption in the context of the information gate-keeping role that staffers play within legislator-enterprises in Congress. Staffers' positions — at the center of solving complex problems with distributed information — lend them extraordinary power to shape the perspective of the members they work for. As such, it is enormously important whether staffers evaluate and select information according to ideological considerations, and if so, whose preferences they are responsive to.

I have presented theoretical expectations based on three accounts of how staffers might act in this position. The first, and in some ways the most normatively appealing, "faithful agent" view, contends that staffers are sufficiently motivated and accountable to their bosses that they act in accordance with their bosses' preferences. I find little support for this theory empirically. While the ideology of a staffer's principal is occasionally associated with a staffer's evaluations of information sources, this is the exception rather than the rule.

Rather, when I condition on a staffer's boss's ideologies, the ideology of the staffer is much more strongly associated with the source evaluations that a staffer makes than the ideology of the staffer's boss. These findings are much more in line with both the "independent agent" and "motivated reasoner" perspectives, which imply that staffers will select sources that are consonant with their own ideological preferences rather than their bosses'.

I present additional evidence that at least some of staffers' tendency to use ideologically consonant sources is likely to be driven by ideological cues and cognitive biases of the staffers, rather than the rational calculations of independent agents. This is evinced by the fact that staffers that work for members with safe seats do not appear to operate with any more agency impunity than staffers that work for vulnerable members, as we would expect of independent agents that are motivated to keep their jobs.

Together the results presented here pose a serious challenge to the predominant assumption that staffers are largely responsive to their bosses' demands. This questions core assumptions of much of the literature on legislative behavior. If staffers exercise their substantial discretion to pursue their own ideological ends, as this study suggests, it has the potential to meaningfully distort the representational activities of elected members of Congress. This chapter demonstrates that staffers are capable of exercising considerable independence as they evaluate information and choose what to pass on to their bosses.

CHAPTER III

Experiments on Staffer Information Use and Evaluation

3.1 Introduction

Congressional staff are central to the representational, legislative, and oversight capabilities of the institution. As members are increasingly time-pressured and subject to fundraising obligations, they necessarily delegate substantial functions to their staffers. Congressional staff serve as gatekeepers for members' of Congress time and attention, communicating with constituents and other stakeholders, assembling information on constituent views and pending policies, strategically identifying supportive coalitions, and making recommendations on credit claiming and position taking opportunities (Whiteman 1995; Kingdon 1989; Hall 1996; Whiteman 1987). Professional staff routinely make recommendations on whether to introduce or co-sponsor legislation, what questions to ask during committee hearings, what remarks to make on the floor, or what statements to issue to the press. Despite the fact that they serve at the pleasure of members and are often hired to reflect their priorities and preferences, both qualitative and quantitative research indicates that staff can and do exert independent effects on lawmakers' behavior (Montgomery and Nyhan 2017; LaPira, Drutman, and Kosar 2020), and have preferences which may not align with

their members (see Chapter 2).

This chapter adds to a growing literature recognizing the importance of congressional staff in the legislative process. While scholars of congressional politics have long recognized that Members of Congress manage legislative enterprises (Polsby 1968; Malbin 1980; Salisbury and Shepsle 1981b; Hammond 1996; Romzek and Utter 1997), it is only relatively recently that research has reconsidered how the training, resources, incentives, and background of staffers independently affect the legislative process (Montgomery and Nyhan 2017; LaPira, Drutman, and Kosar 2020; McCrain 2018; Crosson et al. 2020b; Furnas et al. 2020).

In a recent survey of senior staff, Hertel-Fernandez, Mildenberger, and Stokes (2019) find evidence that these individuals often misperceive the opinions of their constituents on highly salient policy issues, like health reform, gun control, and minimum wage. These misperceptions, moreover, appear to relate to the interactions that staffers have with economically advantaged actors, like campaign donors and corporate interests, raising the possibility that the access enjoyed by these interests may shape staffer behavior.

In this chapter I explore how staffers respond to ideological policy information using data from two separate, large scale surveys of congressional staff that measure individual staffer attributes such as their party identity, ideology, employment setting, and policy and procedural knowledge, among others attributes. The studies presented here ask how legislative staff evaluate policy information from different sources, and whether and how they act on the information provided to them by different political interests — and whether in doing so, they are biasing the recommendations they offer to their bosses. This work uses two different experimental studies to gain causal leverage on how staffer partisanship and ideology structure information processing within Congress, an issue raised in Chapter 2. Accordingly, these designs test how staffers' preferences for particular kinds of information shape their political strategies

and policy recommendations (Miler 2010; Hertel-Fernandez, Mildenberger, and Stokes 2019). I show that staffers use partisan and ideological heuristics to filter information and to recommend positions their bosses should take.

Lastly, these experiments carry implications for broader debates over the representation of organized interests in American politics. In particular, these studies speak to whether and how economic inequalities might translate into inequalities of political representation (Bartels 2008; Gilens 2012; Gilens and Page 2014). While our results do not indicate that staffers admit to preferring donors over others (Hertel-Fernandez, Mildenberger, and Stokes (2019), they do show that staffers defer to actors who bring think tank sponsored research to bear on their advocacy efforts. Thus putatively non-partisan think tanks have the ability to shape policy proposals by members of Congress in decidedly partisan ways. Furthermore, donors or other wealthy interests that fund think tank agendas may have a powerful indirect role in influencing agendas in Congress (Smith 2018; Esterling 2004; Medvetz 2012; Drutman 2015; Hollis-Brusky 2015; Fagan 2019).

Staff in Congress are responsive to very different kinds of arguments, data, and research depending on which side of the aisle they identify. Selective attention to some sources of policy research may explain why Republicans are so responsive to the ideologically unified well-off, while Democrats respond more to the diverse interests of the middle class and economically disadvantaged (Hacker and Pierson 2010; Grossmann and Hopkins 2016; Grossmann and Isaac, n.d. Lax, Phillps, and Zelizer 2019).

Since at least Schattschneider (1975), political scientists have been concerned about elite and upper-class influence in representative institutions. Amidst high and rising levels of inequality in the United States, scholars have focused more on whether out-sized economic resources afford political actors privileged access and influence in the policymaking process (Jacobs and Skocpol 2005; Bartels 2008; Gilens

2012; Hacker and Pierson 2010; Schlozman, Verba, and Brady 2012; Lax, Phillps, and Zelizer 2019; Bowman 2020; Grossmann and Isaac, n.d.). While some have questioned the relationship between economic resources and political clout (Ansolabehere, Figueiredo, and Snyder 2003; Baumgartner et al. 2009; Enns et al. 2014; Branham, Soroka, and Wlezien 2017; Prasad 2018), other research has documented that greater economic resources afford wealthier individuals and private sector businesses more opportunities to shape public policy (Miler 2010; Drutman 2015; Kalla and Broockman 2016; Page and Gilens 2017; Hertel-Fernandez, Skocpol, and Sclar 2018; Miler 2018).

This research complements a growing body of work documenting how political elites—including state legislators and senior staff in Congress—misjudge their constituents' opinions in ways that systematically favor concentrated economic interests (Brookman and Skovron 2018; Hertel-Fernandez, Mildenberger, and Stokes 2019). These studies suggest that the wealthy and well-organized interests enjoy greater access because politicians think they are congruent with constituents' interests. Yet, the process by which this unequal access converts to policy influence is unobserved.

In this paper I report two separate experimental studies designed to test how congressional staff evaluate policy requests.

3.2 Description of experimental studies

The first experimental study (*Study 1*, hereafter), directly tests how much wealthy interests and their lobbyists affect legislative action in addition to seeking access *alone*. Like similar experiments (Chin, Bond, and Geva 2000; Kalla and Broockman 2016; Hertel-Fernandez, Mildenberger, and Stokes 2019), this study, conducted in conjunction with Timothy Lapira, Alexander Hertel-Fernandez, Lee Drutman, and Kevin Kosar, tests the counterfactual that constituents are less likely to gain access to congressional offices than donors and lobbyists. We introduce a novel extension

to prior studies that have focused on the identity of a lobbyist or petitioner, by varying the experimental treatment to include different policy relevant information in their request, some of which come from explicit ideological sources. In addition to whether staffers would take the meeting, we measure staffers' likelihood to use information from, or to side with, the petitioner's request. Using an original survey of over 400 DC-based congressional staffers in 2017 (the 2017 Congressional Capacity Survey, or CCS 2017), the vignette experiment is a hypothetical request to meet with the respondent staffer. The script manipulates three variables: the identity of the petitioner, the intent to introduce legislation or to block legislation, and the nature of the information offered in support of the request. The outcomes we measure include the likelihood of taking a meeting, using the information, of siding with the petitioner and the perception that the petitioner represents geographic constituencies.

Thus our outcomes measure additional, more nuanced responses to campaign donors and lobbyists beyond merely granting access. Seeking and gaining access has long been considered a prerequisite condition for influencing legislation (Austen-Smith 1995; Wright 1995). However, even though gaining access is a prerequisite for influence, it does not mean that legislators or their staff really use what they learn from lobbyists, or do so equally for all of those to whom they grant access. The practical consequence of granting a constituent, donor, or lobbyist a meeting is relatively low compared to other actions in the legislative process. First, the norm in congressional offices is that staffers should grant meetings with as many requests as possible as a matter of professional courtesy. Second, the stakes are low, especially among staff hired in part to be the eyes and ears of members' legislative enterprises. Legislators' time — especially given their limited presence in Washington — is pressed between committee meetings, floor voting, fundraising, media appearances, and other events. Alternatively, the consequence for acting in response to a petitioner's request made during a meeting is higher. These consequences include the costs in time and effort

to follow through, the reputation risk for recommending the "wrong" position to take, the potential publicity associated with advocating on behalf of the interest or policy in question, and so on. These actions are potentially more transparent to attentive sub-constituencies, policy stakeholders, journalists, and real and imagined political rivals. Finally, acting on an issue being requested by a petitioner means not acting on hundreds of other possible issues, which is primarily what private interests seek from legislators (Hall and Deardorff 2006).

Our results corroborate this logic. After being prompted with a hypothetical request, a large majority (70%) of respondents indicate they would be very or somewhat likely to take a meeting with the petitioner. However, of those staffers, only half indicate they would be very or somewhat likely to use the information being offered.[1] Among those likely to both take the meeting and to use the information from the petitioner, less than a third would subsequently recommend that their boss side with the petitioner.[2] Therefore, our design differentiates between granting access and actions that reflect more consequential legislative behavior. While distinguishing between access and the behavior that access is intended to affect may seem unremarkable, many prominent studies of interest group activity measure access alone (e.g., 2016; n.d. 2000; 1995; 2018) However, we are careful not to equate these hypothetical actions as evidence of *influence* per se, but do presume they reflect more intense or consequential forms of legislative participation (Hall 1996).[3]

Study 2, which I conducted as part of the 2019 Congressional Capacity Survey, builds on the design and findings from *Study 1*. Where *Study 1* highlights the role that providing ideological information plays in shaping whether and how congressional staff respond to a petitioner's request, *Study 2* investigates how staffers evaluate specific

1. Pr(Use Information ∈ {Very likely, Somewhat likely} | Take Meeting ∈ {Very likely, Somewhat likely}) = 49%.

2. Pr(Recommend to Boss ∈ {Very likely, Somewhat likely} | Use Information ∈ {Very likely, Somewhat likely} & Take Meeting ∈ {Very likely, Somewhat likely}) = 29%.

3. See Appendix C for descriptive statistics for these responses.

sources of information at the micro level. The design isolates whether staffers rely on the source of information as a heuristic when evaluating a source, or whether they evaluate information based on its content. *Study 2* is an embedded survey experiment using a forced-choice conjoint design in the 2019 Congressional Capacity Survey, which I fielded with Timothy LaPira. In this experiment, staffers are asked to choose between two hypothetical white papers with either liberal or conservative policy content, coming from either liberal or conservative think tanks.

I find that staffers are substantially more likely to rely on a white paper that comes from an ideologically aligned source, and one that contains ideologically consonant policy content. Among the most ideologically extreme staffers, these effects are particularly strong when they occur together, with staffers choosing to rely on policy analysis that is from both an aligned source and containing aligned content even more than the simple additive effect.

Study 2 demonstrates that not only are staffers likely to choose information subsidies that contain aligned policy content, but they are also more likely to choose a white paper from an aligned source *irrespective of the policy content.*

3.3 Study 1: Lobbying Vignette Experiment

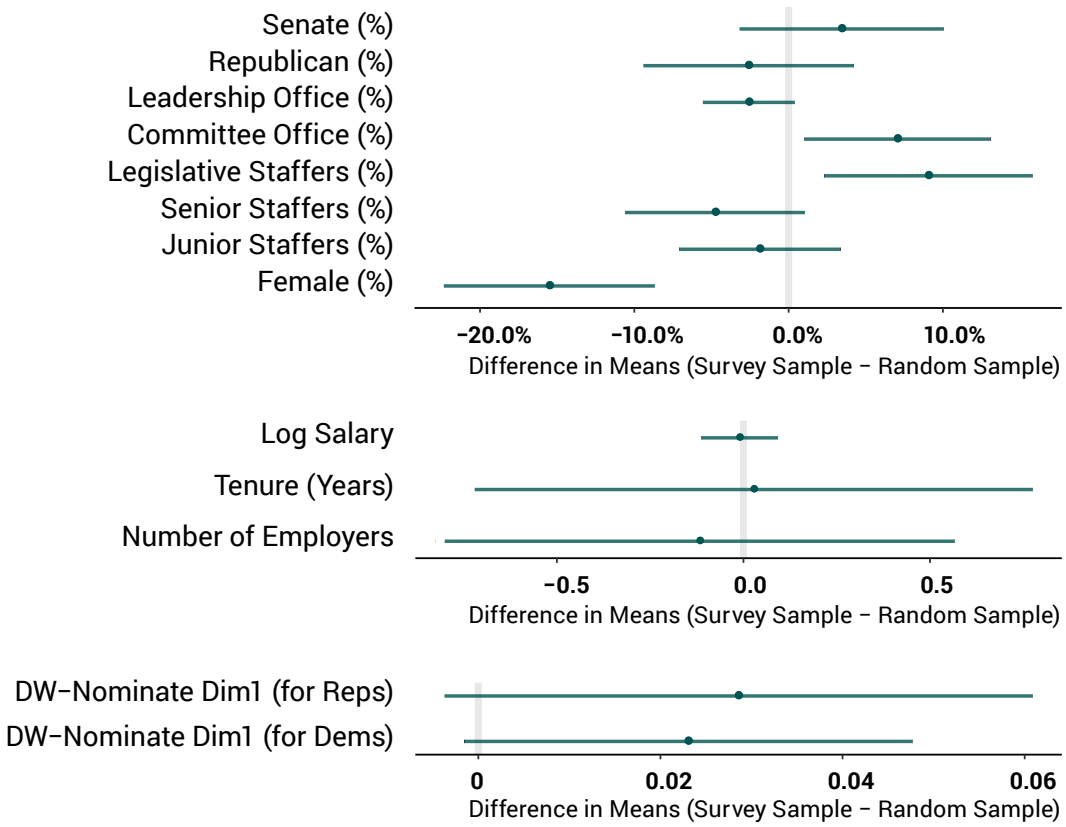
In the subsequent sections, I present the results of the lobbying vignette experiment conducted as part of the Congressional Capacity survey designed and fielded in coordination with the full survey team, comprised of myself, Tim LaPira, Alexander Hertel-Fernandez, Lee Drutman, and Kevin Kosar.

3.3.1 Data: The 2017 Congressional Capacity Survey

Study 1 is a survey experiment embedded within in the 2017 Congressional Capacity Survey (CCS). The 2017 CCS is the largest academic survey of congressional staffers to date. Using a complete census of congressional staffers from payroll records

purchased from LegiStorm, we identified 8,485 prospective respondents who worked in D.C. offices who have some responsibility to contribute to legislative operations, broadly defined. We sent the survey to all 8,458 staffers by email. We also recruited a variety of non-partisan, ideologically-diverse non-profit organizations to promote participation and to serve as external validators.[4]

Figure 3.1: **CCS 2017 Respondent Balance Statistics**



N = 891, 441 survey respondents and 445 randomly selected non-respondents. 95% CIs.

The final response rate of the survey was 5.2% (N = 441). CCS 2017 respondents comprise a diverse and largely representative sample of congressional staff on most observable characteristics. The modal respondent is a 25 to 29 year old white male employed as a mid-level legislative assistant in a majority party member's office

4. Details on the 2017 CCS methodology are in Appendix A.

with roughly four years experience on Capitol Hill. As Figure 3.1 shows, respondent balance is very strong on career trajectory covariates (number of prior employers, tenure, salary), several key institutional covariates (party, chamber, office type, and seniority), and the ideology of their employers. All respondents were given inverse probability weights using a post-stratification procedure conditioning on the joint distribution of chamber, office type (personal, committee, other), and party in the sampling frame (Lumley et al. 2004; Lumley 2017). The maximum weight applied to any case was 4.82, and the minimum 0.749.

It is important to note that despite the potential limitations of this sample, this is the largest experiment sample of Congressional staffers to date.[5] Direct observational and experimental study of congressional staff behavior is a blind spot in the study of Congress. These data offer a unique opportunity to assess fundamental questions of representation, information processing, and policy decision making by congressional staffers.

3.3.2 Experiment Design

This section reports a vignette experiment with a fully randomized factorial design. The experiment is a $4 \times 2 \times 4$ factorial design, with 32 conditions. The hypothetical scenario mimics a common occurrence in Congress: an individual representing some constituency, group, or organization contacts a staffer in pursuit of a policy goal by offering evidence in support of their position. The vignette can be thought of as an instance of in-person lobbying or policy advocacy. We manipulate three factors : (1) the *Identity* of the petitioner, (2) the *Action* the petitioner is requesting, and (3) the supporting *Information* the petitioner offers. The vignette reads:

> Legislative staff like yourself rely on information from a variety of sources. Suppose you received a request for a meeting with a {*Identity*}. The

5. Hertel-Fernandez, Mildenberger, and Stokes (2019), for instance, focused on surveying the most senior members within an office, i.e., chiefs of staff and legislative directors only.

individual is asking your office to {*Action*}. They offered to give your office {*Information*}.

The three manipulated factors in the vignette take the prompts in Table 3.1. We

Factor	Prompt
Identity	Constituent
	Donor to your Member's campaign
	Lobbyist representing a national consumer group
	Lobbyist representing a large, national business
Action	Propose a new bill
	Stop a bill currently under consideration
Information	Polling from your constituency that shows support for their position
	Evidence of how their proposal will help jobs and unemployment in your constituency from an analysis they conducted
	Evidence of how their proposal will help jobs and unemployment in your constituency from a center-left think tank
	Evidence of how their proposal will help jobs and unemployment in your constituency from a center-right think tank

Table 3.1: **Experiment Design Factors and Values**

present respondents with four questions in sequence immediately after the vignette. The first three questions ask staffers to rate how likely they would be to (1) take the meeting, (2) use the information provided by the individual to prepare recommendations for their boss, and (3) side with this individual in their recommendation to their boss. Responses were measured on a 5-point Likert-type scale with likelihood anchors. Each of these actions implies different costs and policy ramifications. For example, taking a meeting implies no policy commitments, and costs only a relatively small amount of time from a staffer; this is a relatively inconsequential action. However, using information from a source is of more consequence; by relying on a particular source a staffer risks their own credibility within their office, and incorporates that source's worldview into the brief they produce. Of higher consequence still, is recommending that a member side with a particular petitioner on a policy issue: such a recommendation implies both the opportunity costs of not recommending an

alternative position, and the coalitional and partisan consequences of publicly taking that position if the member chooses to follow the staffer's advice. Getting a staffer to explicitly recommend that their boss side with a petitioner is a major advocacy victory, and an extremely consequential result. In the fourth question, we ask respondents how much they believe the petitioner is representative of their district or state's opinion as a whole, recorded with a 5-point Likert-type scale with a representativeness anchor.[6]

3.3.3 Partisan Information Processing Effects

We pre-registered an analysis plan which included testing all factorial combinations using ANOVA and pairwise t-tests.[7] Our sample size relative to the number of possible pairwise combinations is insufficient, so we opt to estimate the Average Marginal Component Effect (AMCE) of the levels of each factor.[8] The AMCE of a particular element (e.g., $\{Identity\}$ = "constituent") is the marginal effect of that element averaged over the joint distribution of the other manipulated factors, $\{Action\}$ and $\{Information\}$ (Hainmueller, Hopkins, and Yamamoto 2014). While Hainmueller, Hopkins, and Yamamoto (2014) identify AMCE in the context of conjoint experiments, they note that it may serve as a causal estimand in any factorial design, and is applicable to both choice and ratings based dependent variables. Just as Hainmueller, Hopkins, and Yamamoto (2014) do, we convert our Likert-scale dependent variables to numeric scales, then rescale them from 0-1 to simplify interpretation. We then fit an ordinary least squares (OLS) model to calculate AMCE for each attribute in the factorial design. Hainmueller, Hopkins, and Yamamoto (2014) demonstrate that OLS functions as a subclassification estimator, so it calculates nonparametric

6. Exact question wording is available in Appendix B.

7. Open Science Foundation pre-registration available at `https://osf.io/fvyg9/?view_only=3124f1570ff740cfbeedaba737d605f6`.

8. We report ANOVA and t-test results in Appendix D to be consistent with our pre-registration. The relationship between party identification and the ideology of the source information is consistent with our expectations using pairwise t-tests.

coefficients for AMCE. Therefore, converting our ordinal measures to interval scales is justified given our application. All models estimate effects using post-stratification weights and heteroskedastic-consistent standard errors (HC3) (Long and Ervin 2000). Additionally, in this section we report AMCE for subgroups defined by the party of the staffer's employer.

3.3.3.1 Taking a Meeting

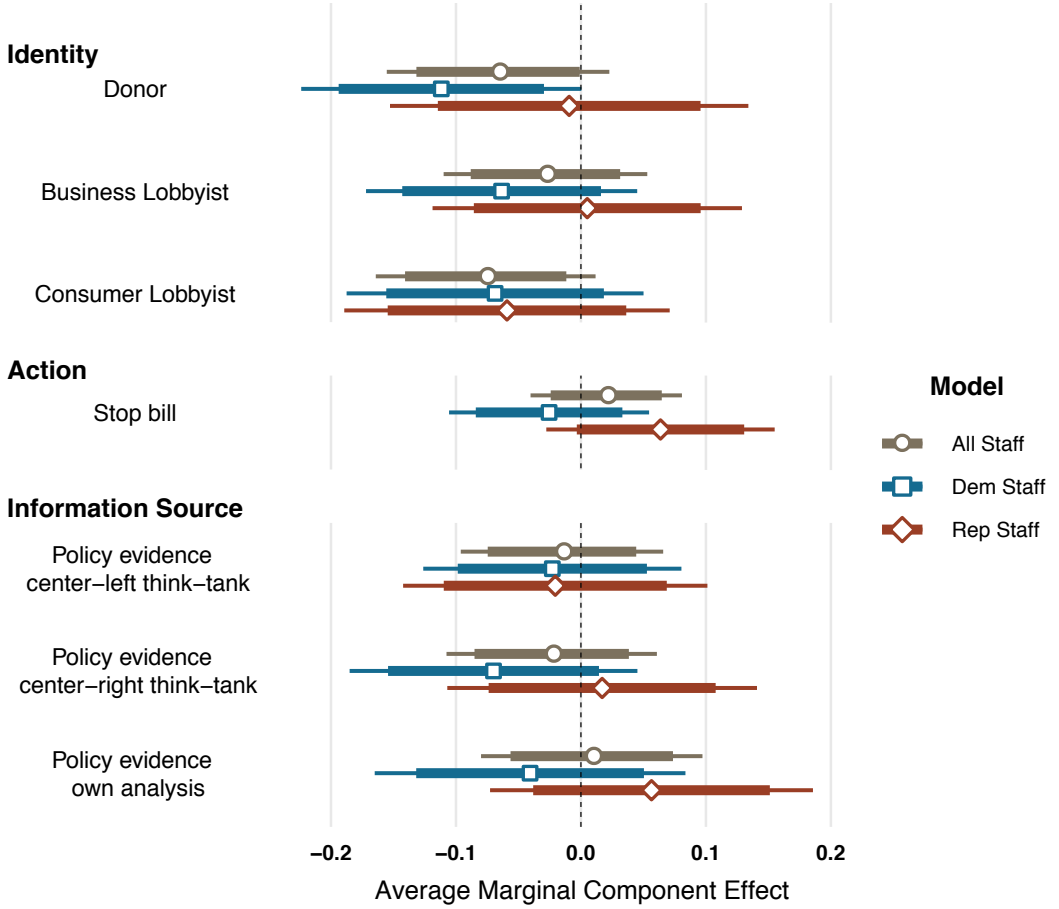
We first turn to the least consequential outcome for a staffer: taking a meeting with the individual described in the request. These results are shown in Figure 3.2.[9] It is important to highlight that results regarding donors should be interpreted with caution, as social desirability bias may disproportionately influence respondents' answers regarding campaign donors. However, it is important to note that respondents were only presented with one vignette and were not made aware of which factors were being manipulated. Because they did not respond to vignettes with both constituents and donors, it was not possible for lower responses to donors to be driven by "anchoring" on constituents, and then responding lower to donors for social desirability reasons. Rather, these results would be driven by social desirability only if the mere mention of donors, without any comparisons to non-donors or additional framing, is sufficient to engage socially desirable responding.

That said, compared to a request from a constituent (the reference category), staffers are nominally less likely to take a meeting with donors or lobbyists, though the effects are not statistically distinguishable. The notable exception here is that staffers in Democrats' offices are less likely to take meetings with donors. Consistent with Chin, Bond, and Geva (2000) but contrary to Kalla and Broockman (2016), staff are no more likely to grant meetings to donors than to non-donors.[10]

9. We display both 95% and 85% confidence intervals. Payton, Greenstone, and Schenker (2003) demonstrate non-overlapping 85% confidence intervals are an appropriate test of statistical significance for the difference between two parameter estimates with roughly equal variance.

10. It is worth noting that our design does not map perfectly to that of Kalla and Broockman

Figure 3.2: **Likelihood of Taking a Meeting**



N = 436. The dependent variable is a five-category "likelihood" Likert-type scale. The baseline categories are Identity = *"Constituent,"* Action = *"Propose bill," and* Information = *"Supportive Polling." 95% and 85% confidence intervals shown.*

We find no relationship between the action being requested or the evidence being offered and the likelihood to grant the petitioner a meeting.

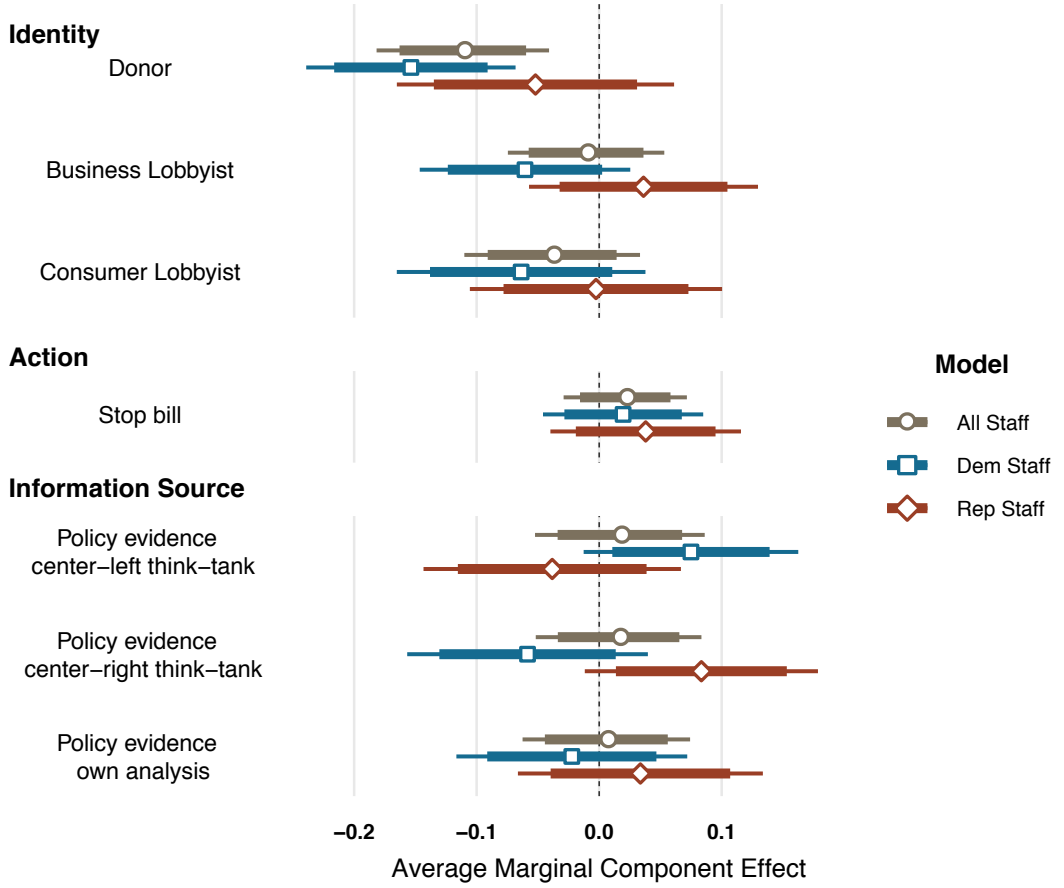
3.3.3.2 Using Information

Figure 3.3 presents staffers' likelihood to use the information offered by the petitioner in preparing recommendations for their boss. Compared to simply taking a meeting, using the information provided by a petitioner is a more consequential action

(2016), who compare donors and non-donors within the subset of geographic constituents, while our design compares constituents to donors with no mention of whether those donors are or are not also constituents.

by a staffer. With previous caveats regarding the possibility of social desirability bias in mind, all staffers are less likely to use information provided by donors. This effect is stronger among Democrats, and not significant among Republicans. In the full

Figure 3.3: **Likelihood of Using Information**



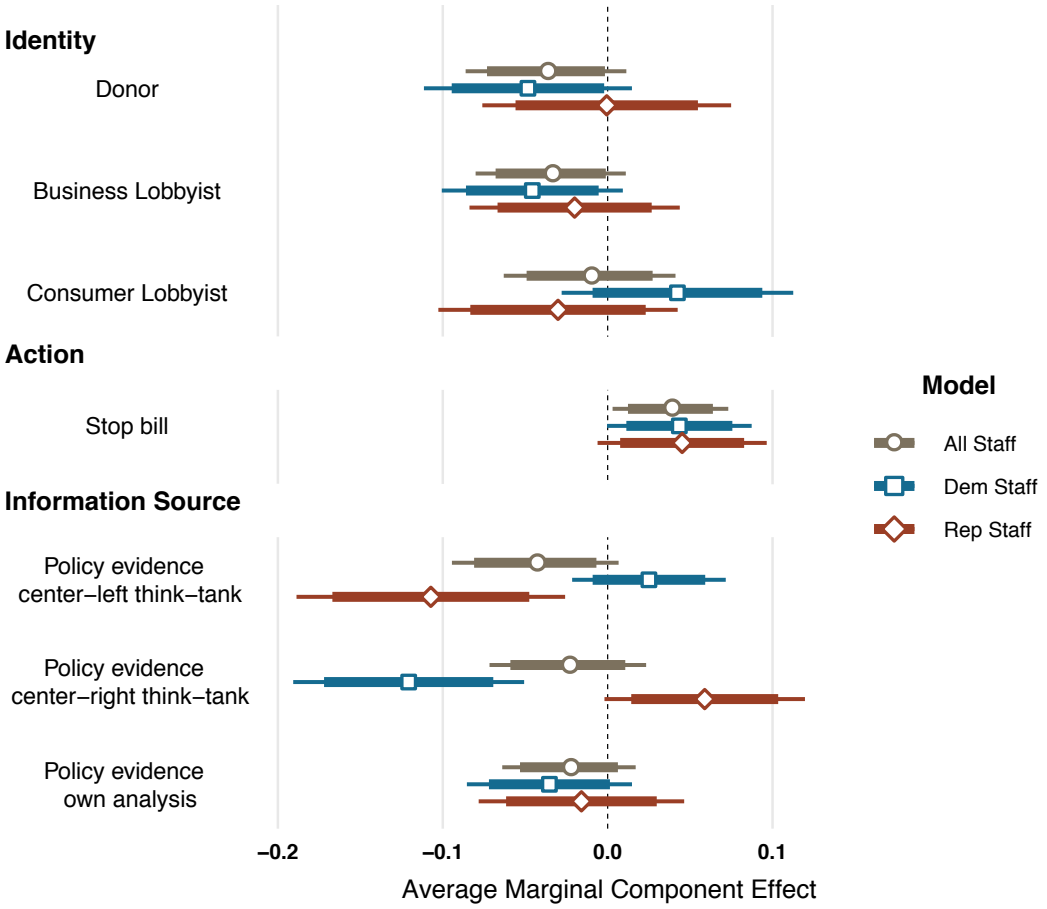
N = 436. The dependent variable is a five-category "likelihood" Likert-type scale. The baseline categories are Identity = *"Constituent,"* Action = *"Propose bill," and* Information = *"Supportive Polling." 95% and 85% confidence intervals shown.*

sample, the estimated effects are null for the petitioner's identity other than donors, the action being requested, and the evidence being offered. However, we do observe distinguishable differences in how staffers in Republican and Democratic offices rate their likelihood of using information from a center-right think tank, with Republicans more likely and Democrats less likely. This partisan difference is not statistically appreciable when petitioners provide information from center-left think tanks.

3.3.3.3 Making a Recommendation to the Boss

The most consequential outcome we measure is whether staffers would side with the petitioner when making recommendations to their boss. Staff are expected to maintain their own credibility with their superiors, so picking a side is a costly professional commitment. Moreover, as gatekeepers, merely meeting with a person or consuming information presumes no further action, whereas elevating it to a superior is a step towards observable public action. As staffers routinely consult on policy matters, their recommendations can be quite consequential (Kingdon 1989; Hall 1996). Results are presented in Figure 3.4.

Figure 3.4: **Likelihood of Making Recommendation to Boss**



N = 436. The dependent variable is a five-category "likelihood" Likert-type scale. The baseline categories are Identity = *"Constituent,"* Action = *"Propose bill," and* Information = *"Supportive Polling." 95% and 85% confidence intervals shown.*

The identity of the petitioner has no effect on a staffer siding with them. Consistent with institution-level status quo bias (Baumgartner et al. 2009; Enns et al. 2014), staffers are significantly more likely to recommend stopping legislation then they are proposing a bill, an effect that holds for both parties. This is perhaps not surprising given that introducing legislation requires significant time and resources from an office, while impeding legislation can be as easy as a member telling their leader they oppose it, sitting on a bill in committee, or withholding unanimous consent in the Senate, all substantially less resource intensive activities.

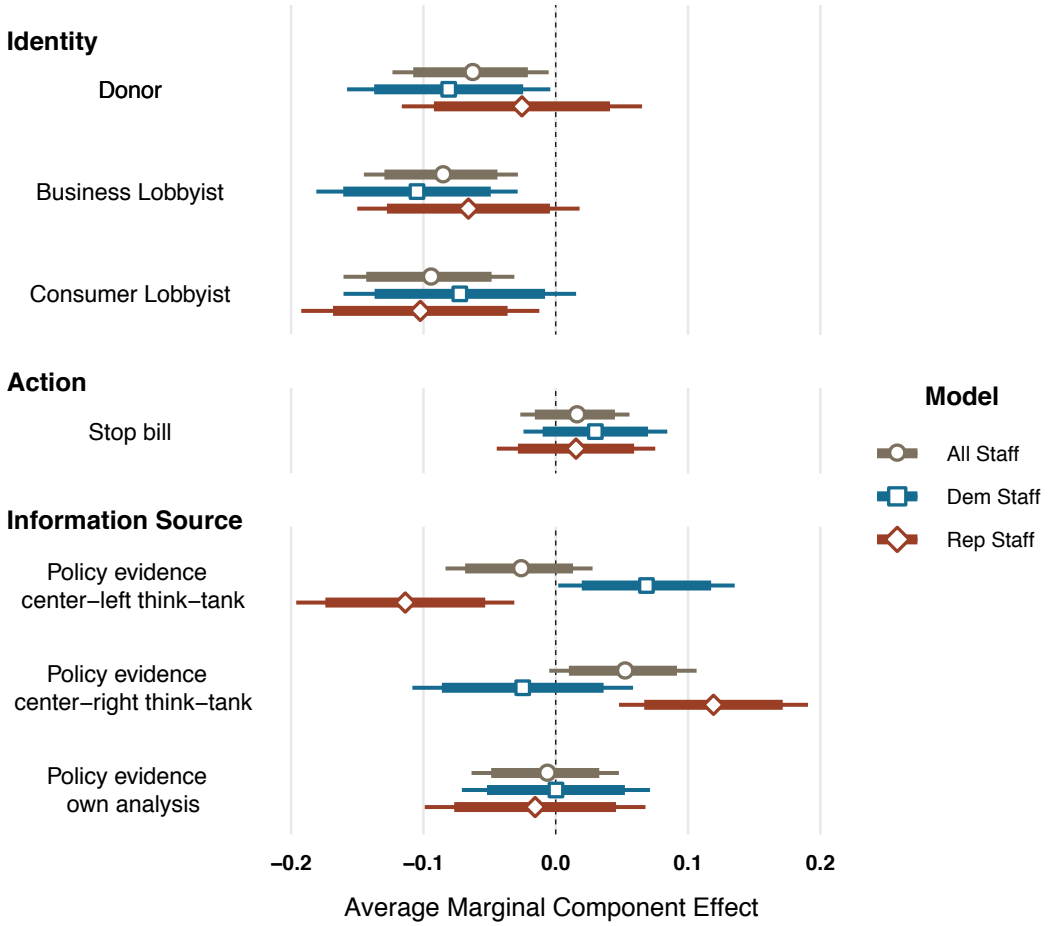
There is minimal evidence that staffers are overall more likely to side with a petitioner bearing information from an ideological think tank. If anything, staffers are less likely to side with party-aligned groups compared to individuals offering their own analysis (the reference category). Disaggregated results by party reveal a very different pattern. Democratic (Republican) staff are substantially more likely to side with the petitioners offering supportive information from center-left (center-right) think tanks and less likely to side with center-right (center-left) ones. The estimated effects for both Democrats and Republicans are significant. The penalty associated with offering information from a non-aligned think tank is roughly twice the benefit gained from offering information from an aligned one. That is, relative to a petitioner that presents supportive polling (the baseline category), petitioners pay twice as large a penalty for presenting information from an ideologically misaligned think tank as they stand to gain by presenting information from an aligned think tank.

3.3.3.4 Representativeness

In addition to outcomes measuring some action, we also ask respondents, "How representative do you think this individual is of your district or state's opinion as a whole?" Results among all staffers and party subgroups are shown in Figure 3.5. Political elites, including legislators and staffers, are systematically biased in their per-

ceptions of public opinion (Brookman and Skovron 2018; Hertel-Fernandez, Mildenberger, and Stokes 2019). Our experiment illuminates which factors may shape these (mis)perceptions of representativeness.

Figure 3.5: **Representativeness**



N = 435. The dependent variable is a five-category "likelihood" Likert-type scale. The baseline categories are Identity = *"Constituent,"* Action = *"Propose bill," and* Information = *"Supportive Polling." 95% and 85% confidence intervals shown.*

Staffers view donors, business lobbyists, and consumer lobbyists as less representative of their district or state's opinion than constituents. However, this effect is null among Republican staffers for donors. Both Democrats and Republicans are less likely to see business and consumer lobbyists as representative. These results suggest staffers negatively perceive the so-called "Scarlet L" label for lobbyists. Most importantly, political elites are fully cognizant that donors and lobbyists are not rep-

resentative of their home-based constituencies, even though the vignette does not specify any particular issue or any opinions per se.

When petitioners are seen as presenting information from think tanks, we obtain the most striking asymmetric partisan effects of perceived representativeness. Both Democrats and Republicans find individuals presenting policy evidence from an ideologically aligned think tank to be *more representative* than individuals presenting supportive polling from their geographic constituencies. Republicans reject evidence from a center-left think tank as less representative of their constituency's opinion. In contrast, Democrats' evaluations of the center-right think tanks are indistinguishable from polling of their constituents.

3.3.4 Information Source Effects

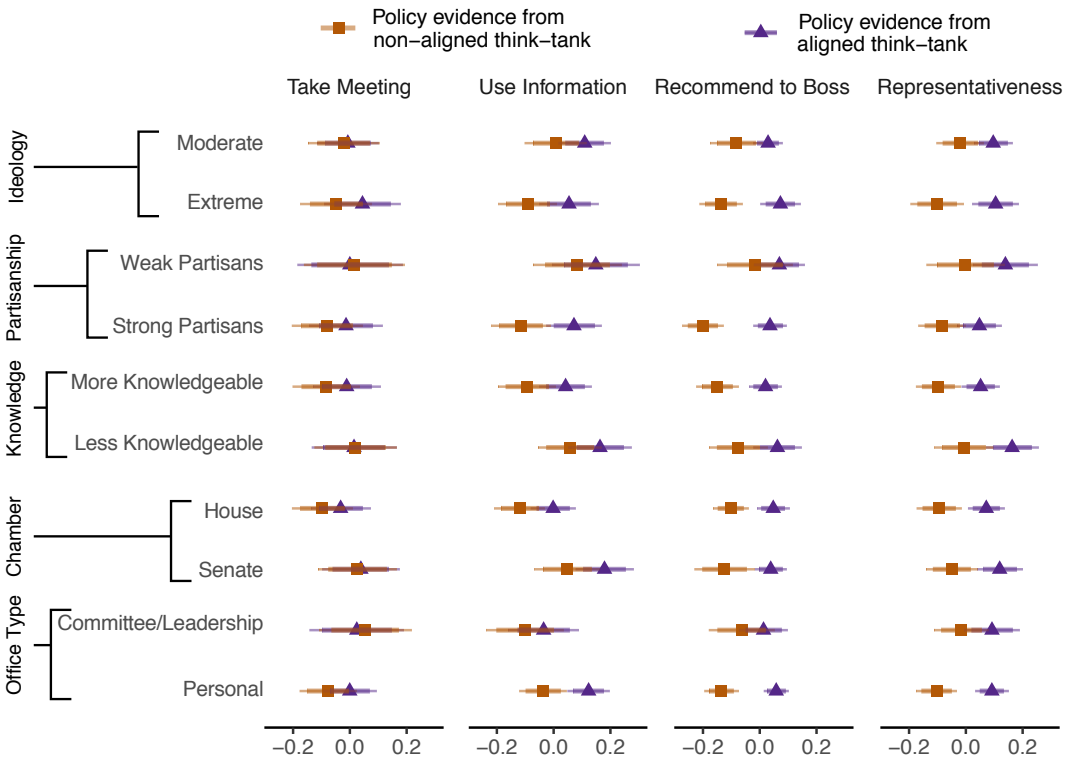
We undertake an exploratory sub-sample analysis to understand which staffers drive these partisan results. We re-code the *information source* variable as "aligned think tank" and "non-aligned think tank" by party. The subsequent analysis pools the partisan effects as the relationship between an ideological think tank and a partisan staffer. We then repeat the same analyses above, splitting the sample by five staffer characteristics to simplify interpretation: self-reported ideology (moderate vs. extreme), self-reported party identification (strong vs. weak/independent), knowledge of parliamentary procedure (median split for correct responses to battery of factual questions), chamber, and office type (personal office or committee/party leadership office).[11]

In Figure 3.6, we present the AMCE for petitioners presenting policy evidence from aligned and non-aligned think tanks, across all four dependent variables.

While we see no significant differences across subsets in the likelihood to take a meeting, differences do appear in the higher stakes actions. Strong partisans are

11. Details of measurement construction for these five factors are reported in Appendix F.

Figure 3.6: **Subgroup Tests for Ideologically Aligned Sources**



N = 436 (435 for "representativeness"). The dependent variables are five-category "likelihood" Likert-type scales (Take Meeting, Use Information, and Recommend to Boss) or "Representativeness" Likert-type scales. Prompts for center-left (center-right) think tanks have been transformed to match staff working in Democratic (Republican) offices for aligned, and vice versa for non-aligned. See Appendix G for full model estimates. 95% and 85% confidence intervals shown.

more likely to use information from an aligned think tank, whereas the likelihood of using information from aligned and non-aligned think tanks is indistinguishable among weak partisans. Similarly, personal office staff use ideological alignment as a cue for information use, but committee/leadership staff do not.

Staffers rely more on ideology as a heuristic when taking a side. This is consistent with Kingdon's 1989 explanation of legislators looking to cue givers to find agreement within their "field of forces" when making voting decisions. Ideological extremists, strong partisans, more knowledgeable staffers, and personal office staffers are all more likely to make a recommendation on the petitioner's behalf. Staff in both chambers discount evidence from non-aligned think tanks when making recommendations. And, strong partisans, more knowledgeable staffers, staffers in both chambers, and personal office staffers interpret petitioners as more representative when they come bearing ideologically aligned evidence.

Taken together, this exploratory subgroup analysis suggests that ideological alignment is a powerful signal to staff. Requests for legislative action depend heavily on how the request is packaged, which is distinct from the substance of the request itself.

3.3.5 Discussion

Importantly, *Study 1*, itself, does not reveal preferential access or legislative influence to donors *qua* donors. However, it does reveal that the presence of information from *ideologically aligned* sources of policy information affect whether staff use the information and how they interpret it. Congressional staff are substantially more likely to use policy evidence from a source ostensibly matching their own ideological leaning, and to side with organizations presenting this information when they make recommendations to their bosses. Moreover, ideological extremists and staff working in members' personal offices are more likely to interpret a petitioner presenting evidence from an aligned source as representative of their constituents. The same patterns are

not true of polling demonstrating support among geographic constituents.

We might read the low weight that staff give to meeting with and to using information from donors as encouraging. That said, we are aware that staff are trained not to reveal that donors hold sway over offices. Polarized attitudes about campaign finance reform may trigger a socially desirable response. It is possible that staffers have convinced themselves that they are not likely to grant meetings to donors, even though they do (Kalla and Broockman 2016); this partisan attribute may not have been as salient when Chin, Bond, and Geva (2000) found null results for PAC representatives. This apparent contradiction merits further investigation. It may be equally likely that donors qua donors indeed have little *direct* influence. Staffers may be more likely to meet with lobbyists because they provide useful, actionable information about policy, whereas donors rarely do. This result may also be the result of staffers cognitive anchoring as they answer this question, as staffers may genuinely spend more time meeting or talking with constituents than they do donors, even if the true conditional probability of an individual donor getting a meeting is higher than the true conditional probability of any individual constituent, given their relative base-rates. Alternately, work on costly signalling (1995; n.d.) argues that it is not the fact that donors give money that leads to access, but rather that the act of donating signals aligned policy goals, which facilitates trust and subsequently, a willingness to engage. In this telling it is donorship as a proxy for allyship that is instructive to the staffer. Perhaps, in the presence of another, clearer signal of ideological alignment—information source—staffers are less likely to rely on whether a staffer is a donor for this sort of cue.

Indeed, Kalla and Broockman (2016) find that the most likely staffer to grant meetings to donors is Chief of Staff, who is typically designated within an office to be the liaison to partisan constituencies. These low-risk meetings are often granted as a courtesy. Most legislators care which organized interests belong to supportive and

opposing policy coalitions, so meeting with various stakeholders is a matter of due diligence; the same would not be true for donors to opposing campaigns.

Our results show that while staffers seem to be open to meetings with a variety of groups and individuals, when it comes to actions of more consequence, there are real differences in who and what they pay attention to. This suggests that while access to congressional staffers may be relatively easy, influence over policy making is not. Our findings are particularly telling for those seeking to *influence* Congress: bring policy evidence from an ideologically "correct" think tank. Staffers are more likely to make recommendations to their bosses in line with a petitioner request if that petitioner brings policy evidence from a think tank that the staffer is ideologically aligned with. This is encouraging if, on balance, staffers seek out credible analysis before recommending a policy. Deliberation depends on sound evidence, even if it is produced by organizations with the imprimatur of the party.

Alternatively, strongly partisan and ideologically extreme staffers' reliance on in-group cues may be evidence of epistemic closure, not robust deliberation. Moreover, because we ask about the post-treatment behaviors that are highly specialized to the legislative context, congressional staff — under supervision of members — may be professionally socialized to be unwilling to hear the other side (Hacker and Pierson 2010; Grossmann and Hopkins 2016). This is consistent with Bauer, Pool, and Dexter's 1963 contention that staffers and members hear what they want to hear, and use evidence to justify policy positions that they hold ex-ante.

Thus, our evidence reveals micro-level foundations that underlie endemic polarization in Washington. The largest effects are associated with ideological alignment within parties. While we omit brand names such as the Brookings Institution and Heritage Foundation in *Study 1*, we take them up in *Study 2*. It may hardly be surprising that Democrats discount evidence from the right, and vice versa. But our findings are not tied to knee-jerk, normative partisan talking points; rather, it is worth noting

that the experimental vignette did not describe the ideologically opposite think tanks as offering any different substantive conclusions. This suggests that the results we observe are purely the function of the source cue. Healthy democratic deliberation presumes that all ideas are given equal consideration, even if they are to be rejected on merit or used to develop counterarguments. The interest group deliberation ideal can't be satisfied when the other side is summarily ignored, especially if its credibility is judged solely on the messenger rather than the message (Mansbridge 1992).

3.4 Study 2: White Paper Conjoint Experiment

Study 1, embedded within the 2017 CCS, showed that staffers were more likely to side with petitioners, or view them as representative of constituents when they offered information from ideologically aligned sources. This finding motivated a follow up study, *Study 2*, which I designed to assess how staffers evaluate policy information more precisely.

Both *Study 1* and the results from Chapter 2 provide strong evidence that absent any other details about the credibility of the information they are receiving, congressional staff report a higher likelihood of trusting and using information from ideologically aligned think tanks. In particular, *Study 1* suggests that this has a material impact on representation. However, because these studies measured differences in staffer evaluations of information based only on general types of sources (e.g., left-of-center think tank), they are not able to identify what, specifically, is driving staffers ideological selection of information. Indeed, if staffers are satisficing agents (Simon 1955) interested in reducing the uncertainty over how policies map to outcomes (Gilligan and Krehbiel 1990), they may simply be relying on the ideology of the source of information as a heuristic to infer aligned policy goals. This is consistent with members of Congress accepting legislative subsidies from interests based on signals of alignment (2006; n.d.).

While the reliance on such cues can be an effective cognitive shortcut under appropriate conditions (Lupia 1994), they can also substantially bias decision-making (Tversky and Kahneman 1974; Petersen et al. 2013; Lodge and Hamill 1986). Of particular normative concern in this case, is whether staffers rely on the ideology of an information source and disregard the actual policy content that source provides, abdicating their responsibilities to actually consider policy alternatives. If staffers function as information gatekeepers that only rely on information from ideologically consonant sources, they functionally outsource their own reasoning over policy alternatives to these unaccountable actors.

In this experiment, I decouple source and content, allowing for identification of whether staffers are relying on the alignment heuristic offered by the information source, or whether they are selecting policy materials that match their own. This design provides leverage with which to assess whether staffers use ideology as a rational cue in an environment with incomplete information, or whether counter-attitudinal ideological cues may bias them against their preferred policies.

This study uses a conjoint design embedded in the 2019 Congressional Capacity Survey to assess whether staffers rely on white papers from ideologically aligned sources because of the ideological cue that those sources signify, or because information from those sources features ideologically consonant content. This study randomly varies the institution issuing the hypothetical reports which staffers must choose between, as well as the content of those reports.

Staffers are highly politically sophisticated, and as such are more likely to process information using partisan schema (Lodge and Hamill 1986) which shape coding and recall of information. Politically sophisticated people are more likely to think in ideological terms, and to use heuristics based on political schema when they make decisions (Converse 1964; Lau and Redlawsk 2001). The well-documented reliance of political source cues of this kind, generates hypothesis 6.

Hypothesis 6 (H6): *Staffers will be more likely to choose white papers from ideologically aligned sources than misaligned sources.*

In addition to manipulating the source of the white paper, the content of the white paper is also manipulated so that it reflects a conservative or a liberal policy. Rather than simply using source cues to reduce uncertainty about policy tradeoffs, however, staffers may be genuinely interested in specific policy options and prefer different types of interventions. Price (1971) argues that staffers are policy motivated, and use their positions to pursue particular outcomes as "policy entrepreneurs." In this case, we should expect staffers to be considerably more attentive to the policy-content of the reports they are asked to evaluate. This view of staffers as policy-motivated, generates hypothesis 7, wherein I expect Republican staffers to choose white papers with conservative content, and Democratic staffers to choose white papers with liberal content.

Hypothesis 7 (H7): *Staffers will be more likely to choose white papers with aligned policy content than misaligned content.*

As I argue in Chapter 2, staffers' propensity for confirmation bias, and need to rely on heuristics in complex information environments leads to a reliance on partisan or ideological source cues in information processing. In general, I present a theory in which staffers function as information gatekeepers, able to condition what they pass on to their bosses based on ideological alignment. Petersen et al. (2013) argues that if people use partisan or ideological cues as a heuristic as we should expect boundedly rational agents to (Simon 1955; Gilligan and Krehbiel 1990), then some degree of bias is an unfortunate byproduct of this shortcut. If, however, people are cognitively invested in their political identities, they will engage in motivated reasoning and these biases are an inevitable and systematic result of how they reason. In the experiment I present here, a staffer with a strong sense of ideological identity should be more

attuned to the explicit ideological signal sent by the source of the information than the content of the policy paper. I argue that a staffer engaged in motivated reasoning will convince themselves that information from an aligned source should be relied on, even if the information provided is counter-attitudinal. In this case we should expect hypothesis 8 to be true.

Hypothesis 8 (H8): *The effect of ideological alignment between a staffer and an information source will be stronger than the effect of the alignment between a staffer and the content.*

Finally, I expect the effects hypothesized above to be stronger among staffers who are more ideologically extreme. Where Chapter 2 reported stronger associations among more extreme staffers' self-reported levels of trust and use of information, this experiment provides the opportunity to identify these effects causally. Staffers that are more ideologically extreme, I argue, should have stronger attachments to their ideological identities, and thus have stronger directional goals (Kunda 1990). The stronger these attachments and goals, the more strongly they should respond to the ideological signals sent by the manipulated factors. This insight suggests hypothesis 9.

Hypothesis 9 (H9): *More ideologically extreme staffers will be more likely to choose information from ideologically aligned sources.*[12][13]

In the next section, I detail the data used to assess these hypotheses.

12. In the preregistration this hypothesis was mis-worded, referring to 'ideologically extreme sources" rather than ideologically aligned sources. It is not feasible to test whether extreme staffers use more extreme sources, because my ideal points for staffers and think tanks are not on a common scale. However, I am able to test whether staffer extremism conditions the use of ideologically *aligned* sources, which I do here instead. Future work on common scaling of these institutions and actors may enable such comparisons, however, which rely on relative proximity between staffers and institutions.

13. These hypotheses (with a slightly different version of H9) were pre-registered, along with an analysis plan at `https://osf.io/wvnxm`.

3.4.1 Data: The 2019 Congressional Capacity Survey

I evaluate these hypotheses using a survey experiment embedded in the 2019 Congressional Capacity Survey (CCS). This survey followed much the same procedure as the 2017 CCS, and was fielded with Tim LaPira, and funded by Democracy Fund. We constructed the sampling frame from the full Legistorm contact list of congressional staffers as of July 18, 2017, which included individual's names, employers, and official email addresses. The contact list contained the full census of 10,369 legislative branch employees with a Washington, DC office address. The contact list included 729 House, Senate, and bicameral offices and organizational units. The list excluded legislative support agencies (such as the Congressional Research Service, Government Accountability Office, and the Congressional Budget Office) that employ personnel as federal civil servants. From this list of organizational units, the research team selected 633 organizational units with names suggesting the primary mission contributed to legislative operations, as broadly as could be determined by public information about the office. Primarily, these units focus on members' personal offices, standing committees, and party leadership offices. Secondarily, we included "other" administrative offices (such as the House Parliamentarian)[14] and institutionalized caucuses or member organizations (such as the Senate Caucus on International Narcotics Control and the House Republican Study Committee).

This process resulted in 6,505 individual staffers employed as political appointees in the legislative branch, summarized in Table 3.2. The table cross-tabulates prospective respondents by chamber and office type.

The survey was conducted exclusively online in three sequential data collection stages between May 14th and September 11th. Each of the 6,505 prospective staffers were contacted first by mail with a personalized survey link and then by three subse-

14. Institutional officers and their staff are arbitrarily attributed to the respective majority party, though they operate in fact as non-partisan employees.

	Personal	Committee	Party Leadership	Total
House	2756	953	184	3893
Senate	1768	741	103	2612
Total	4524	1694	287	6505

Table 3.2: **2019 Sampling Frame**

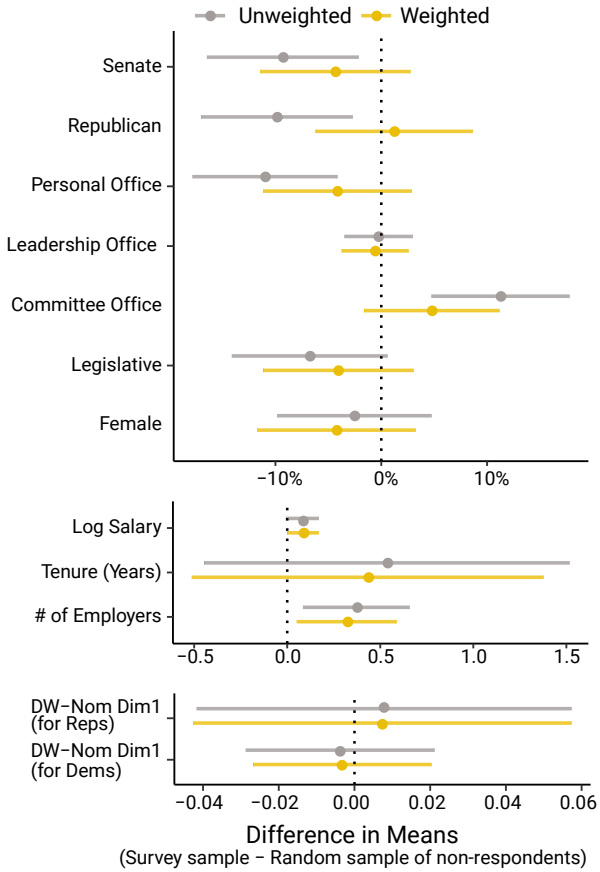
quent emails with a personalized link to identify respondents with existing biographical data and to maintain strict confidentiality. In addition to direct contacts, the research team recruited senior legislative staffers in our professional networks to ask them to spread the word as much as they were willing, and partnered with external validator groups including the Congressional Management Foundation, R Street, the Legislative Capacity Working Group and Demand Progress to promote participation.

The overall response rate was 5.5 percent (355 of 6,505). The margin of error at the 95% confidence level is 5.2%. All respondents were given inverse probability weights using a post-stratification procedure conditioning on the joint distribution of chamber, office type (personal, committee, other), and party in the sampling frame (Lumley et al. 2004; Lumley 2017). Respondents were counted as having taken the survey for the purpose of inclusion in the numerator when calculating weights if they responded affirmatively regarding participation in the study and responded to any other question in the survey. The maximum weight applied to any case is 1.588, and the minimum is 0.556.

Potential non-response bias presents a significant challenge to inference with a sample of this kind. In Figure 3.7, I show that the unweighted experimental sample over-samples Democratic staffers, House staffers, Committee office staffers, and those who have worked in a larger number of offices within Congress, suggesting that respondents and non-respondents may differ in some systematic ways.

Respondents and non-respondents work for ideologically quite similar members of

Figure 3.7: **2019 Congressional Capacity Balance Tests**



N= 710, 355 non-respondents, 355 respondents. 95% confidence intervals shown around difference in means.

Congress, as the within party comparisons show.[15] The sample is also quite representative along gender lines, and of the percentage of staffers in legislative roles.[16] Using the post-stratification weights provides substantially better balance on important institutional and partisan covariates like the percent of staffers that work in the Chamber, Party and Office Type (shown in yellow). This suggests that weighted responses are likely to be less subject to potential non-response biases. I use these

15. Committee and subcommittee staffers are coded as working for the chairs of the committee or subcommittee, respectively.

16. Identified for this purpose by a simple search for "legis" or "policy" in their titles. This inevitably under counts committee staffers, who often have the title of "Professional Staff Member" regardless of their responsibilities, however this is equally true of both respondents and non-respondents in committee offices.

weights in all subsequent analysis reported in this paper.

3.4.2 Experimental Design

This experiment uses a fully randomized choice-based conjoint design (Hainmueller, Hopkins, and Yamamoto 2014), to causally identify the impact of two types of alignment on staffers' choices of think tank policy white papers: 1) ideological alignment between the staffer and the policy content, and 2) ideological alignment between the staffer and the source of the white paper.

The conjoint comparison task was designed to mimic a common situation that congressional staff often face: quickly choosing among several potential sources of information when making policy recommendations. In the experimental setting, I distill this to its simplest instantiation, a choice between two policy documents, or white papers. I manipulate two factors: (1) the *policy content* of the white paper, (2) the *source* of the white paper. The experimental prompt read:

> While this might not be an issue you usually work on, imagine that [your boss/ a member][17] has asked you to evaluate policies to lower prescription drug prices.
>
> As you are working on this issue, the following two white papers come across your desk:

They were then presented with two hypothetical white papers, in which the policy content and institutional source were randomly varied. After viewing the two options, staffers were then asked "If you could only choose one, which report would you rely on? (If Reports A and B are identical, select at random.)"[18] Staffers were given radio buttons to select either Report A or Report B.

17. Personal office staff received the prompt with "your boss" wording, while committee and leadership office staffers received the prompt with "a member" wording.

18. It was possible that staffers received identical reports because the conjoint design was fully randomized. This occurred in 111 out of 1224 tasks completed by staffers). Results are substantively the same when these responses are excluded from the analyses.

Immediately following this choice, staffers were presented with a second forced choice conjoint task following the same design on the topic of the minimum wage. They were presented with the following analogous prompt:

> Next, imagine that [your boss/ a member] has asked you to evaluate the impact of raising the minimum wage.
>
> As you are working on this issue, the following two white papers come across your desk:

Table 3.3 shows the Executive Summary prompts which were used in the conjoint presentations for each of the two different policy areas, as well as whether they were intended to capture a conservative or liberal position on these issues. The executive summaries presented were modified from existing policy reports published by well known conservative and liberal think tanks.[19] Generally, the liberal positions were selected to favor a greater degree of government involvement in the economy (i.e., setting a minimum wage or setting drug prices) and the conservative positions were selected to focus on market mechanisms (i.e., increasing competition to lower drug prices, or focusing on how minimum wage might impact prices).

In addition to randomizing the executive summaries of the white papers, each white paper was attributed to one of six random think tanks, three conservative and three liberal, shown in table 3.4. These think tanks were coded as either conservative or liberal according to their IGScores, which are revealed preference estimates based on position-taking activity (2020).

Staffers were presented these conjoint tasks as shown in Figure 3.8.

19. https://www.americanprogress.org/issues/healthcare/reports/2016/09/26/144760/negotiation-plus-a-framework-for-value-based-drug-pricing-negotiation/, https://www.cato.org/publications/commentary/heres-how-trump-should-address-high-cost-prescription-drugs, https://www.heritage.org/health-care-reform/commentary/order-lower-drug-prices-3-areas-the-government-should-address

Issue	Position	Executive Summary
Drug Prices	Conservative	Congress should reduce regulations and address patent abuse that hinder the ability of private firms to bring cheaper generics to market.
Drug Prices	Liberal	Congress should authorize drug price-setting that will help public and private insurance providers negotiate lower prices
Minimum Wage	Conservative	Increasing the minimum wage raises the costs of goods and services and are poorly targeted to benefit low-income families.
Minimum Wage	Liberal	Increasing the minimum wage raises the earnings of people with low incomes with little risk of significant job loss.

Table 3.3: **Experiment Manipulation: Policy Content**

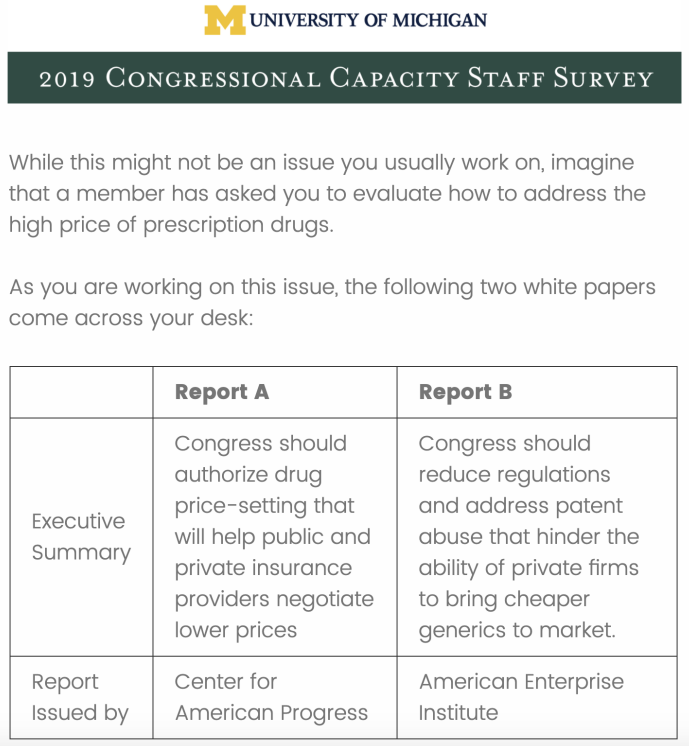
Source	Ideology
American Enterprise Institute	Conservative
Heritage Foundation	Conservative
R Street Institute	Conservative
Center on Budget & Policy Priorities	Liberal
Center for American Progress	Liberal
Demos	Liberal

Table 3.4: **Experiment Manipulation: Information Source**

3.4.3 Methods: Analysis

I began by recoding individual respondent-white paper dyads according to whether the staffer and the white paper content were aligned or not-aligned, and whether staffer and the white paper source were aligned. Republican staffers were coded as being aligned with conservative (generally pro-market) content and conservative

Figure 3.8: **Example of White Paper Conjoint Presentation**



This figure shows the white paper conjoint as it was presented to staffers in the 2019 Congressional Capacity Survey. The Executive Summary and Issuing Institution were fully randomized for each report.

think tanks (Heritage, AEI and R Street), and Democratic staffers were coded as being aligned with liberal (generally regulatory) content and liberal think tanks (Center for American Progress as a left of center source, Center on Budget & Policy Priorities, and Demos). Staffer partisanship is taken from Legistorm, which uses staffers' congressional work histories to determine partisanship.

In order to assess the impact of source ideology and report content on staffer evaluations of hypothetical reports, I follow Hainmueller, Hopkins, and Yamamoto (2014)'s analysis protocol. I calculate the average marginal component effect (AMCE) estimator on the direct effects of alignment between staffer and source, and the alignment between a staffer and the content of the report. I estimate the Average Component Interaction Effect (ACIE) on the interaction between these two forms of alignment.

In a choice-based conjoint with binary outcomes (chosen or not), effect sizes of the AMCE and ACIE can be interpreted simply as the increase in the probability of selection over the baseline case.

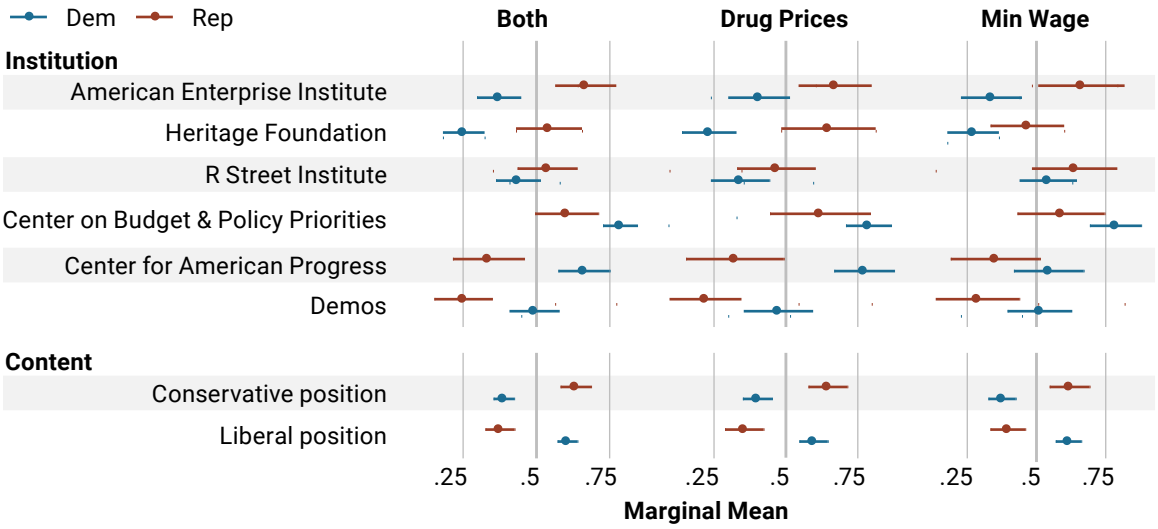
In addition to estimating the marginal effects for these components and interactions, I condition the analysis fully on the extremism of staffers to investigate whether more extreme staffers evaluate white papers differently than their more moderate peers. In all analyses standard errors are clustered by respondent.

3.4.4 Results: Conjoint Experiment Analysis

I begin by reporting the descriptive marginal means of the different treatments in the conjoint experiment. Column one of 3.9 presents the marginal means pooling across both issues, while column two and three present these results separately. To illustrate how the treatments are evaluated differently by partisan staffers, I calculate the marginal means on partisan subsets of staffers. Marginal means are a descriptive method of evaluating conjoint data, and represent simply the mean outcome for all instances of a given feature level in the data (e.g., Center for American Progress as a source or conservative policy content), averaged over the rest of the features. In a forced choice context with two options, like the one presented here, marginal means average .5 by definition with a range of [0-1] (Leeper 2020). A marginal mean of 0, would mean that no respondents in the sample (or subsample) chose a report with that factor, a marginal mean of 1 would mean that every staffer in the sample (or subsample) chose the report when that factor was displayed. Thus, a marginal mean above .5 indicates that a factor is associated with an increased likelihood of selection, and one below .5 indicates that it is associated with a decreased likelihood of selection.

Figure 3.9 shows substantial differences between the marginal means in democratic and republican subsamples for almost every factor, in both the pooled and issue specific cases. There are a few notable exceptions to this, however. The R

Figure 3.9: **Descriptive marginal means from the full conjoint design.**



This figure presents the marginal means of each treatment factor from the full conjoint design, with the 95 percent confidence intervals.

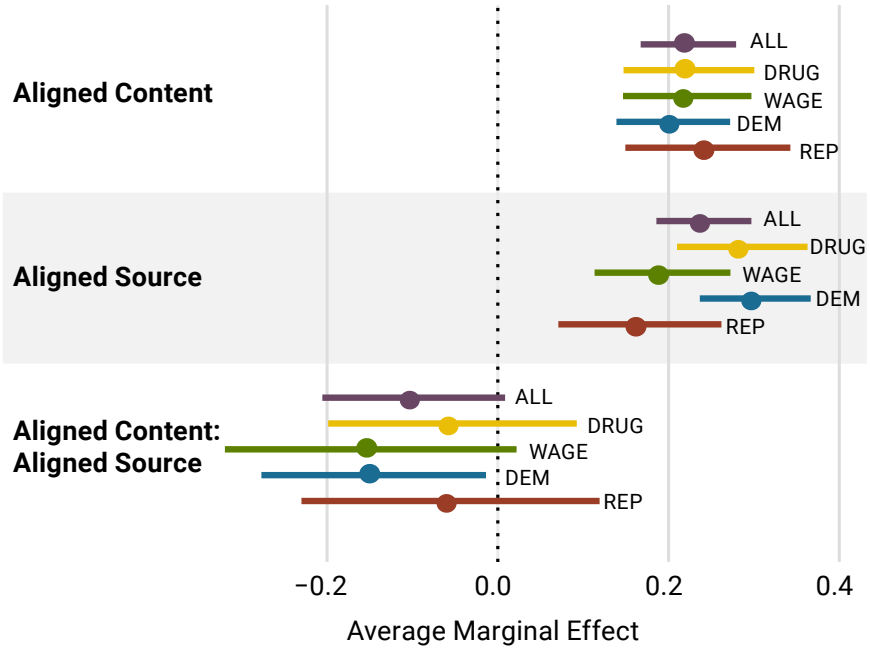
Street Institute, a moderate center-right think tank, enjoys relative parity in how it is evaluated by both democratic and republican staffers. The Center on Budget & Policy Priorities, a left of center think tank with a reputation for rigorous work, is positively evaluated by both Democrats and Republicans, although democratic staffers are even more likely to select it than Republicans. These results suggest that staffers are appropriately recognizing the ideological affiliations of the think tanks chosen as treatment conditions. The descriptive results appear broadly similar in both the prescription drug price task and the minimum wage task. However, the results appear slightly more muted in the case of the minimum wage task.

There is clear separation between the level of support indicated by the marginal means for the liberal and conservative policy content in partisan subsamples, with higher marginal means for the liberal content among Democrats and higher marginal means for the conservative content among Republicans.

Following these descriptive marginal means, Figure 3.10 displays the causal esti-

mands of interest for *Aligned Content*, *Aligned Source* (AMCE) and the interaction between *Aligned Content* and *Aligned Source* (ACIE). The substantive interpretation of AMCE and ACIE are somewhat different than that of the marginal means presented above. Zero is indicative of no effect, and the estimated effect sizes correspond to the increase (or decrease) in probability of selecting a white paper with a particular attribute relative to the baseline category. Here, the baseline case is non-aligned content and non-aligned source, so the effects presented indicate the percentage increase in the probability that a staffer would choose a white paper with aligned content (or from an aligned source) relative to a white paper with non-aligned content (or from a non-aligned source). Full results of these models are shown in Table L.1 in Appendix A.

Figure 3.10: **Conjoint Marginal Effects**



Average marginal effects based on white paper/staffer alignment. Estimates presented are AMCE for main effects ACIE for the interactive effect with 95 percent confidence intervals.

Results from the full conjoint data indicate that staffers are $\sim$ 22 percent more likely to choose a white paper with aligned content (e.g, liberal content if the staffer

is a Democrat, conservative content if the staffer is a Republican), than they are to choose a white paper with content of the opposing alignment. Similarly, congressional staffers are $\sim$ 24 percent more likely to select a white paper coming from a think tank that ideologically aligned with them (e.g., liberal for Democrats, conservative for Republicans). There is no statisitically distinguishable interaction between aligned content and aligned source for the white paper, suggesting that the effects of each of these types of alignment is, broadly speaking, additive. Furthermore, figure 3.10 shows the marginal effects estimated on important subsets of the conjoint data. These results indicate strong support for both H6 and H7.

We observe broadly comparable results in each of the two separate issue-based tasks, suggesting that these findings generate beyond one specific issue area, and alleviating potential concerns about carryover across tasks. To fully test the assumption of no carryover, and demonstrate that the results hold equivalently across topics, I interacted the full model with an indicator variable for the task topic (Drug Prices or Minimum Wage) and conducted a restricted hypothesis F-test for the joint significance of the interaction terms ($F(3, 1216) = 1.0462$, $p = .371$). Thus, I cannot reject the null hypothesis that the effects are identical across topics and tasks.

Finally, Figure 3.10 shows the average marginal effects broken out by partisanship of the staffer respondent. Again, results are broadly consistent across both Democratic and Republican staffers, with strong effects of both information coming from an aligned source and information containing aligned content. Notably, the effect of an aligned source appears somewhat weaker among Republicans. Returning to the marginal means displayed in table 3.9, we can see that Republican staffers tend to view the Center on Budget & Policy Priorities quite favorably despite it's liberal alignment, so this factor level may be attenuating the effect of "aligned source" among Republican staffers. Despite the appearance of some differences in marginal effects between Republican and Democratic staffers, a restricted hypothesis F-test for the

joint significance of the interaction terms of the full model, interacted with staffer partisanship, cannot reject the null hypothesis that the marginal effects for Democratic and Republican staffers are identical at conventional levels ($F(3, 1216) = 1.9564$, $p = 0.1187$).

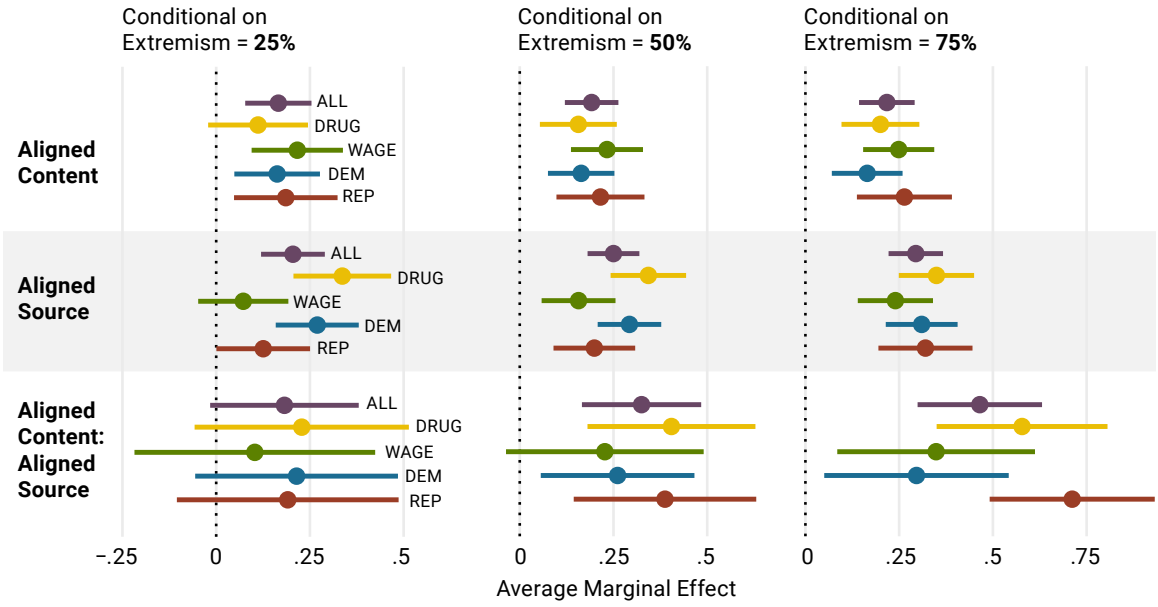
Together the results in Figure 3.10 demonstrate that the effects of source and content alignment generalize beyond a single issue, or party, supporting H6 and H7.

Next, I turn to hypothesis 8, that the effect of source alignment is stronger than content alignment. The average marginal component effects of aligned content and aligned source appear of roughly equivalent magnitude in both the full data set and subsets reported in Figure 3.10. A restricted hypothesis F test cannot reject the null hypothesis that the effects are the same ($F(1, 1220) = 0.539$, $p = .463$). Accordingly, I find no support for H8.

Finally, Figure 3.11 presents results of the conjoint analysis conditioned on *ideological extremism*, a respondent varying characteristic. To obtain estimates of ideological extremism, I follow the same procedure outlined in Chapter 2. Staffers were asked a battery of five questions with likert-type agreement responses from Heinz (1993), and scaled using a Rasch Partial Credit Model (PCM) a special case of item-response theory adapted to suit categorical response items. The distribution of staffer ideology, and the item specific cutpoints from the scaling can be seen in Figure L.1 in Appendix A. In order to obtain a measure of ideological extremism, I first standardize (with weights) the ideology measure produced by the PCM and then take its absolute value.

The results shown in Figure 3.11 present the same basic model of the conjoint data as those in Figure 3.10 but the model is fully conditional on staffer extremism. When conditioning on extremism, it is clear that the interaction between aligned content and aligned source becomes an increasingly important effect, both substantively and statistically significant among the most extreme staffers. Staffers in the 75th percentile of ideological extremism remain between ~ 20 and ~ 30 percent more likely to

Figure 3.11: **Fully Interacted Extremism Results**



Average marginal effects based on white paper/staffer alignment in fully interacted extremism model (AMCE for main effects ACIE for the interactive effect.

select a white paper with aligned content or from an aligned source, but they are also almost 50 percent more likely to select a source that both offers aligned content *and* comes from an aligned source. This interactive effect is significant in four subsets of the conjoint data to varying degrees, with the strongest interactive effect appearing among Republican staffers.

3.4.5 Discussion

Together these experimental results make several important aspects of staffer evaluation of white papers clear: 1) both the content in a paper and the ideological valence of the source shape how partisan staffers evaluate information that comes across their desk; 2) this is particularly pronounced among more ideologically extreme staffers, for whom I uncover an especially strong average component interactive effect when both the source and the content are aligned with the staffer; 3) these results appear

to be broadly consistent in both the prescription drug price task and the minimum wage task, as well as among Democratic and Republican staffers, suggesting a high degree of generalizability of these findings.

The strong effects of ideological alignment of both content and source demonstrate strong support for hypotheses 6, 7 and the more pronounced effects among more ideologically extreme staffers support hypothesis 9. While these results suggest that the ideological cue provided by the source of a policy report has a significant effect on whether a staffer will rely on that report regardless of its ideological content, I find no support for the notion that the effect of source cues are *larger* than the effect of the content itself, contra hypothesis 8. While the effects of source cues are strong as bounded rationality expectations would lead us to believe, when given additional information, such as a summary of the content of a report, staffers incorporate that information into their assessment of the report.

3.5 Discussion

The bottom line is that legislators and their staff do want information and analysis, but they especially want it from their friends. Think tanks offer an easy heuristic for credibility and belief confirmation, but only if they are already on your side. As with most heuristics, their use may lead to correct decisions, but can also introduce blind-spot errors. Consequently, think tanks have become important interlocutors in the Washington influence spheres, as both producers and marketers of important policy ideas.

Together these findings suggest that political polarization in Congress may be self-reinforcing (McCarty, Poole, and Rosenthal 2006; Sinclair 2006). If staff are disproportionately responsive to information from co-partisans or ideology-confirming experts regardless of policy content, and draw especially from sources that confirm their priors within their own ideological networks of information providers (see also

Curry 2015), then they may be creating feedback loops that alienate out-partisans and minimize deliberation.

In the context of representation, these results support the notion that legislative subsidy occurs along ideological lines (Hall and Deardorff 2006), with staffers drawing only from their allies. However, because staffers rely so heavily on the ideological cue offered by the source of policy information, these information sources can substantially influence the priorities and policy activities of policy makers (Fagan 2019). However, think tanks depend on private funding, which is not always transparent (Campbell and Pedersen 2014). Indeed, anecdotal evidence suggests business lobbyists advise their clients to fund a trusted think tank to do research supporting their position (Baumgartner et al. 2009; Drutman 2015). These often opaque motivations should raise concerns about moneyed interests, information provision, and action in Congress. This highlights the importance of ongoing and future work on whether and how funding the production and dissemination of policy information serves as a powerful tool for well resourced interests.

Think tanks, as inherently partisan organized interests, merit further study if they indeed serve as credible signals for those seeking policy influence. For example, how do the research and policy agendas of left and right think tanks differ? What policies do they prioritize and ignore? And how do corporations, wealthy donors, and foundations who fund think tanks shape these agendas? Recent observational work by Smith (2018), Lerner (2018), Fagan (2019), and others have explored think tanks as ideological actors in national policymaking. Together with this project, this scholarship suggests that the role of think tanks as institutions embedded in party network,s and as conduits of interest group influence, deserves increased attention.

Finally, this investigation suggests a possible causal mechanism for recent observations that while both Democrats and Republicans listen only to co-partisans, Republicans support policies more favored by rich constituents than poor constituents

(Lax, Phillps, and Zelizer 2019). Perhaps think tanks act as intermediaries, validating low-tax, anti-regulatory concerns of wealthy donors primarily on the political right (see, e.g., Smith 2009; Mayer 2016; Hertel-Fernandez 2019). If so, there's little need for wealthy donors to seek anything more than mere access, so long as others produce and package the right message for them. In this case, campaign donations buy very little. And, both lawmakers and their wealthy benefactors can claim the absence of a quid pro quo. Meanwhile, think tank benefactors — the campaign donors themselves, or those with very similar political interests — subsidize their credibility as definitive sources of policy information.

CHAPTER IV

Coalitions and Coordination in Washington Think Tanks: Board Interlock Among Washington DC-based Policy Research and Planning Organizations

4.1 Introduction

The last 40 years have seen a precipitous rise in both the number and influence of policy-planning organizations, often called "think tanks" (Medvetz 2012). Recent research in American politics has begun to reckon with the role that policy-planning organizations play in substantive policy-making and party politics. Indeed, incoming presidents routinely staff their administrations with high-level think tankers, and think tanks have been central actors in the rise of policies like Welfare Reform, and the Affordable Care Act (Medvetz 2012).

In previous chapters, I have focused on how individual staffers evaluate information produced by organizations outside of Congress. I've shown that staffers are more likely to trust and use information from ideologically aligned think tanks, and that this effect is particularly strong among the most extreme staffers. The source of policy information has large effects on how staffers treat petitioners seeking meetings

and making policy requests, and has as large an effect on how staffers evaluate white papers as does ideological valence of the content. The importance of this outside information, and particularly the substantive and significant effect of source ideology, suggests that the organizations that produce these policy subsidies play an important role in what perspectives are heard on Capitol Hill.

Think tanks' allocation of attention across issues tends not only to reflect, but also to shape partisan issue ownership (Fagan 2019). Both the ideological perspective and proximity to power of a think tank shape how their work is used by Congress (Lerner 2018). Moreover, as previous chapters have demonstrated, congressional staffers both disproportionately trust policy evidence from partisan-aligned think tanks, and are more likely to favorably evaluate petitioners presenting evidence from aligned think tanks.

Despite this recent growth in attention to think tanks, the full ecosystem of these policy-planning organizations remains under-mapped. Following work in interest organization population ecology, and population demography, (Gray and Lowery 2000; Carroll 1984), this chapter catalogues policy research and analysis organizations active in Washington D.C.. In particular, I focus on the connections between these organizations, examining how they coordinate and share information, as well as mitigate systemic risk. Viewing this set of organizations in a networked context is critical to understanding the system of policy information production and legitimation.

As Hertel-Fernandez (2019) details in his thorough accounting of the network of conservative activists, think tanks, and party adjacent organizations in the states, organizations engaged in crafting draft legislation and policy research benefit from coordination and cross-subsidization. Just as the individual components of the conservative "troika" of ALEC, the State Policy Network, and Americans for Prosperity cannot be fully understood without a focus on their interactions, I argue that the full ecosystem of policy information production must be viewed as relational. In

this chapter, I begin the process of examining the broader, networked organizational context in which policy information is produced.

As legislators and staff depend on the informational subsidies produced by these organizations, the manner in which they coordinate amongst themselves, boost particular policies, confer status and legitimacy, seek funding, and shape the bounds of debate is substantively important for understanding policymaking in the United States. In this chapter, I take an inductive approach at how these central—yet understudied—actors in the American political landscape coordinate among themselves. I conduct the largest mapping of the Washington D.C. think tank ecosystem to date (Burris 2008). Following an approach common in organizational sociology, I leverage interlocking directorates of organizations to examine patterns of organizational coordination (Mizruchi 1996). Two organizations are said to have an "interlock" between their directorates when one (or more) people sit on the boards of both organizations. While there are surely many forms of coordination and communication among think tanks, interlock signifies a particularly strong organizational tie between two groups. I construct and analyze the board interlock network for 277 Washington D.C.-based organizations, using IRS 990 disclosure data.

Prior interlock scholarship has tended to focus largely on connections between corporate boards (Mizruchi 1996). However, even in these contexts, scholars have found that interlock has been central in enabling political activity (Mizruchi 1982), with highly interlocked directors being more active in policy associations (Useem 1979). Research on bank control over corporate boards has indicated that centrality in the interlock network can be understood as power or importance in the community (Mariolis 1975), with some arguing that these ties are particularly important as they facilitate social capital and access to information flowing through the network of organizations (Davis 1991; Mizruchi 1996).

A more thorough accounting of policy-planning organizations and the manner in

which they coordinate is of central importance in understanding contemporary American political institutions. As legislative staff capacity has declined in members' offices (Crosson et al. 2020a), policy-making in Congress has become centralized in party leadership (Curry 2015). We can understand this partisan legislating in the context of a recently prominent theory of American politics, which conceptualizes political parties as extended networks of policy demanding constituencies, organizations and interest groups (Bawn et al. 2012). This theory is usually applied to the role these networks play in setting party agendas or nominating and supporting candidates for elected office. To be sure, the nomination and election process serves a fundamental role in identifying and prioritizing issues for government attention. However, I argue that think tanks serve as the policy-apparatus of these extended party networks of policy-demanders. As such, we should expect them to coordinate along ideological dimensions in their attempts to support and influence partisan and ideological lawmakers (Noel 2014).

Prior interlock research among policy planning organizations has focused on small subsets of the full network, with particular attention given to the largest actors. Burris (2008) evaluated interlock among twelve prominent think tanks, and Salas-Porras (2018) focused on a more inclusive set of connections — beyond board interlock — among 33 economic policy think tanks during the financial crisis. These studies have found strong evidence of ideological coordination among these elite policy planning actors. In a study of policy networks around estuaries, Berardo and Scholz (2010) demonstrate that organizations connect both to popular and well-resourced organizations. These connections enable both information flow in the network, and the establishment of bonding structures that facilitate higher-stakes coordination.

This research differs from this prior work on think-tank interlock in two important ways. First, I analyse a far larger set of organizations, as policy information, especially on niche issues, may come from players beyond the few most prominent.

Current work gives us no sense of whether or how these organizations are integrated into the network. Second, I use exponential random graph modeling to more systematically evaluate the interlock network. Beyond simply describing the observed characteristics of the network (Burris 2008; Salas-Porras 2018), this enables me to conduct a statistical assessment of what features of individual organizations are directly associated with greater connectivity in this network.

Because of the inductive nature of this investigation of coordination and coalition formation among policy-planning organizations, I do not detail explicit theory-driven hypotheses to test. However, it is useful to lay out some general expectations about what evidence of different network structures and interlock patterns might indicate. Following the findings in Burris (2008) and Salas-Porras (2018), I expect that organizations will be more likely to foster ties with other organizations that are ideologically aligned with them. However, it remains to be seen if this effect extends to this broader set of organizations beyond the top, often quite ideological, players. I also expect organizations with access to greater financial resources to be more heavily interlocked, as access to resources is a substantial motivator of interlock in other contexts (Mizruchi 1996).

I do not have strong prior beliefs about the direction or magnitude of the relationships between other dyadic and organizational factors and the probability of connection. Common explanations for strategic interlock in the corporate context include preferences for diverse connections to increase information gathering breadth, and preferences for connections to other similar organizations to monitor competition, or engage in collusion (Mizruchi 1996). Similar explanations map to this case: organizations may seek to build cross-issue coalitions increasing the scope of their information networks (issue heterophily), or they may choose ties within their local issue space to increase efficiency and avoid duplicated effort (issue homophily). Similarly, we might imagine justifications for either homo- or heterophilic preferences

in other dimensions of organization type, like whether the organization engages in lobbying, has dues paying members, or hires contractors.

Following Berardo and Scholz (2010), we can interpret the presence of centrally located bridging ties as indicative of the network's ability to facilitate information transfer and mitigate low-level risk, while a tendency for transitivity and triadic closure can be understood as offering the potential for greater collaboration within communities.

In this chapter, I have three main goals. First, I set out to describe the scope and properties of the U.S. federal policy-planning network, at a much larger scale than has previous work. Second, I model the organizational factors which are associated with a greater embeddedness in this community. Finally, I detail the communication and coordination strategies that these interlock trends imply.

4.2 Describing The U.S. Federal Policy-planning Network

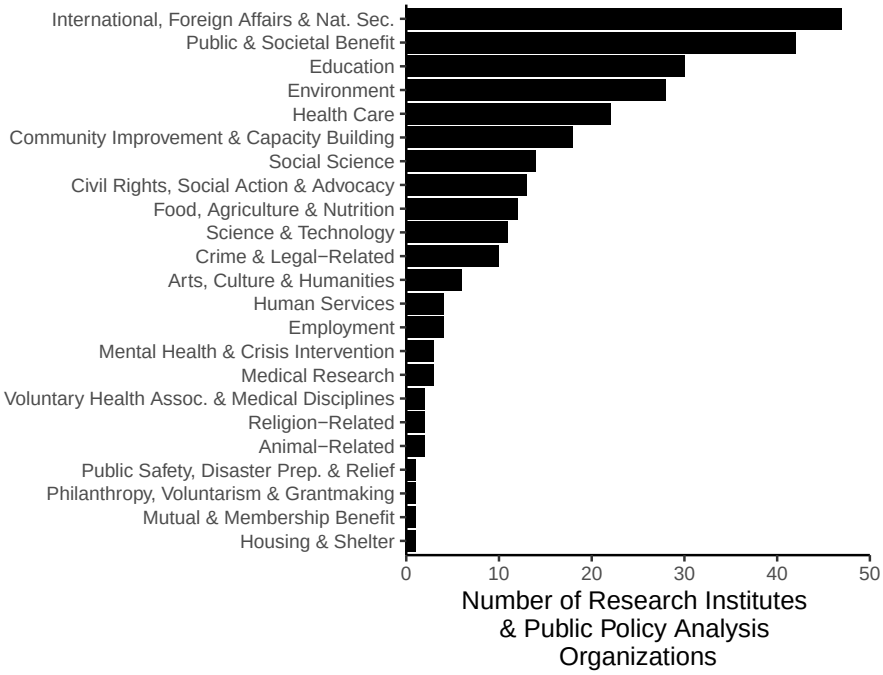
In this project, I construct and analyze the board interlock network of policy planning organizations headquartered in Washington D.C.. I analyze all organizations active between 2008-2015 with average annual budgets over $100,000, which are classified as subtype "Research Institutes & Public Policy Analysis" according to the IRS' National Taxonomy of Exempt Entities Core Codes (NTEE-CC). As part of their determination of tax exemption status, "Determination specialists" at the IRS classify organizations by type using the NTEE-CC. The first digit of the NTEE-CC is a letter A-Z, which represents the "Major Group," a broad sectoral categorization (e.g. Education, Environment, Crime & Legal-Related etc.). The second and third digit of the NTEE-CC subdivide organizations by specific areas, organization types, or activities. The NTEE includes a set of, so-called, "common codes," that code for particular types of activity that are common across all major groups, such as advocacy, technical assistance, fundraising, or research. In this analysis, I include all

organizations classified with the "05" common code for "Research Institutes & Public Policy Analysis," regardless of their major group.

4.2.1 Think tank data

Figure 4.1, shows the breakdown of the 277 research institutes and public policy analysis organizations included in this analysis by their major group. Notably, the most common type in the dataset are International, Foreign Affairs & National Security organizations, followed by Public & Societal Benefit, Education, and Environment.

Figure 4.1: **Think Tanks by Area of Focus**



This figure presents a breakdown of Washington D.C.-based Research Institutes & Public Policy Analysis organizations (subtupe 05) by NTEE-CC Major Codes.

Data about these organizations, including their classifications, complete listings of their boards of directors, annual revenues, membership dues, lobbying expenditures, and contracting are from their Internal Revenue Service (IRS) form 990 mandatory annual disclosures, as collected and digitized by GuideStar. In addition to IRS 990

data, I gathered campaign contributions made by employees of these organizations, summed by party, using data from the Center for Responsive Politics, and organizations' ideal points, IGScores (2020). IGScores are ideal points on a unidimensional, left-right scale based on organizations' public position-taking activity between 2005-2016, which are particularly well-suited to this application (2020). Edges have been dichotomized to code for the existence of an interlock tie between organizations. Table 4.1 below, shows descriptive statistics for the variables which are used in the subsequent analysis.

Variable	**Percent True**	**Percent False**
Has IG Score	28.9	71.1
Has Members	14.8	85.2
Hires Contractors	55.6	44.4
Engages in lobbying	90.6	9.4
Variable	**Mean**	**SD**
Total Revenue	$4,085,478.76	$10,572,496.46
Membership Dues	$61,838.29	$332,845.65
Lobbying Spending	$12,712.53	$151,517.58
Number of Contractors	1.39	3.80
Contributions to Democrats	$21,936.59	$9,0503.17
Contributions to Republics	$9,934.49	$6,0659.49
IGScore (all)	-0.07	0.88
IGScore (real)	0.06	1.09
IGScore (imputed)	-0.12	0.77

Table 4.1: **Think Tank Descriptive Statistics**

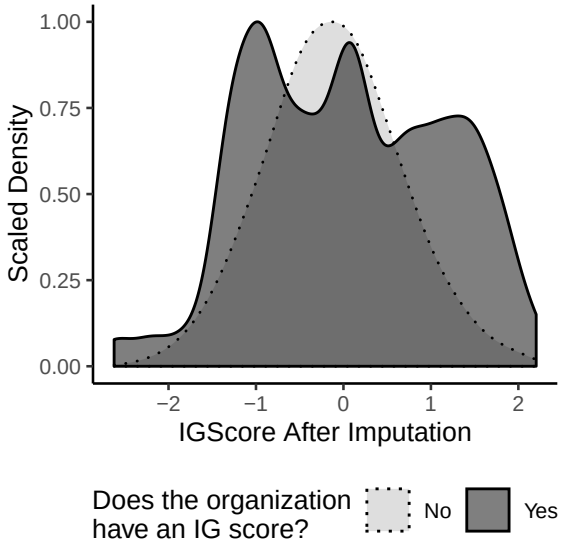
As table 4.1 shows, IGScores were only available for 28.9 percent of the organizations included in the analysis. Because of this missingness, I employed multiple imputation using `Amelia` (Honaker, King, Blackwell, et al. 2011), to generate imputed values for IGScores for think-tanks without scores. In service of a more accurate imputation model, I then collected two campaign finance variables for each organization using data from the Center for Responsive Politics: 1) total contributions to democratic candidates from the organizations' employees, and 2) total contributions to republican candidates from the organizations' employees. I found contributions

to democratic candidates from 61.0 percent of organizations and contributions to republican candidates for 54.1 percent of organizations. Organizations with no contributions found from employees to either republicans or democrats were treated as missing. I also included variables for the average IGScore of the three and five organizations with the most semantically similar names in a 300 dimensional vector space constructed using latent semantic analysis (Furnas et al. 1988; Deerwester et al. 1990; Rehurek and Sojka 2011). Both the contribution variables and the proximate IGScore variables were used in the imputation model, along with average revenue, average membership dues, average number of contractors, average total revenue, NTEE code, and average end of year assets during the period 2008-2015. Contributions to democrats, contributions to republicans, revenue, membership dues, total revenue and end of year assets were logged, while NTEE was treated as a nominal variable. Bounds for the IGScores to be imputed as well as the campaign finance variables were set at the empirically observed minimum and maximum values in the dataset. I generate 100 imputed datasets and conduct my subsequent analysis in parallel across datasets, combining results.

The distribution of real versus imputed IGScore values is shown in Figure 4.2, below. The imputed values for missing IGScores is substantially more unimodal and centrally aligned than the distribution of actual IGScores. Additional imputation diagnostics are shown in Appendix A, in Figures 7 and 8. It is important to note that because I use these scores to measure ideological distance between organizations, the moderate, unimodality of the imputed scores will tend to yield conservative estimates of ideological distance, and bias against finding substantive ideological results.

In expectation, overly moderate IGScores for these organizations will artificially shrink the distance between organizations—the key dyadic measure of ideological alignment. This should attenuate estimated effects, and as a result the test of dyadic alignment presented here is a conservative one.

Figure 4.2: **Think Tank Ideology**



Density plot of IGScores for the research institutes and public policy analysis organizations in the study sample. Imputed values for organizations without IGScores shown in light grey with a dotted line.

4.2.2 Detecting think tank interlock

To facilitate the detection of interlocks, I standardized directors names using a three-stage process. First, I used key collision clustering with a two letter fingerprint with manual verification to correct for typos. Next, I used key collision clustering based on word-tokens, with manual verification to identify names that may have been entered in different formats (e.g. Firstname Lastname vs. Lastname, Firstname). This clustering and merging was done in OpenRefine (Verborgh and De Wilde 2013; Kusumasari et al. 2016). Finally, I removed titles, honorifics, and post-nominal letters or initials such as Esq., PhD or Jr., as they are applied extremely inconsistently throughout the data.[1] Following this name standardization procedure, the 277 think tanks included in this analysis had, in total, 9,469 unique directors between 2008

1. While it is certainly true that titles and post-nominal letters provide additional information which may distinguish between otherwise identically-named individuals, they are applied so inconsistently (even when the same person's name is being entered by the same organization in successive years) that matching on names including titles and post-nominals would induce substantial false negatives.

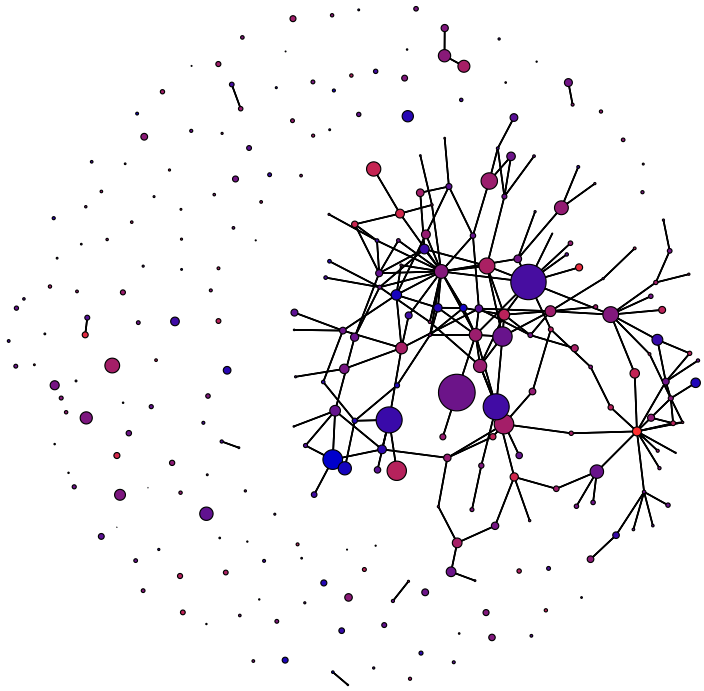
and 2015. Two organizations were coded as having an interlock tie between them if they had directors with identical post-standardization names at any point during that eight year window. Using this method, 234 of these directors served on the boards of more than one organization in the dataset. For example, Ambassador C. Boyden Gray, founding partner of the DC-based law firm, Boyden Gray & Associates LLP, served on the board of 5 organizations in the dataset during this period, the most of any director, — American Action Forum, Atlantic Council of the US, The European Institute, Center for Global Development, and Freedomworks Foundation.

Because having a common board member within this time window is coded as an interlock tie, organizations can be coded as being interlocked without actually having a board member simultaneously serve on both boards. For example, if John Smith serves on the board of organization A from 2008-2011 and then organization B from 2013-2015, my procedure would code organizations A and B as being interlocked although they were not, in the strictest sense, actually interlocked. In this analysis, I attempt to analyze the structure of the policy-planning network during the Obama Administration, looking at the whole time period. Because I use interlock ties as an indicator of coordination and communication, I count asynchronous ties like the hypothetical one between organisations A and B. As a member of the board of directors for organization B, John Smith would retain social-network connections to the board members he formerly served with on the board of organization A. Because these existing social ties would still serve as effective means of coordination and communication, I consider these asynchronous interlocks as valid for my analytic purposes.

4.2.3 Properties of the think tank interlock network

The interlock network of these D.C.-based research institutes and public policy analysis organizations is shown in Figure 4.3, below. The degree distribution of this network is shown in Figure 4.4.

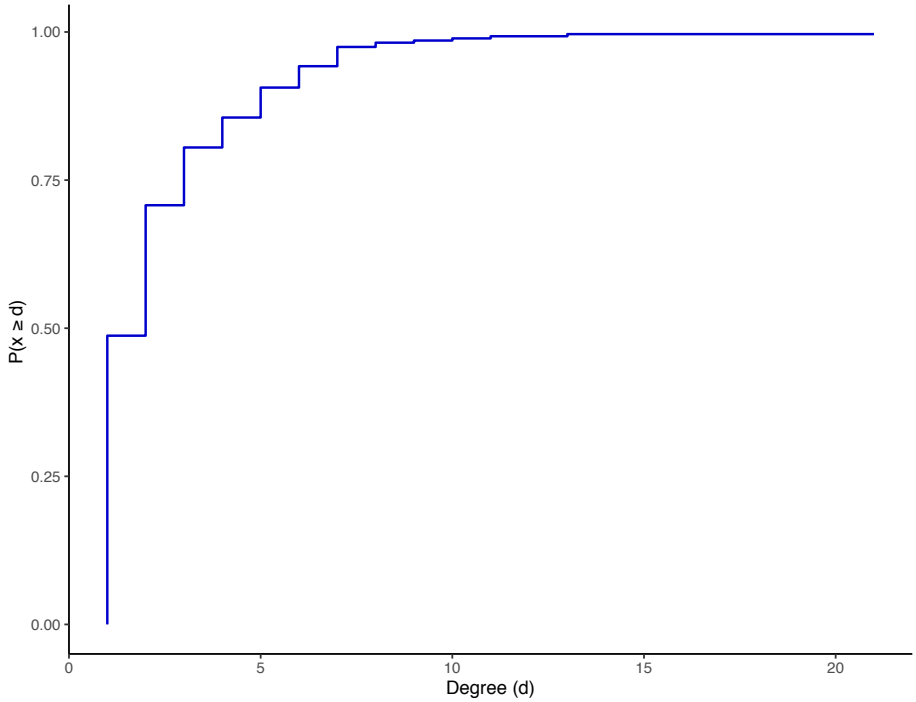
Figure 4.3: **Think Tank Board Interlock Network**



Edges represent instances where the same individual served on the board of directors of two organizations between 2008 and 2015. Node size is proportional to organizations' average total revenue during this period, and color is a function of the organization's ideological ideal point (IGScore), where blue indicates more liberal and red indicates more conservative. The network is displayed using the Fruchterman & Reingold force-directed algorithm (Fruchterman and Reingold 1991)

Following Gerber, Henry, and Lubell (2013) who conduct a similar network analysis on the regional planning network in California, I report a series of network statistics on the observed interlock network. These are shown in table 4.2. The 277 node undirected interlock network has a density of .005, which means that only $\frac{1}{200}$ of all possible dyads are connected by an interlock. The average organization in the network has a degree of 1.4 other organizations, while the most connected organization, the Atlantic Council of the US, is connected to 20 other organizations. There are 127 organizations in the largest connected component of the network, which comprises ~ 46 percent of the network. Path length, or the degree of separation between nodes, refers to the minimum number of "hops" that are required to travel from one node to the other. Mean path length is equal to $\frac{1}{n \cdot (n-1)} \cdot \sum_{i \neq j} d(v_i, v_j)$ where n is the number

Figure 4.4: **Degree distribution of the think tank interlock network.**



of vertices in the network, and $d(v_i, v_j)$ is the length of the shortest path between vertex i (v_i) and vertex j (v_j). Networks with longer mean path lengths are more disparately connected, while those with shorter mean path lengths are more closely connected. The interlock network has an mean path length of 4.825, substantially lower than the expected average path length of 9.29 calculated from 100 randomly generated Erdős-Rényi random graphs (Erdős and Rényi 1960; Newman, Strogatz, and Watts 2001), in which the probability of ties between any two of the 277 nodes was set equal to the observed density in the interlock network. The global clustering coefficient is the share of all triplets (sets of three nodes) which are closed (i.e. all connected to each other). Networks with higher global clustering coefficients will tend to have more tightly-knit clusters of nodes. The interlock network has a global clustering coefficient of .158 which far exceeds the expected global clustering coefficient estimated from Erdős-Rényi random graphs.

This pattern of comparatively small mean path length and a substantially higher

Statistic	Value
Size	277
Density	0.005
Average degree	1.408
Maximum degree	20
Size of largest component	127
% in largest component	0.458
Global clustering	0.158
Mean path length	4.825
Expected global clustering	0.005
Expected path length	9.29

Table 4.2: **Think Tank Interlock Network Statistics**

clustering coefficient than we would expect by random chance suggests that the interlock network is a "small-world network" (Watts 1999), a type of network common in social and other real-world phenomenon that tend to have more highly connected subgraphs with high-degree hubs and relatively short paths between nodes.

Scholars have long noted the importance of an actor's position in a network for a variety of salient outcomes such as access to information (Granovetter 1985; Carpenter, Esterling, and Lazer 2004), ability to engage in brokerage (Burt 1992; Heaney 2006), and status (Podolny 2010; Heaney and Lorenz 2013). I focus on betweenness centrality to identify potentially influential organizations in the interlock network, as suggested by Heaney and Lorenz (2013). Betweenness centrality measures how frequently a given organization lies on the shortest path between other organizations in the network (Freeman 1978). For descriptive purposes I present the top twenty most central nodes according to betweenness centrality in table 4.3.

All but one of the twenty most central organizations, the Albert Shanker Institute, have average yearly revenues above the median revenue in the network of $1,189,176. This suggests that revenue is strongly related to connectedness in the network, a proposition which I test more rigorously below.

Organization	Betweenness	Revenue
Atlantic Council of the U.S.	2932.31	$14,830,739.38
National Quality Forum	2129.40	$19,507,711.62
Economic Policy Institute	1811.19	$6,308,457.50
Brookings Institution	1799.28	$98,120,399.86
Center for Global Development	1150.49	$12,671,746.12
World Resources Institute	954.05	$52,983,077.14
InterAction	847.39	$9,080,699.25
Families USA Foundation	847.33	$6,925,062.38
Washington Inst for Near East Policy	785.95	$10,627,693.75
Committee for Economic Development	768.53	$4,508,123.43
Center on Budget & Policy Priorities	754.52	$29,939,195.12
Center for us Global Leadership	694.39	$4,486,452.25
AAA Foundation for Traffic Safety	686.79	$4,241,489.75
Environmental Law Institute	675.64	$5,278,672.88
New America Foundation	618.39	$19,859,039.00
Albert Shanker Institute	614.00	$907,843.57
Competitive Enterprise Institute	570.56	$5,887,372.14
American Enterprise Institute	568.04	$53,042,058.86
Institute on Taxation & Economic Policy	510.22	$1,452,101.25
Results for Development Institute	491.23	$13,642,474.25

Table 4.3: **Most Central Policy Planning Organizations**

4.3 Modeling think tank interlock connections

In this section, I model the individual organizational, dyadic, and endogenous network factors which shape the patterns we observe in the interlock network I have described above.

4.3.1 Methods

I use an exponential-family random graph model (ERGM) to interrogate the interlock network described above. Interdependence between ties presents a critical challenge to inference when working with network data, as the higher-order relational structure of the data violates the usual assumptions of simple linear regression models. ERGMs allow an analyst to explicitly model these higher-order network structures in addition to node-level and dyad-level covariates of interest (Robins et al. 2007a;

Robins et al. 2007b).

Exponential random graph modeling treats the full observed network as the dependent variable, and node variables, dyadic variables, and endogenous network structures act as independent variables which influence the probability of any given tie to form within that network. The observed network is understood as a random draw from a probability distribution of possible networks given those independent variables, maximized via Monte Carlo maximum likelihood (MCMLE).

The ERGMs in this paper are fit using MCMLE (Handcock et al. 2008), using a single chain of 33,562,620 iterations and a thinning interval of 8,196 for an effective sample size of 4090.

The full model of board interlock estimated here includes the following "exogenous" terms:

Ideological Distance (`absdiff`)—dyadic covariate for each (i, j), defined as the absolute value of the difference between the IGScores of nodes i and j.

Match NTEE (`nodematch`)— a statistic for "uniform homophily." Accounts for the propensity for groups to connect with others of the same NTEE-CC type (assumes this probability is *uniform* across types).

Match Dues Collecting (`nodematch`)—a statistic for "uniform homophily." Accounts for the propensity for groups to connect with others that also (do not) have dues paying members.

Match Lobbying (`nodematch`)—a statistic for "uniform homophily." Accounts for the propensity for groups to connect with others that also (do not) spend money on lobbying.

Match Contracting (`anodematch`) —a statistic for "uniform homophily." Accounts for the propensity for groups to connect with others that also (do not) hire contractors.

Log(Revenue) (`nodecov`)—a node covariate which captures the propensity for organizations with higher revenues to have more connections. Logged to aid convergence, as the distribution of revenue is extremely left-skewed.

Membership Dues (`nodecov`)—a node covariate which captures the propensity for organizations to connect to others with larger revenues from membership dues specifically.

Lobbying Fees (`nodecov`)—a node covariate which captures the propensity for organizations to connect to others that spend more money on lobbying.

When I take endogenous network structure into effect using the ERGM, I include the following "structural" terms:

Edges (`edges`)—a count of the number of edges in the graph. This can be thought of as analogous to an intercept in a linear model.

Concurrent (`concurrent`)—a network statistic equal to the number of nodes with degree two or higher.

Isolates (`isolates`)—a network statistic equal to the number of nodes with degree zero.

GWESP (`gwesp.fixed`)—a statistic equal to the *Geometrically weighted edgewise shared partner distribution* with a decay parameter of $\theta = .8$. See (Hunter 2007) for details. This statistic captures the tendency of the network towards transitivity, but is less sensitive to degeneracy than a simple triangles statistic.

The *Edges* term is included to capture the base-rate of connections within the network, and the *Concurrent*, *Isolates*, and *GWESP* terms are included to account for endogenous network dependency in the interlock network. These terms capture the tendency of the interlock network to form clusters while having a relatively large percentage of isolates.

Following best practices, I report several intermediary models prior to the full ERGM specification (Cranmer and Desmarais 2011; Schrodt 2014). I present models which include only the primary variables of interest (Ideological distance and NTEE typo homophily, as well as those without endogenous network controls.

The models are run using identical specifications across 100 imputed datasets. Each of these datasets is identical in all regards other than that they contain different values of the imputed IGScores used to calculate the ideological distance between nodes. Results from these 100 separate estimates are combined using Rubin's rules (Rubin 1987; Honaker, King, Blackwell, et al. 2011).

4.4 Results

The results from the ERGM analysis is presented in table 4.4, below. ERGM coeficients can be interpreted similarly to those of a logit regression. In fact, because models 1-3 contain no model terms for endogenous network effects, the ERGM estimation procedure defaults to logistic regression on the network dyads. Coefficients are the log-odds of a particular tie given the rest of the interlock network (Leifeld and Schneider 2012). Model 4 is the full ERGM model including endogenous network statistics, estimated using MCMC MLE on the 100 imputed datasets. If the p-value from the multivariate geweke test was greater than or equal to .95, indicating poor convergence of the MCMC model, the model was re-estimated for that dataset. ERGM convergence and goodness-of-fit diagnostics are presented in the Appendix N.

Compared to the simpler specifications, Model 4, which includes all substantive covariates as well as endogenous network effects, offers the best fit as indicated by the lowest AIC and BIC. It is worth noting, however, that across all specifications there is strong evidence of homophily by issue area of the think tank as indicated by the Match NTEE parameter estimates.

However, these results in Table 4.4 offer mixed evidence as to whether ideological

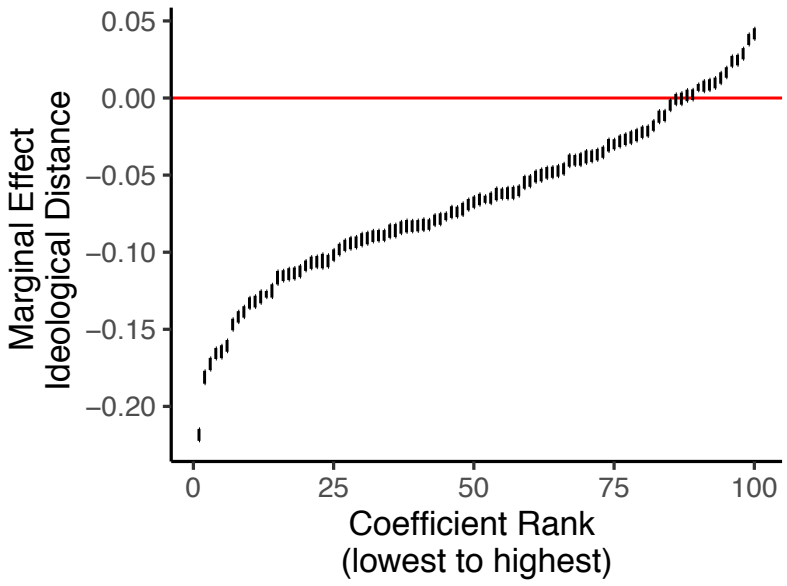
	Model 1	**Model 2**	**Model 3**	**Model 4**
Ideological Distance	0.014	0.037	-0.100	-0.066
	(0.141)	(0.142)	(0.121)	(0.053)
Match NTEE		1.447	1.355	1.066
		(0.158)	(0.160)	(0.022)
Match Dues Collecting			-0.628	-0.410
			(0.166)	(0.017)
Match Is Lobbying			0.127	0.103
			(0.189)	(0.017)
Match Is Contracting			0.193	0.108
			(0.167)	(0.014)
Log(Revenue)			0.522	0.253
			(0.037)	(0.013)
Membership Dues			0.000	0.000
			(0.000)	(0.000)
Lobbying Fees			0.000	0.000
			(0.000)	(0.000)
Edges	-5.290	-5.571	-20.496	-12.073
	(0.158)	(0.168)	(1.122)	(0.469)
Concurrent				-0.527
				0.135
Isolates				0.960
				0.074
GWESP($\theta = 0.8$)				0.761
				0.072
Model Type	dyadic-independent	dyadic-independent	dyadic-independent	network-dependent
Replicates	100	100	100	100
Median AIC	2450.750	2386.328	2128.629	2008.582
Median BIC	2467.852	2411.982	2205.590	2111.198

Table 4.4: **Results from ERGMs run on 100 datasets with imputed IGScores.**

distance is associated with a decreased probability of connection between organizations. In the complete model, think tanks are less likely to be connected to those that are ideologically more distant from them. However, the magnitude of this effect is quite small, and after propagating uncertainty from the imputation using 100 imputed datasets the effect is not significant at conventional levels. In order to assess

whether this uncertainty is the result of missingness and imputation, I plot the separate estimates for each imputed dataset in Figure 4.5, below. This plot shows the marginal effect of an increase of 1 unit in distance between organizations i and j on the probability of a tie between those two organizations across each of the ERGMs estimated. In 85 out of 100 replicates (85 percent), ideological distance was associated with a significantly lower likelihood of a tie between two organizations. This suggests that these results are substantially attenuated by measurement error induced by missingness in the ideology measure, and variance introduced by imputation.

Figure 4.5: **Marginal Effect of Ideological Distance on Interlock**



This figure reports the estimated marginal effect of ideological distance between two think tanks on their probability of interlock separately for each imputed dataset. Each estimate is shown with 95 percent confidence intervals. Results are statistically significant at conventional levels in 85 out of 100 replications.

The most persistent and substantively significant finding across models 2-4, is that organizations are significantly more likely to be connected to each other if they are both of the same NTEE-CC classification. With log-odds of ∼1.07, a given think tank is ∼190 percent more likely to be connected to another think tank that works in the same issue area (according to NTEE classification), than it is to be

connected to a think tank that works in a different issue area. This is strong evidence of issue-based homophily in the interlock network. This is consistent with several existing explanations for interlock behavior. Because the information transfer and coordination enabled by interlock can mitigate risk (Mizruchi 1996), scholars have argued that organizations tend towards homophilic interlock when they are dependent on other organizations in their sector. For example, organizations active within the same policy area may need to rely on the same sets of funders, and knowledge of each others' activities may allow them to avoid challenging each others' funding streams.

While not as strong as the propensity for organizations to connect with those working in the same area, organizations are also ~ 10 percent more likely to be connected to those that lobby if it also hires lobbyists. Similarly, organizations are ~ 11 percent more likely to interlock if they both hire contractors. One possible explanation for this is that contractors and lobbyists may serve as potential vectors of informal relationships between organizations, which ultimately facilitates later institutionalization via interlock.

In contrast, membership organizations that collect dues are significantly less likely to be connected to others that collect membership dues. Organizations connect to those that are dissimilar along this dimension, suggesting that they find benefit in the differential expertise and resources that the other can provide. However, the amount of lobbying an organization does, or amount of membership dues it collects are not associated with interlock. Non-member organizations and member organizations appear to seek each other out for interlock.

As expected, think tanks are substantially more likely to have interlocking boards as the revenue of the organizations increase; particularly successful fundraisers appear to be more attractive targets for interlock. Because the dependent variable in an ERGM is represented as log odds, the estimated effect of revenue can be interpreted as a log-log model , in which the proportional change in the probability of tie associated

with a p percent increase in $Revenue = exp(a\beta_R)$, where $a = log([100+p]/100)$ and β_R is the coefficient estimated for $Log(Revenue)$ (Benoit 2011). Using this, an increase in revenue of 100 percent is associated with a 19.1 percent increase in the likelihood of a tie. An organization with the revenue at 75th percentile ($3,433,207) has a 65.0 percent higher probability of a given tie than an organization with revenues at the 25th percentile ($473,935).

In order to better understand the within-issue area homophily that the ERGM results indicate, I present a breakdown of the subgraph density of the interlock network by NTEE-CC code of the organization. These results are shown in table 4.5.

NTEE-CC Code	**Organizations**	**Edges**	**Density**
International, Foreign Affairs & Nat. Sec.	47	26	0.0241
Public & Societal Benefit	42	11	0.0128
Education	30	5	0.0115
Environment	28	4	0.0106
Health Care	22	6	0.0260
Community Improvement & Capacity Building	18	1	0.0065
Social Science	14	3	0.0330
Civil Rights, Social Action & Advocacy	13	0	0.0000
Food, Agriculture & Nutrition	12	1	0.0152
Science & Technology	11	0	0.0000
Crime & Legal-Related	10	0	0.0000
Arts, Culture & Humanities	6	0	0.0000
Employment	4	0	0.0000
Human Services	4	1	0.1667
Medical Research	3	0	0.0000
Mental Health & Crisis Intervention	3	0	0.0000
Animal-Related	2	0	0.0000
Religion-Related	2	0	0.0000
Voluntary Health Assoc. & Medical Disciplines	2	0	0.0000
Mutual & Membership Benefit	1	0	N/A
Public Safety, Disaster Prep. & Relief	1	0	N/A
Philanthropy, Voluntarism & Grantmaking	1	0	N/A
Housing & Shelter	1	0	N/A
Full Network	277	195	0.0051

Table 4.5: **Subgraph density by organization NTEE-CC code**

Density within the subgraph composed of the 47 organizations in the International,

Foreign Affairs & National Security sector is almost five-times higher (.024) than in the full interlock network (.005). In fact, the five most common categories all have higher subgraph density than the density in the full graph. This suggests that organizations form interlock communities with each other based on their activity in the same policy sector. This effect is particularly strong among the most common types of organizations in the network.

4.5 Discussion

The results presented here represent the most extensive look at the network structure of interlock among active policy-planning organizations in Washington D.C. conducted to date. The network appears to exhibit small-world properties, suggesting it is relatively efficient for transmitting information within the connected component. The tendency for triadic closure represented by the positive effect of the GWESP parameter in the ERGM is consistent with organizations forming dense ties within their local communities, a form of network structure often thought to facilitate collaboration.

In contrast to prior work on small subsets of the policy network, I find mixed and inconclusive evidence of ideological alignment as a substantial driver of interlock. This may in part be related to ideology indeed playing a substantially less significant role among niche organizations, for whom issue area is a more salient part of their organizational identity than ideology. However, substantial missingness in my measure of ideology – and a conservative imputation process – may have attenuated these results as well. Future work should extend and validate more extensive measures of ideology for think tanks and explore the potentially conditional nature of ideological coordination.

Organizations tend to interlock with those with the most resources, and those active in their own issue areas. In the case of membership organizations, the network

structure indicates that organizations tend to connect with organizations unlike themselves; membership organizations are more likely to connect with non-membership organizations and vice versa. This is particularly interesting because, by virtue of their organizational structure, membership organizations may tend to have better access to diffuse information from their membership, or a greater ability to mobilize an outside lobbying campaign (Kollman 1998).

While the analysis presented in this chapter does not directly address the production of policy information, the way that think tanks coordinate has important implications for the production and dissemination of information. Future research should address whether information producers that are more embedded within the think tank network have more stable access to funding, produce more cross organizational collaborative research, are perceived by policymakers as more credible, or are more successful at getting their research in front of policymakers. Ultimately, whether such disparities in the organizational support for information production translate to representational disparities in Congress is a critical avenue for future research.

CHAPTER V

Conclusion

This dissertation sits at the nexus of three literatures: Congress, the psychology of political decision-making, and interest group representation. First and foremost, it is a dissertation about Congress, specifically about how congressional staff function as information processors, and the manner in which their individual information processing decisions, in aggregate, can impact the institution's representational functioning. To appropriately engage with this question, I have tried to be sensitive to two strains of scholarship that are not often in dialogue with each other: legislative institutions and the political psychology of information processing. While foundational research in both the study of legislative institutions and political psychology take seriously the idea that their subjects of inquiry are *boundedly rational*, the former has tended to emphasize the *rationality* and the latter has tended to emphasize the *boundedness*. In examining how staffers evaluate privately provisioned outside information in the policy making process, I have attempted to learn from both of these scholarly traditions.

5.1 Summation

Beginning in Chapter 2, I laid out a theory of congressional information processing that centers individual staffers in a complex decision-making environment. Staffers

operate under considerable constraints in both time and resources. In this theorizing, I have attempted to be conscious of how the institutional structure of Congress, and the incentives placed on individual members, shape the demands placed on staffers. Faced with overloaded schedules, short timelines, competing incentives, and a wealth of possible information providers, staffers function as information gatekeepers tasked with evaluating and selecting legislative subsidy. Scholarship on political information processing has highlighted how environments of this kind are particularly ripe for biased information processing. In this dissertation, I have sought to apply lessons and methods from scholarship on motivated reasoning, confirmation bias and the use of ideological heuristics especially, to micro-level processes that comprise critical components of congressional activity.

In Chapter 2, I presented three competing theoretical frameworks for understanding how staffers serve their members as they evaluate information. The first of these, the "faithful agent" theory suggests that staffers process information in line with the directional goals of the members of Congress for whom they work. I find little evidence to support this theory, with the notable exception that the use of right-of-center think tank information is driven by the extremism of the member for whom a staffer works in conjunction with the staffer's own ideology. Overall, however, I find a great deal of support for the "independent agent" theory, in which I posit that staffer's evaluation of information is driven largely by their own ideological positions, rather than their bosses. In fact, across a set of information sources tested, staffers' own ideologies explain more than 10 times the variance in their reported levels of trust in information as the ideologies of the members they work for. The relationship between staffers' ideology and their evaluation of information sources is especially pronounced among the most extreme and most conservative staffers. Finally, I show that staffers' propensity to trust and use information that aligns with their own ideologies is not conditional on whether their bosses' seat is vulnerable in the next election. That is to

say, staffers do not act as more faithful agents of their bosses — as better employees — if their boss might lose their seat, as we should expect if they act strategically. This lack of strategic action is consistent with the view that staffers select information that fits their priors as a subconscious aspect of their search and evaluation procedure, rather than intentional agency-slacking in pursuit of their own policy goals.

In Chapter 3, I tested the relationship between ideological information sources and staffer behavior that I uncovered in Chapter 2, using two novel experimental designs. These experiments built on the findings from Chapter 2 in several important ways. I designed both the lobbying vignette and white paper conjoint experiments to mimic real situations faced regularly by staffers based on the numerous interviews conducted with congressional staffers in 2017 and 2018. While survey experiments are always somewhat limited in their external validity, these specific designs represent a substantial increase in verisimilitude over the direct evaluations of trustworthiness and likelihood of use which are the core of Chapter 2. Secondly, Study 2 in Chapter 3 uses specific sources of information with well known ideological perspectives, and finds results which are consistent with my previous findings using general categories of think tanks. Furthermore, these experiments demonstrate that the source of information and its content have a causal effect on how information is evaluated.

The survey experiments that I designed and fielded in the 2017 and 2019 Congressional Capacity Survey represent the largest survey experimental samples of congressional staffers fielded to date. They offer a unique insight into the role that ideological source cues play in how staffers respond to meeting requests, and process white papers. In particular, this experiment reveals large and consistent effects of source ideology across a range of substantively important outcomes including the likelihood of using information, siding with an organization when making recommendations, and viewing a petitioner as representative of district constituents. In fact, a staffer's view of a petitioner bearing an ideologically aligned think-tank report as

more representative of district constituents than one that comes bearing supportive polling from that staffer's district. The effects of ideological information identified in this experiment are strongest among personal office staff, strong partisans, and ideologically extreme staff. In the white paper conjoint experiment, I find that both content and source are important in how staffers evaluate information. The results demonstrate that even when staffers are provided with conservative or liberal policy information, the source of that information shapes the extent to which they will rely on it. These effects are robust across multiple policy domains, think tanks, and in both Democratic and Republican staffers.

While this research is focused largely on Congress, its motivations are fundamentally those of an interest group scholar. In large part, this is a demand side look at the micro-foundations of legislative subsidy (Hall and Deardorff 2006), and the studies presented in Chapters 2 and 3 present empirical evidence on how staffers condition the opportunities to grant those subsidies. Of course, as Hall and Deardorff (2006) theorize, outside actors providing matching grants to allies is a powerful tool for interest group influence. The questions I have addressed, and results I've presented, are especially normatively and theoretically important when viewed in the context of interest group representation.

This research suggests that the logic of parties-as-networks extends beyond the campaign, as these same long coalitions of interests fund institutions of external knowledge creation that subsidize aligned legislators. Policy is, then, not the product of Congress and elected, but of parallel organs of external, partisan, ideological, and interest-based policy production created and funded by largely opaque actors. These institutions have the potential to launder the interests of industry or donor organizations, providing the imprimatur of non-partisan policy-research and analysis (Hertel-Fernandez 2019; Skocpol and Hertel-Fernandez 2016). Prominent reporting in recent years has documented the ability of wealthy interest to set think tank agen-

das on a wide array of issues (Wakabayashi 2020; Lipton and Williams 2016; Lipton, Williams, and Confessore 2014). Insofar as interests are able to influence the agendas of think tanks with known ideological identities, their policy goals gain the benefits of the biased information processing by staffers that I have documented. If a staffer is more likely to trust and use information from an ideologically aligned think tank *no matter what that information says*, the ideological seal of approval think tanks can offer is a valuable asset for interests to cultivate.

This insight suggests numerous avenues for future research, with a particular emphasis on the wider ecosystem of political knowledge production. Chapter 4 begins that research program by mapping the network of think tanks active in policy planning in Washington D.C.. In this chapter, I used IRS 990 records to examine the patterns of coordination among 277 think tanks across a wide array of issue areas based on overlapping board memberships. I find strong evidence of coordination within issue areas, and connection patterns that are consistent with think tanks pursuing financial and organizational resources. Understanding the networked nature of policy information production is particularly critical. Researchers at think tanks routinely cite each other, collaborate on projects— including launching fully joint programs like The Urban-Brookings Tax Policy Center—, host and serve on panels with each other, and both coordinate and compete in their grant-seeking activity. Embeddedness within this network of mutuality confers privilege, access to resources, and legitimacy. While Chapter 4 is only a first look at this network of policy information producers, it suggests that these organizations are status and resource seeking, and coordinate strongly within their issue areas. While there is less evidence from this particular study regarding the role that organizational ideology plays in this sort of coalition formation, this lack of evidence is not itself evidence against such coordination. The extent to which ideology structures the funding of these institutions, and the production, and dissemination of the information they produce remains an

important topic for further scholarly work.

5.2 Implications

Much of the canonical work in the study of Congress depends on the assumption that legislators are rational unitary agents. This dissertation challenges that assumption and suggests that the critical unit of inquiry is the organizational structure of congressional offices. Observed legislative behavior, from bill introductions and floor speeches to committee activity and constituent communication, is better understood as outputs of the legislative enterprise than it is as the actions of the member of Congress herself. As such, the organizational processes within this enterprise are important. If members truly delegate to their staffers, then these staffers have the ability to impact that activity. I have shown in this dissertation that, as far as evaluating information is concerned, staffers' activity deviates from what we would expect from the actions of members themselves. Because of this, I argue that congressional scholarship needs to take more seriously the organizational information processing biases and limitations of legislators' staffs, and contextualize member legislative behavior as an outcome of this selective information processing, and often independent staffer activity.

This insight has profound implications for the study of Congress. Understanding legislative behavior as the output of the legislative enterprise, suggests that the ways in which Members of Congress differ as managers is likely to have a meaningful impact on the activity we observe. Rather than looking to personality, style, or member biographical characteristics to understand legislative behavior, scholars should attend to office level and organizational characteristics. For instance, scholars should focus on features like whether and why offices are more or less hierarchical, how much initiative staffers are encouraged to take, or how much ownership over issues they are granted. Following Crosson et al. (2020a), it may be useful to view how a legislator

allocates their resources across hiring different types of staffers as an expression of their priorities, and the capabilities of the enterprise they run.

A view of staffers as information aggregators and gatekeepers, as I have presented here, highlights the importance of the distribution of policy positions, evidence, and subsidy that outside interests are able to provide. Recent work building on Schlozman, Verba, and Brady (2012) and Bonica (2013), has demonstrated renewed interest in the distribution of preferences in the broad interest community, and the representational implications of differential activity by these actors (e.g. Lerner 2018; Crosson, Furnas, and Lorenz 2020; Abi-Hassan et al., n.d.). In particular, Crosson, Furnas, and Lorenz (2020) argue that different levels of intense activity by interest groups may shape the perceived distribution of preferences by congressional staffers and other political elites that may explain persistent misconceptions of public opinion (Brookman and Skovron 2018; Hertel-Fernandez, Mildenberger, and Stokes 2019; Miler 2018). If staffers understand the world through biased sampling from the distribution of subsidies provided by these organizations, then the ideologies and activities of these organizations, and the policy apparatuses they maintain, can have tremendous impact on what issues are prioritized, what policy alternatives are considered, and what policy is enacted. The relationship between these interconnected networks of institutions and outcomes is worthy of further study.

5.3 Future Work

The themes and findings of this dissertation suggest numerous avenues for future research. The survey and experimental work I have presented in Chapters 2 and 3 focused on how individual staffers evaluate information sources. Future work should focus on how this micro-level activity manifests in aggregate, institution-wide processes and outcomes. Research could examine, for example, how the composition of sources that are referenced in committee reports or during committee hearings

changes over-time as the composition of committee staff changes. It is commonplace for new committee chairs to bring many of their own staffers with them to committee offices when they are appointed. These institutional changes—particularly in the set of exogenous committee departures—could provide some causal leverage on how staffing changes affect the information that committees use in this observational setting.

The empirical observation from Chapter 2 that the ideologies of staffers and their bosses are only weakly correlated within party is worthy of further study as well. In future work, I plan to use the method developed by Esterling (2018) to generate common space scores that place staffers and members of Congress on the same ideological scale. A common space measure of this kind will allow me to further interrogate questions such as: do some members tend to hire staffers that are more moderate or more extreme than themselves, or do members tend to curate ideologically heterogeneous offices, as we might expect them to, if they hope to counter individual staffer's bias by triangulating based on multiple staffers' input.

The centrality of staff in information processing within the institution takes on additional importance in an era where meaningful policymaking is centralized in leadership offices, as is now increasingly the case (Lee 2016; Curry and Lee 2020; Curry 2015). Staffers in leadership offices may differ systematically from those in other institutional positions, and are particularly well-placed to influence legislative outcomes. The manner in which leadership staffers' incentives and information environments differ from those in personal or committee offices warrants further exploration. Leadership staffers may have less issue-specific domain expertise than their committee counterparts, or fewer connections to trusted interlocutors on a particular issue. They may also be stronger partisans or more ideologically extreme than their committee counterparts, which should lead us to expect a stronger influence of their directional goals on their decision-making. Moreover, they may feel additional pressure to rely

on sources of information that are embedded in their partisan networks over more neutral arbiters. Leadership staffers make up a small proportion of overall staff on the hill, and are difficult to survey. However years of payroll records can help identify the career trajectories of these staffers and how those who end up serving in leadership offices may differ from other staffers. Understanding who becomes a leadership staffer will help us understand the extent to which findings about personal or committee staffers are likely to generalize to leadership staff.

Perhaps the most significant and ambitious research agenda this work calls for is the one that I began in Chapter 4: mapping the growth, development and maintenance of the infrastructure of policy legitimation. The Unites States is unique among OECD democracies in the extent to which the production of policy relevant information is privately provisioned. As privately funded organizations, institutions that produce and disseminate policy information are subject to the same sorts of challenges in organization and maintenance as other interest groups. As such, we should expect their actions, including the policy information that they produce, to be shaped by their ongoing needs for funding. The ability of the well-resourced to found and support the organizational scaffolding of policy creation—the organizations that not only generate policy ideas, but legitimate those ideas in the elite D.C. policy planning networks—is a substantial tool of influence which is worthy of further study.

This dissertation has shown that staffers rely on this privately provisioned information, and do so in ways that are biased. This points to how crucial it is to understand the forces that shape the interests and agendas of those that produce the information that the congressional enterprise is relying on. Just as lobbying or campaign finance are often understood as costly signals of alignment between interests and lawmakers, the interconnectedness of think tanks may represent participation in ideological networks that are powerful influencers of policy. This view suggests multiple theories that might underpin the behavior of corporate and high net worth

individuals that fund these institutions. For example, access to partisan networks (Bawn et al. 2012), investments in long-term ideological projects (Noel 2014), or access oriented hedging strategies (Drutman 2015) could all motivate the financing of private policymaking institutions. This dissertation demonstrates that it is critical to understand how these organizations are built and maintained, and how that impacts what positions are reflected in the policy discourse, to begin to appreciate the full ramifications of Congress's reliance on outside organizational information.

This dissertation suggests that Congress must be thought of as an institution embedded within a wider ecosystem of political and policy knowledge production. This perspective suggests that committees' informational needs, chairs' and members' relationships, staffers' individual constraints and biases, extended partisan and ideological networks, and interest group activities combine to create a system of information processing for the institution. To understand how Congress meets (or fails to meet) representational, oversight, and legislative goals, we, as scholars must observe how information flows within and between actors in this broader network, and what conditions the production, dissemination and uptake of that information by critical actors.

APPENDICES

APPENDIX A

Chapter 2 Full Models and Additional Tests

	Right TT	**Left TT**	**Univ**	**CRS**	**CBO**	**GAO**
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
Not at all|Somewhat	-0.488	-1.064	-3.821	-5.457	-5.453	-4.052
	(2.517)	(2.243)	(2.298)	(2.355)	(2.358)	(2.291)
Somewhat|Mostly	2.598	1.656	-1.115	-3.999	-3.994	-1.722
	(2.513)	(2.246)	(2.283)	(2.322)	(2.325)	(2.257)
Mostly|Completely	7.05	6.313	2.211	-1.321	-1.317	0.829
	(2.568)	(2.326)	(2.284)	(2.311)	(2.314)	(2.254)
Staffer Ideology	0.603	-0.817	-0.649	-0.52	-0.52	-0.589
	(0.195)	(0.185)	(0.181)	(0.191)	(0.191)	(0.172)
Boss Ideology	0.722	-0.239	-0.339	-0.303	-0.303	-0.053
	(0.203)	(0.184)	(0.184)	(0.187)	(0.186)	(0.173)
Log(Salary)	0.21	0.095	0.028	-0.19	-0.189	0.001
	(0.244)	(0.222)	(0.226)	(0.231)	(0.231)	(0.224)
Mid-Level Staffer	-0.012	0.041	-0.718	0.242	0.233	0.629
	(0.372)	(0.358)	(0.376)	(0.391)	(0.389)	(0.359)
Senior Staffer	0.37	-0.518	-1.327	-0.097	-0.106	0.457
	(0.521)	(0.484)	(0.511)	(0.504)	(0.502)	(0.474)
Health Issue	0.613	0.521	0.657	0.164	0.162	-0.019
	(0.315)	(0.304)	(0.312)	(0.311)	(0.311)	(0.296)
Nat Sec Issue	0.504	0.672	0.144	0.649	0.647	0.189
	(0.282)	(0.277)	(0.281)	(0.294)	(0.294)	(0.272)
IssueKnowledge	0.279	-0.04	0.722	1.581	1.582	0.717
	(0.474)	(0.463)	(0.468)	(0.500)	(0.500)	(0.456)
Committee Office	-0.767	-0.07	-0.073	-0.052	-0.051	0.103
	(0.341)	(0.312)	(0.320)	(0.325)	(0.325)	(0.307)
Party Office	-1.176	-0.01	-0.543	-0.492	-0.492	-1.717
	(0.639)	(0.580)	(0.558)	(0.544)	(0.544)	(0.557)
Senate	0.261	0.049	-0.242	0.031	0.031	0.24
	(0.263)	(0.241)	(0.250)	(0.255)	(0.254)	(0.237)
IMR	-1.387	-0.584	-0.778	-0.043	-0.044	-0.721
	(0.791)	(0.617)	(0.624)	(0.519)	(0.519)	(0.511)
Nobs	317.73	318.53	315.00	328.94	328.94	327.26
logLik	-277.08	-292.73	-301.52	-256.27	-256.27	-312.44
AIC	584.16	615.45	633.05	542.54	542.54	654.88

Table A.1: **Second stage of two stage ordinal logistic regression models DV: Trust of information sources**

	Right TT	**Left TT**	**Univ**	**CRS**	**CBO**	**GAO**
	Model 7	**Model 8**	**Model 9**	**Model 10**	**Model 11**	**Model 12**
Never|Occasionally	-0.356	-1.689	-2.294	-2.623	-2.354	1.237
	(2.271)	(2.334)	(2.232)	(2.121)	(2.264)	(2.147)
Occasionally|Frequently	2.605	1.612	0.793	-0.279	-0.527	3.466
	(2.277)	(2.331)	(2.231)	(2.115)	(2.261)	(2.154)
Staffer Ideology	0.046	-0.829	-0.622	0.017	-0.051	-0.102
	(0.179)	(0.185)	(0.175)	(0.160)	(0.170)	(0.163)
Boss Ideology	1.092	-0.229	0.255	0.057	0.084	0.14
	(0.194)	(0.183)	(0.179)	(0.164)	(0.173)	(0.165)
Log(Salary)	-0.02	-0.043	-0.033	-0.16	-0.033	0.152
	(0.223)	(0.230)	(0.222)	(0.213)	(0.226)	(0.215)
Mid-Level Staffer	0.639	0.559	0.591	0.454	0.24	0.987
	(0.358)	(0.377)	(0.374)	(0.354)	(0.390)	(0.352)
Senior Staffer	0.857	0.655	0.342	0.937	0.035	1.039
	(0.475)	(0.506)	(0.489)	(0.465)	(0.502)	(0.461)
Health Issue	0.521	0.158	0.184	-0.336	-0.455	-0.372
	(0.310)	(0.311)	(0.308)	(0.284)	(0.307)	(0.289)
Nat Sec Issue	0.417	0.087	-0.302	-0.85	0.062	-0.227
	(0.276)	(0.281)	(0.276)	(0.260)	(0.289)	(0.257)
IssueKnowledge	0.396	-0.334	-0.372	0.997	0.72	0.66
	(0.471)	(0.480)	(0.485)	(0.434)	(0.474)	(0.437)
Committee Office	-0.228	-0.103	-0.615	0.411	-0.524	0.937
	(0.314)	(0.331)	(0.320)	(0.295)	(0.312)	(0.306)
Party Office	-2.365	-0.852	-1.772	-0.988	-1.599	-0.882
	(0.633)	(0.572)	(0.556)	(0.499)	(0.491)	(0.493)
Senate	-0.015	0.113	0.291	-0.187	-0.466	0.027
	(0.242)	(0.250)	(0.245)	(0.227)	(0.242)	(0.226)
IMR	-0.321	-0.892	-0.759	0.207	0.45	-0.316
	(0.574)	(0.730)	(0.510)	(0.441)	(0.504)	(0.443)
Nobs	326.16	326.16	326.16	338.78	337.92	337.92
logLik	-276.16	-264.92	-285.26	-330.79	-281.07	-332.60
AIC	580.32	557.83	598.51	689.58	590.14	693.19

Table A.2: **Second stage of two stage ordinal logistic regression models DV: Use of information sources**

	Right TT	**Left TT**	**Univ**	**CRS**	**CBO**	**GAO**
	Model 13	**Model 14**	**Model 15**	**Model 16**	**Model 17**	**Model 18**
Not at all|Somewhat	-0.998	-1.228	-3.668	-7.148	-7.129	-4.708
	(2.691)	(2.377)	(2.412)	(2.524)	(2.528)	(2.378)
Somewhat|Mostly	2.161	1.504	-0.97	-5.626	-5.607	-2.328
	(2.674)	(2.377)	(2.394)	(2.483)	(2.487)	(2.340)
Mostly|Completely	6.513	6.188	2.402	-2.84	-2.822	0.271
	(2.733)	(2.454)	(2.400)	(2.460)	(2.463)	(2.334)
StaffLeft	-0.945	-0.637	-0.225	-0.367	-0.365	0.45
	(0.584)	(0.546)	(0.548)	(0.599)	(0.598)	(0.532)
StafferExtremism	0.166	-1.019	-0.611	-1.03	-1.03	-0.924
	(0.328)	(0.316)	(0.309)	(0.298)	(0.298)	(0.276)
BossLeft	0.454	-0.212	-0.67	-0.24	-0.237	-0.163
	(0.993)	(0.914)	(0.920)	(1.031)	(1.032)	(0.898)
BossExtremism	0.686	-0.275	-0.317	-0.818	-0.818	-0.133
	(0.524)	(0.482)	(0.477)	(0.475)	(0.475)	(0.462)
Log(Salary)	0.214	0.105	0.039	-0.234	-0.232	-0.015
	(0.247)	(0.225)	(0.230)	(0.235)	(0.236)	(0.225)
Mid-Level Staffer	0.006	0.068	-0.695	0.325	0.32	0.604
	(0.383)	(0.370)	(0.382)	(0.406)	(0.407)	(0.365)
Senior Staffer	0.415	-0.514	-1.343	0.085	0.081	0.538
	(0.539)	(0.504)	(0.521)	(0.521)	(0.521)	(0.486)
Health Issue	0.568	0.492	0.644	0.166	0.168	0.006
	(0.319)	(0.309)	(0.316)	(0.317)	(0.317)	(0.302)
Nat Sec Issue	0.499	0.647	0.111	0.671	0.672	0.241
	(0.285)	(0.279)	(0.282)	(0.297)	(0.297)	(0.275)
IssueKnowledge	0.268	-0.037	0.719	1.72	1.719	0.78
	(0.476)	(0.465)	(0.470)	(0.510)	(0.510)	(0.459)
Committee Office	-0.786	-0.084	-0.074	-0.154	-0.155	0.058
	(0.356)	(0.322)	(0.329)	(0.336)	(0.336)	(0.317)
Party Office	-1.149	0.063	-0.476	-0.451	-0.452	-1.788
	(0.655)	(0.588)	(0.563)	(0.554)	(0.554)	(0.563)
Senate	0.265	0.105	-0.169	0.021	0.021	0.221
	(0.274)	(0.252)	(0.259)	(0.263)	(0.263)	(0.245)
IMR	-1.487	-0.635	-0.786	-0.312	-0.314	-0.832
	(0.857)	(0.673)	(0.667)	(0.567)	(0.567)	(0.545)
StaffLeft:StafferExtremism	-0.743	1.951	1.418	1.179	1.18	0.908
	(0.472)	(0.477)	(0.463)	(0.482)	(0.482)	(0.429)
BossLeft:BossExtremism	-1.473	0.978	1.426	0.94	0.934	0.069
	(0.911)	(0.858)	(0.862)	(0.952)	(0.954)	(0.824)
Nobs	317.73	318.53	315.00	328.94	328.94	327.26
logLik	-275.07	-291.46	-300.35	-252.36	-252.37	-309.36
AIC	588.145	620.92	638.70	542.71	542.75	656.72

Table A.3: **Second stage of two-stage ordinal logistic regression models with interactions**
DV: Trust in information sources

	Right TT	**Left TT**	**Univ**	**CRS**	**CBO**	**GAO**
	Model 19	**Model 20**	**Model 21**	**Model 22**	**Model 23**	**Model 24**
Never|Occasionally	-0.607	-1.463	-2.02	-3.167	-4.013	0.522
	(2.398)	(2.447)	(2.324)	(2.178)	(2.361)	(2.223)
Occasionally|Frequently	2.353	1.885	1.073	-0.811	-2.15	2.764
	(2.403)	(2.449)	(2.325)	(2.170)	(2.354)	(2.227)
StaffLeft	0.193	0.514	0.036	-0.504	-0.31	-0.084
	(0.538)	(0.521)	(0.524)	(0.490)	(0.516)	(0.486)
StafferExtremism	-0.158	-0.533	-0.533	-0.096	-0.648	-0.169
	(0.302)	(0.294)	(0.288)	(0.270)	(0.285)	(0.266)
BossLeft	0.672	0.151	0.458	-0.008	-0.501	-0.687
	(0.924)	(0.959)	(0.915)	(0.830)	(0.917)	(0.851)
BossExtremism	1.234	-0.328	0.421	-0.302	-0.418	-0.448
	(0.484)	(0.493)	(0.486)	(0.434)	(0.497)	(0.443)
Log(Salary)	-0.043	-0.039	-0.034	-0.165	-0.082	0.148
	(0.226)	(0.231)	(0.223)	(0.212)	(0.228)	(0.217)
Mid-Level Staffer	0.601	0.557	0.561	0.516	0.304	1.083
	(0.369)	(0.387)	(0.382)	(0.359)	(0.406)	(0.360)
Senior Staffer	0.911	0.644	0.303	1.006	0.267	1.159
	(0.494)	(0.520)	(0.499)	(0.470)	(0.517)	(0.471)
Health Issue	0.526	0.202	0.175	-0.346	-0.478	-0.327
	(0.314)	(0.316)	(0.312)	(0.287)	(0.314)	(0.295)
Nat Sec Issue	0.459	0.115	-0.295	-0.879	0.076	-0.239
	(0.279)	(0.283)	(0.278)	(0.262)	(0.296)	(0.260)
IssueKnowledge	0.407	-0.359	-0.395	1.038	0.872	0.74
	(0.473)	(0.480)	(0.486)	(0.436)	(0.485)	(0.441)
Committee Office	-0.208	-0.084	-0.574	0.37	-0.607	0.852
	(0.322)	(0.343)	(0.326)	(0.302)	(0.321)	(0.313)
Party Office	-2.351	-0.795	-1.756	-1.021	-1.717	-0.92
	(0.631)	(0.571)	(0.555)	(0.501)	(0.501)	(0.500)
Senate	-0.076	0.051	0.267	-0.199	-0.476	0.028
	(0.254)	(0.260)	(0.254)	(0.235)	(0.255)	(0.236)
IMR	-0.34	-0.88	-0.696	0.139	0.215	-0.477
	(0.598)	(0.762)	(0.527)	(0.455)	(0.527)	(0.466)
StaffLeft:StafferExtremism	-0.228	1.347	1.195	0.218	0.291	0.281
	(0.455)	(0.458)	(0.448)	(0.409)	(0.434)	(0.419)
BossLeft:BossExtremism	-2.869	0.187	-0.904	0.101	0.355	0.352
	(0.877)	(0.887)	(0.848)	(0.774)	(0.857)	(0.792)
Nobs	326.16	326.16	326.16	338.778	337.92	337.92
logLik	-275.14	-263.60	-285.01	-329.71	-276.11	-331.33
AIC	586.27	563.19	606.03	695.42	588.23	698.66

Table A.4: **Second stage of two-stage ordinal logistic regression models with interactions**
DV: Use of information sources

	Trust All Offices	**Use All Offices**	**Trust Non-Competitive**	**Use Non-Competitive**
1|2	-7.339	-2.677	-8.451	-3.419
	(2.079)	(1.865)	(2.205)	(2.233)
2|3	-3.927	0.482	-5.154	-0.338
	(2.059)	(1.844)	(2.188)	(2.215)
3|4	-0.353		-1.792	
	(2.041)		(2.175)	
StaffAligned	-4.734	-2.501	-4.523	-2.348
	(0.818)	(1.732)	(0.813)	(1.732)
StaffNonAligned	-5.058	-2.77	-4.865	-2.607
	(0.226)	(0.813)	(0.206)	(0.813)
StafferExtremism	-0.709	-0.339	-0.565	-0.189
	(0.770)	(0.205)	(0.770)	(0.206)
BossAligned	-0.673	0.126	-0.886	-0.406
	(0.373)	(0.771)	(0.362)	(0.770)
BossNonAligned	0.037	0.53	-0.174	0.022
	(0.828)	(0.364)	(0.823)	(0.362)
BossExtremism	-0.291	-0.208	-0.425	-0.286
	(0.780)	(0.831)	(0.788)	(0.835)
Log(Salary)	0.042	-0.013	-0.069	-0.076
	(0.247)	(0.780)	(0.193)	(0.786)
Mid-Level Staffer	0.011	0.614	0.16	0.708
	(0.393)	(0.165)	(0.347)	(0.174)
Senior Staffer	-0.19	0.728	0.095	0.708
	(0.473)	(0.329)	(0.465)	(0.351)
Health Issue	0.29	-0.093	0.498	0.067
	(0.272)	(0.387)	(0.272)	(0.386)
Nat Sec Issue	0.603	-0.127	0.5	-0.046
	(0.248)	(0.268)	(0.247)	(0.270)
IssueKnowledge	0.912	0.911	0.814	0.704
	(0.438)	(0.248)	(0.429)	(0.260)
Committee Office	-0.294	0.203	-0.168	0.354
	(0.271)	(0.429)	(0.269)	(0.436)
Leadership Office	-1.246	-1.193	-0.803	-1.226
	(0.565)	(0.277)	(0.696)	(0.347)
Senate	0.144	-0.338	0.135	-0.31
	(0.236)	(0.565)	(0.236)	(0.563)
IMR	-0.89	-0.349	-1.162	-0.542
	(1.036)	(0.380)	(0.521)	(0.383)
StaffAligned:StafferExtremism	1.221	0.618	1.05	0.604
	(0.259)	(0.454)	(0.259)	(0.454)
StaffNonAligned:StafferExtremism	-0.373	-0.309	-0.53	-0.508
	(0.433)	(0.259)	(0.433)	(0.259)
BossAligned:BossExtremism	1.084	1.107	1.253	1.441
	(0.281)	(0.434)	(0.281)	(0.436)
BossNonAligned:BossExtremism	-0.296	-0.499	0.029	0.009
	(0.450)	(0.284)	(0.450)	(0.284)
Nobs	1621.38	1666.93	1351.93	1390.52
logLik	-1405.20	-1460.24	-1188.61	-1220.60
AIC	2860.41	2968.47	2427.23	2489.19

Table A.5: **Second stage of two-stage mixed effects ordinal logistic regression models of trust and use, repeated measures dataset**

	Responded to Survey {0,1}
Tenure	−0.008
	(0.014)
Gap in work	0.137
	(0.130)
Female	−0.429***
	(0.093)
Boss Ideology (Nominate Dim1)	0.734**
	(0.314)
Number of Issues Worked on	0.010
	(0.013)
Number of Job Titles	0.028
	(0.029)
Number of Committees Worked for	0.024
	(0.054)
Senate	0.030
	(0.131)
Log(Salary)	−0.178*
	(0.101)
Democrat	−0.762***
	(0.280)
Committee Office	0.349**
	(0.166)
Party Office	0.027
	(0.250)
Number of Employers in Congress	−0.009
	(0.010)
NonWhite	−0.176
	(0.137)
Highest Level of Education	0.110**
	(0.053)
Legislative(Job Title)	−0.227
	(0.510)
Political Management(Job Title)	−0.070
	(0.546)
Communications(Job Title)	−0.644
	(0.550)
Office Management(Job Title)	−0.260
	(0.506)
Constituency Service(Job Title)	−0.591
	(0.866)
Institutional(Job Title)	−0.051
	(0.572)
Fellow	0.863***
	(0.274)
Seniority	0.011
	(0.046)
Constant	2.240*
	(1.211)
N	838
Log Likelihood	−540.928
AIC	1129.857

***p < .01; **p < .05; *p < .1

Table A.6: **Example Stage 1 Selection model results**

APPENDIX B

Question Wording

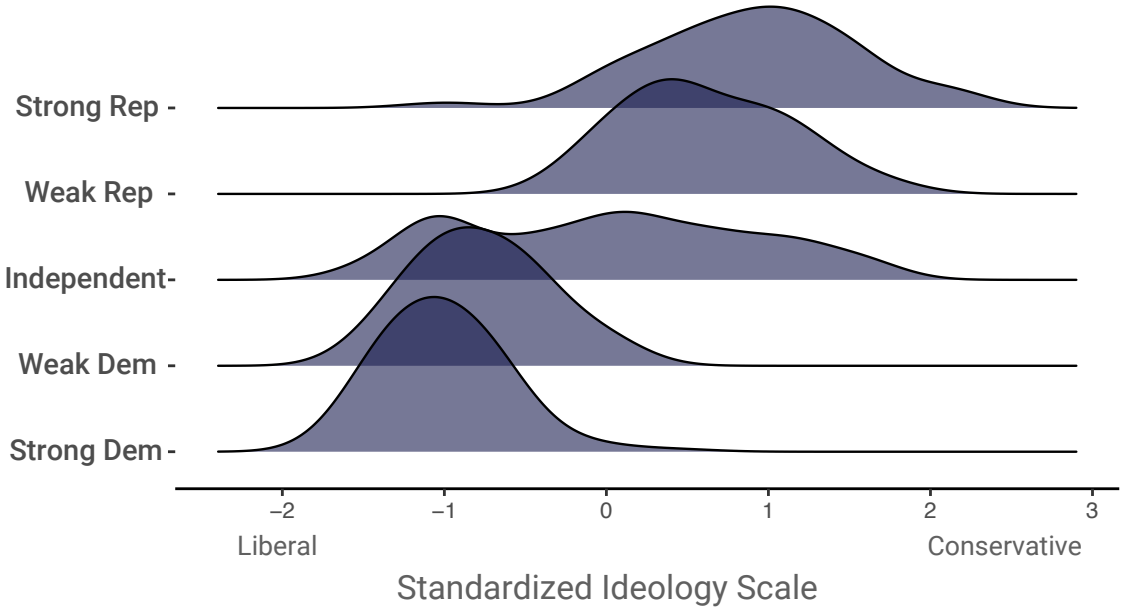
Respondents were asked whether they work on a list of issues “never," “occasionally" or “daily."[1] If respondents answered “daily" to one and only one of the follow: 1) “Budget & Appropriations", 2) “Health", or 3) “Defense" and/or “International Affairs" they were directed to a specific question block corresponding to Budget & Appropriations, Health Policy or National Security Policy respectively. All other respondents were randomly distributed among the three issue blocks.

The analyses in this paper use two types of scales which were constructed from respondents' answers: 1) issue specific knowledge scales, and 2) an ideology scale. Each issue block contained a battery of 4 or 5 knowledge questions designed in coordination with issue expert consultants. Issue specific knowledge scales were constructed by taking the standardized sum of the number of knowledge questions that the respondents answered correctly.

The staffer ideology scale was is constructed using a PCM Rasch model (a form of IRT) on the likert-type response items (1-5) of respondents' answers to a five question ideology battery designed and validated in Esterling 2018.

1. The survey used a list of 24 policy domains adapted from the Comparative Agendas Project Master Codebook (http://www.comparativeagendas.net/pages/mastercodebook). We replaced “National Budget" with “Budget and Appropriations" but all other issues were identical.

Figure B.1: **Staffer party identification and ideology**



Respondents that declined to answer the party identification question are shown as "Party Q NA".

Figure B.1 shows the distribution of ideology scores for staffers that responded to the 2017 Congressional Capacity Survey by their party identification. Democratic staffers tend to be ideologically left-of-center, while Republican staffers tend to be ideologically right-of-center. Strong partisans tend to be more extreme ideologically than weak partisans, and Independents and staffers that did not answer the party ID question have ideologies across the spectrum. It is useful here to note that this is consistent with the notion that partisans in congress think in schematic, sophisticated and ideologically coherent terms. The absolute value of this ideological measure is used to capture staffer extremism.

In their assigned issue blocks, respondents were given batteries that asked about how much they trust and use a variety of sources. In this analysis I focus on the trust and use of three sources inside the government (CRS, CBO and GAO) and three sources outside the government (left-of-center Think Tanks, University Researchers, and right-of-center Think Tanks). Respondents were asked to rate sources on a four

item likert-type trustworthiness scale (not at all, somewhat, mostly, completely trustworthy) and a three item use scale (never use, occasionally use, frequently use). The question prompt format for these items is shown below

Ideology Battery Questions

Q19 Thinking about YOUR OWN personal opinions -- not what you think your boss believes -- what do you think about the following?

q19.1 The protection of consumer interests is best insured by a vigorous competition among sellers rather than by federal government regulation on behalf of consumers.

(1) Strongly agree (n=104)

(2) Somewhat agree (n=111)

(3) Neither agree nor disagree (n=47)

(4) Somewhat disagree (n=119)

(5) Strongly disagree (n=40)

q19.2 There is too much power concentrated in the hands of a few large companies for the good of the country.

(1) Strongly agree (n=109)

(2) Somewhat agree (n=151)

(3) Neither agree nor disagree (n=65)

(4) Somewhat disagree (n=72)

(5) Strongly disagree (n=24)

q19.3 One of the most important roles of government is to help those who cannot help themselves, such as the poor, the disadvantaged, and the unemployed.

(1) Strongly agree (n=178)

(2) Somewhat agree (n=116)

(3) Neither agree nor disagree (n=37)

(4) Somewhat disagree (n=65)

(5) Strongly disagree (n=25)

q19.4 All Americans should have access to quality medical care regardless of ability to pay.

(1) Strongly agree (n=205)

(2) Somewhat agree (n=83)

(3) Neither agree nor disagree (n=46)

(4) Somewhat disagree (n=65)

(5) Strongly disagree (n=22)

q19.5 The differences in income among occupations should be reduced.

(1) Strongly agree (n=47)

(2) Somewhat agree (n=97)

(3) Neither agree nor disagree (n=75)

(4) Somewhat disagree (n=86)

(5) Strongly disagree (n=116)

For purposes of summative scale construction q19.1 was reverse coded so that higher number always were the more conservative codes.

Source use and trust prompts

Indicate how often you use the following resources [INSIDE/OUTSIDE] THE FEDERAL GOVERNMENT when you make [federal budget/health policy/national security policy] recommendations.

Indicate how trustworthy you find the following resources [INSIDE/OUTSIDE] THE FEDERAL GOVERNMENT when you make [federal budget/health policy/national security policy] recommendations.

Party Identification Battery

Q21 Generally speaking, do you usually think of YOURSELF as a Republican, a Democrat, an Independent, or something else? Note: your response here may differ from your boss's party.

(1) Republican (n=141)

(2) Democrat (n=139)

(3) Independent (n=39)

(4) Other (n = 7)

(5) No preference (n=3)

q21_4_text [text if Q21== 4]

[Display This Question if Q21== 1]

Q23 Would you call yourself a strong Republican or a not very strong Republican?

(1) Strong (n=96)

(2) Not very strong (n=44)

[Display This Question if Q21== 2]

Q25 Would you call yourself a strong Democrat or a not very strong Democrat?

(1) Strong (n=120)

(2) Not very strong (n=19)

[Display This Question if Q21 === 3,4 or 5]

Q27 Do you think of yourself as closer to the Republican or Democratic party?

(1) Republican (n=22)

(2) Democratic (n=25)

House Procedure Questions

Q83 Please answer the following questions about the legislative process as accurately as you can.

Q34 Which of the following is accurate in reference to the Committee of the Whole in the House?

(1) Amendments are generally debated for five minutes (n=74)

(2) A majority of the membership constitutes a quorum (n=54)

(3) The previous question is always in order (n=32)

(4) Calling for a recorded vote requires the support of a majority of the chamber (n=39)

q34_correct Correctly responded (1) in Q34

(0) No (n=125)

(1) Yes (n=74)

Q73 How many signatures are required for a successful discharge petition?

(1) A majority of all members chosen and sworn (n=26)

(2) A majority of the chamber (218) (n=168)

(3) A majority of the majority party (n=8)

(4) A majority of the minority party (n=1)

q73_correct Correctly responded (2) in Q73

(0) No (n=35)

(1) Yes (n=168)

Q81 What are 302(a) allocations?

(1) The amounts set by the House and Senate Budget Committees for their respective Appropriations Committees at the start of the budget process (n=141)

(2) The amounts given to each committee in the House and Senate to spend on staff (n=21)

(3) The number of seats in the House given to each state following the decennial census (n=2)

(4) The amounts set by the House and Senate Appropriations Committees for their respective subcommittees as part of the budget process (n=36)

q81_correct Correctly responded (1) in Q81

(0) No (n=59)

(1) Yes (n=141)

Q82 What does it mean to invoke "martial law" in the House?

(1) There is no required layover period between the filing of a bill and debating it (n=143)

(2) The leadership may adjourn the chamber at any point (n=17)

(3) Only the Speaker of the House may preside over the chamber (n=13)

(4) No amendments on the floor are permitted (n=25)

q82_correct Correctly responded (1) in Q82

(0) No (n=55)

(1) Yes (n=143)

know_house_st percent of correct answers to Q34, Q73, Q81, and Q82

(mean =0.65; SD=0.26)

End of Block: House Procedure Block

Senate Procedure Questions

Q84 Please answer the following questions about the legislative process as accurately as you can.

Q38 What does Senate Rule XIV do?

(1) Allows bills to bypass committee consideration in the Senate (n=102)

(2) Allows for unlimited debate on the Senate floor (n=4)

(3) Sets requirements for committee hearings (n=3)

(4) Restricts amendment opportunities on the floor of the Senate (n=15)

q38_correct Correctly responded (1) in Q38

(0) No (n=22)

(1) Yes (n=102)

Q37 Why does the majority leader often vote against cloture?

(1) He does not want to end debate on the underlying measure (n=16)

(2) He wants to limit the ability of minority party senators to offer amendments (n=17)

(3) He wants to make it easier to hold another cloture vote on the same bill in the future (n=87)

(4) He wants to send the bill back to committee for further consideration (n=4)

q37_correct Correctly responded (3) in Q37

(0) No (n=37)

(1) Yes (n=87)

Q36 What is one procedural advantage of using amendments between the houses to resolve differences between the House and Senate?

(1) A House amendment is privileged for consideration in the Senate (n=43)

(2) A House amendment cannot be filibustered in the Senate (n=15)

(3) There are no limits on the number of times a particular bill may go back and forth between the chambers (n=50)

(4) Amendment exchanges cannot introduce new content into the bill (n=11)

q36_correct Correctly responded (1) in Q36

(0) No (n=76)

(1) Yes (n=43)

Q35 When does a cloture motion ripen?

(1) The same day of session it is filed (n=4)

(2) The second day of session after it is filed (n=84)

(3) The third of day of session after it is filed (n=34)

(4) The fourth day of session after it is filed (n=4)

q35_correct Correctly responded (2) in Q35

(0) No (n=42)

(1) Yes (n=84)

know_senate_st percent of correct answers to Q38, Q37, Q36, and Q35

(mean =0.62; SD=.026)

APPENDIX C

2017 Congressional Capacity Survey Methodology

Appendix: 2017 Congressional Capacity Study

Overview

The 2017 Congressional Capacity Study is a collaborative research project conducted by a core team of political scientists: Timothy LaPira (James Madison University), Alexander Furnas (University of Michigan), Alexander Hertel-Fernandez (Columbia University), Lee Drutman (New America), and Kevin Kosar (R Street Institute). The project collected original qualitative and quantitative data collection in two stages. In Stage #1, from February through June, 2017, the team conducted in-person interviews with 52 senior staff in House and Senate personal, committee, party leadership, and chamber administrative offices in Washington, DC. In addition, the team interviewed four former members of Congress and seven former staff from the House and Senate committee offices. In Stage #2, from August through December, 2017, the research team fielded an online questionnaire targeting all congressional staff primarily located in Washington, DC in offices. The sampling frame purposely broad based on staffers' geographic location to best capture those who contribute to Congress's legislative, appropriations, oversight, or general public policy operations. Both stages of the project were monitored by the James Madison University Institutional Review Board to protect participants' confidentiality.[1] The research project was generously funded by the Hewlett Foundation's Madison Initiative, in support of the R Street-New America Legislative Branch Working Group and the collaborative research project team.

Stage #1: Former member of Congress and Senior Staff Interviews

Purpose

The interviews were meant to investigate senior staffers' and former members' perspectives on legislative office management and operations, including career backgrounds and expertise, perspectives on personnel knowledge, skills, and abilities, and views on institutional and professional goals. The objectives were to collect original narratives on opportunities and challenges of working in a characteristically polarized Congress and to probe interviewees for qualitative data to prioritize the more systematic and objective data collection in the subsequent survey stage of the study.

Interviewee Selection and Recruitment

The research team constructed a sampling frame from an institutional subscription to a legislative staff contact list distributed by LegiStorm, LLC. An initial list of senior staff in House and Senate member offices with job titles of Chief of Staff Administrative Assistant (if no Chief of Staff was listed), and Legislative Director, Communications Director were compiled. A second list of senior staff with job titles Staff Director in all permanent chamber and joint legislative committees and subcommittees were compiled. Staff were directly contacted with a request for in-person meetings in Washington offices, with an intention to vary interviewees by chamber, office type, party, gender, ethnicity, and the

[1] James Madison University IRB Protocols #17-0333 (Phase 1) and #18-0030 (Phase 2).

home state or district of the principal member and chair or ranking member. The selection was not intended to be random, but instead focused on those most willing to share their valuable time. In addition, we asked several interviewees to identify former members of Congress and staff colleagues no longer working in Congress who may be willing to share their hindsight perspectives after having worked in Congress.

When explicitly permitted, interviews were audio-recorded, transcribed, and anonymized. In roughly a dozen cases, transcripts were likely to reveal the interviewee's identity were not made available to the research community outside than the five co-principal investigators approved by institutional review board protocols.

Semi-structured Interview Protocol

In general, interviews were semi-structured to balance several competing goals, including establishing rapport by allowing respondents to take the conversation in the direction they felt most comfortable, to maximize the amount of novel, idiosyncratic information not otherwise available from existing sources, and to uncover information that the research team could not possibly conjecture *ex ante* (Leech 2002). The interviews varied in practice, but were intended to ask variations of the following questions:

1. Can you tell me about your background?
   PROBING QUESTIONS:
   - How did you end up in this position? What has been your career trajectory?
   - When did you start thinking about Congress as career?
   - Did you originally work on the campaign side, or did you do more policy work?
2. What skills and characteristics do people need to be effective in a position like yours?
   PROBING QUESTIONS:
   - If pay/hours were adequate, would you want to spend your whole career on the Hill?
   - If your boss was not returning after the next election (for whatever reason), would you seek another job on the Hill?
   - Do you think you'll still be working on the Hill in 5 years?
   - Has this job met your expectations?
   - What are things you like *most* about your job? *Least*?
3. What is more important, specific policy expertise or a deep understanding of how things really work on Capitol Hill?
   PROBING QUESTIONS:
   - Do you prefer working on policy details or on winning elections?
   - IF "BOTH" - In what context is one more important than the other?
4. Some people say there are three types of members – partisan, policy, and constituent service. What kind of office do you think you have?
   PROBING QUESTIONS:
   - Do you think this is valid? If so, where does your office fit? If not, is there a better typology?
   - What is your office most known for on Capitol Hill? [IF "constituency service," then: what is it most known for inside Washington?]
5. What goals are most important to your member?

- [IF GENERAL OR VAGUE, seek specifics on party/reelection and policy expertise]

6. [WRAP-UP] Are there any questions that I have not asked that you think are important for me to understand how Congress manages its legislative work?

Generally, interview times typically ranged between 30-45 minutes, with some conversations lasting 90 minutes or more.

Stage #2: Staff Survey

Purpose

The survey questionnaire sought to find out more about the backgrounds, career paths, policy views, technical knowledge, substantive expertise, and job experiences of congressional staffers, as well as the procedures and organizational structures that allow them to assist members of Congress to do their work in the most effective and democratically responsive ways. The sampling and fielding process was purposely intended to seek as broad and representative sample of congressional staff as possible.

Sample Construction

We constructed the sampling frame from the full Legistorm contact list as of July 18, 2017 that included individual's names, employers, and official email addresses.[2] The contact list contained the full census of 10,512 legislative branch employees with a Washington, DC office address. The contact list included 729 House, Senate, and bicameral offices and organizational units. The list excluded legislative support agencies (such as the Congressional Research Service, Government Accountability Office, and the Congressional Budget Office) that employ personnel as federal civil servants.[3] From this list of organizational units, the research team selected 633 organizational units with names suggesting the primary mission contributed to legislative operations, as broadly as could be determined by public information about the office. Primarily, these units focus on members' personal offices, standing committees, and party leadership offices. Secondarily, we included "other" administrative offices (such as the House Parliamentarian) and institutionalized caucuses or member organizations (such as the Senate Caucus on International Narcotics Control and the House Republican Study Committee). The sampling frame excluded offices with exclusively administrative, facilities, or maintenance missions (such as House Office of Logistics and Support and Senate Office of Printing, Graphics and Direct Mail).

Table A1 summarizes the 8,485 individuals in our sampling frame this process considered to be primarily employed as political appointees in the legislative branch. The table cross-tabulates prospective respondents by chamber and office type, including 540 member offices, all standing, permanent select, and joint committees, official party leadership

[2] LegiStorm constantly updates records from House and Senate public payroll and disbursement data. As with any human resources data, individuals are constantly moving in and out of positions, and positions are continuously being created or eliminated at the discretion of individual offices. Our sampling frame is accurate as of the date of purchase.

[3] LegiStorm does not maintain payroll disbursement records from the Office of Personnel Management, even though legislative service agency personnel serve the legislative branch.

offices, and "other" institutional offices with a legislative function, such as House Legislative Counsel.

Table A1. Sampling Frame Contacts by Chamber and Type of Office

Chamber	Office Type				Total
	Other	Personal	Committee	Party	
House	141	3,511	1,185	143	4,980
Senate	52	2,459	871	123	3,505
Total	193	5,970	2,056	266	8,485

The process intentionally made no assumptions about individual staffers within an office based on common job titles to maximize the variety of staff. This sampling frame conservatively biases toward over-coverage of prospective participants that may reasonably be thought of as politically appointed staff engaged in legislative operations. The *ex ante* expectation is that response rates would be artificially deflated because we were likely asking non-legislative staff employed in "legislative offices" to participate. We expect these non-legislative staff employed in "legislative offices" to be more likely to decline to participate in survey.

Fielding Process, Pre-registration, and Timeline

The survey was offered exclusively online using the James Madison University license to the Qualtrics survey platform. The survey was offered in three sequential data collection stages between August and December. Each of the 8,485 prospective staffers were contacted directly by email with a personalized link to identify respondents with existing biographical data and to maintain strict confidentiality. In addition to direct contacts, the research team recruited senior legislative staffers in our professional networks to ask them to spread the word as much as they were willing, and partnered with external validator groups including PopVox, Congressional Management Foundation, Pew Charitable Trusts, Bipartisan Policy Center, and the Stennis Center to promote participation.

Pre-registration documentation was filed with Open Science Framework before data collection was initiated. An addendum was added to the pre-registration while data collection was ongoing, but prior to any data analysis.

The fielding process was conducted over the course of five months in 2017, including:

1. July 24-31: Professional network and external validator promote forthcoming survey.
2. August 4-15: Initial invitation emails sent in batches of 100.
3. August 9: Finalized "Congressional Capacity Staff Survey" pre-registration documentation submitted for review.
4. August 13: Pre-registration documentation approved and embargoed.

5. September 21: Email response declines and survey completions identified, dropped from first follow-up contact list.
6. September 21-October 2: First reminder email sent.
7. October 30: Second round email response declines and survey completions identified, dropped from second follow-up contact list.
8. October 30-October 31: Second and final reminder email sent.
9. November 4th: Survey closed and response data collected from Qualtrics.
10. December 7: LegiStorm delivers biographical data for in- and out-samples.
11. December 7-18: Survey response and Legistorm biographical data processing.
12. December 31: Pre-registration embargo completed.

Response Rates and Margins of Error

The overall response rate was 5.2 percent (441 of 8,485). The margin of error at the 95 percent level of confidence is 4.5 percent. In addition, survey respondents were blocked for two banks of questions.

First, staff were asked a series of questions about chamber-specific parliamentary procedures, so subsample margins of error for House staff is 5.9 percent and Senate staff is 7.7 percent at the 95 percent level.

Second, staff were selectively or randomly assigned to one of three policy domain blocks for series of questions about policy substance and information source credibility. Selections were determined by a question reading, "Please indicate how frequently you work on each of the following issues for your boss in a typical week when Congress is in session: never, occasionally, or daily," for a list of 24 policy domains adapted from the Comparative Agendas Project Master Codebook (http://www.comparativeagendas.net/pages/master-codebook).[4] Domain specialists were selected into the relevant block if they responded "daily" for "Budget and Appropriations," for "Health," or for "Defense" and/or "International Affairs." Respondents indicating specialization in more than one domain were randomly assigned to one of their specialties. All other respondents were randomly assigned to one of the three domains. The actual valid subsamples were 30.3 percent (125 of 412) in budget and appropriations (margin of error = 8.7 percent, 95 percent level), 29.1 percent (120 of 412) in health policy (margin of error = 8.9 percent, 95 percent level), and 40.5 percent (167 of 412) in national security policy (margin of error = 7.5percent, 95 percent level); 6.6 percent of the sample were missing responses to questions in these blocks. Questions for chamber and policy domain are comparable across blocks, so generally responses may to be aggregated up to the full sample to maximize statistical power.

Post-stratification Weights and Sample Balance

Post-stratification survey weights were calculated using the 'survey' package in R (Lumley 2004, 2017). For the purpose of calculating weights, respondents were counted as having taken the survey for the purpose of inclusion in the numerator if they if they agreed to Q68

[4] The subtopic code 105, "National Budget" corresponds with our "Budget and Appropriations." All other CAP Master Topic level policy domains correspond perfectly.

and responded to any other question in the survey. The provided (psweight) are the inverse probability of selection for each respondent conditioning on the joint distribution of Chamber, office type, and party in the population, using the sampling frame purchased from LegiStorm. Because of a persistent gender imbalance, we calculate a second weight variable (psweight_g) conditioned on party, chamber and gender. The results of a series of balance tests between respondent sample and a random sample of the non-respondents are shown in Table 2, for unweighted as well as both sets of post stratification weights.

Table A2. Balance tests for non-response bias

	Unweighted			PostStratification Weights by officetype, party, chamber			PostStratification Weights by party, chamber, gender		
Variable	Respondent Mean	Non-respondent Mean	p-value	Respondent Mean	Non-respondent Mean	p-value	Respondent Mean	Non-respondent Mean	*p*-value
chamber_ls2	0.378	0.355	0.535	0.408	0.355	0.151	0.397	0.355	0.255
gapYes	0.177	0.137	0.148	0.178	0.137	0.142	0.182	0.137	0.107
genderF	0.363	0.488	0.001	0.365	0.488	0.001	0.462	0.488	0.485
ls_educ1	0.499	0.587	0.020	0.500	0.587	0.023	0.504	0.587	0.029
ls_educ2	0.165	0.166	0.986	0.168	0.166	0.927	0.165	0.166	0.975
ls_educ3	0.304	0.224	0.018	0.301	0.224	0.023	0.301	0.224	0.023
ls_educ4	0.029	0.023	0.612	0.028	0.023	0.697	0.028	0.023	0.678
ls_race_white*	0.879	0.860	0.471	0.883	0.860	0.375	0.878	0.860	0.505
num_employers*	2.330	2.340	0.902	2.307	2.340	0.892	2.261	2.340	0.896
num_members*	1.608	1.744	0.080	1.602	1.744	0.092	1.522	1.744	0.076
num_offices*	0.723	0.596	0.002	0.705	0.596	0.004	0.738	0.596	0.006
num_titles*	3.183	3.023	0.588	3.177	3.023	0.562	3.183	3.023	0.558
officetype22	0.313	0.221	0.007	0.267	0.221	0.164	0.317	0.221	0.005
officetype23	0.035	0.058	0.159	0.057	0.058	0.952	0.037	0.058	0.203
party_ls31	0.006	0.012	0.422	0.021	0.012	0.334	0.010	0.012	0.814
party_ls32	0.528	0.517	0.782	0.553	0.517	0.347	0.553	0.517	0.355
salary*	$73,533	$72,860	0.816	$73,535	$72,860	0.798	$73,390	$72,860	0.842
seniority*	0.826	0.985	0.128	0.832	0.985	0.160	0.844	0.985	0.186
tenure*	5.785	5.570	0.452	5.707	5.570	0.488	5.717	5.570	0.466
title_cat1	0.572	0.535	0.326	0.559	0.535	0.526	0.568	0.535	0.389
title_cat2	0.115	0.096	0.417	0.114	0.096	0.449	0.113	0.096	0.467
title_cat3	0.068	0.148	0.001	0.071	0.148	0.001	0.072	0.148	0.001

title_cat4	0.204	0.192	0.702	0.203	0.192	0.706	0.200	0.192	0.789
title_cat5	0.003	0.003	0.992	0.003	0.003	0.975	0.002	0.003	0.879
title_cat6	0.024	0.026	0.830	0.037	0.026	0.433	0.032	0.026	0.667
*p value for a bootstrapped KS test, all other variables p value presented is for a t test.									

Linking back to biographical data

In addition to the variables collected with the survey instrument, respondents were subsequently linked back to additional biographical data purchased from LegiStorm. The fully merged data set for replication and a detailed description of these variables can be found in the data codebook at <DATAVERSE OR OTHER PERMANENT REPOSITORY TO BE MADE AVAILABLE WITH PUBLICATION>.

Works Cited

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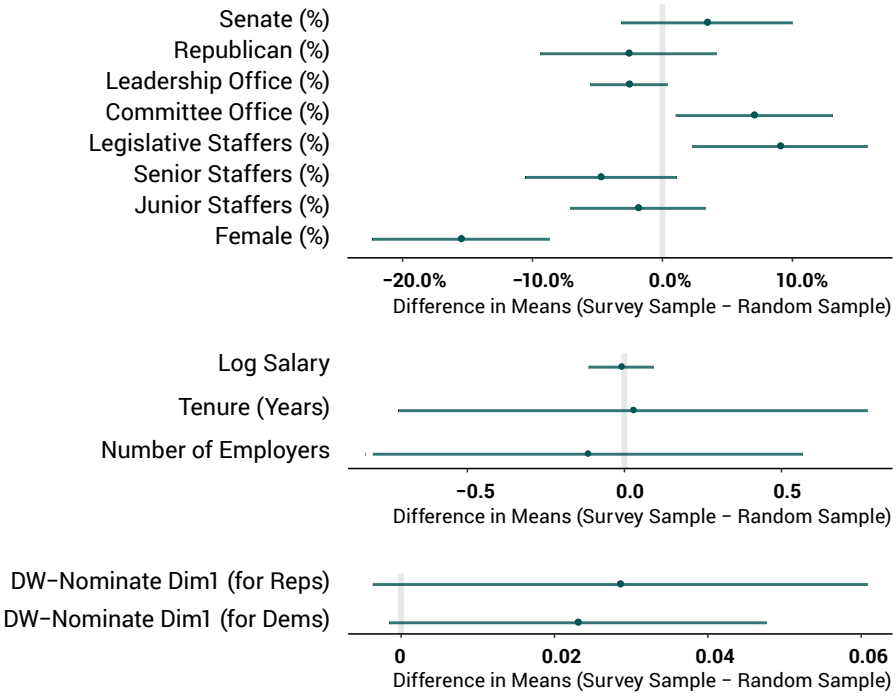
APPENDIX D

Additional Balance Statistics for CCS 2017

In general, unweighted balance is quite good on most covariates. The sample has approximately the same share of Senate staffers, staffers in Republican offices, leadership staffers, and staffers of different levels of seniority as a random sample of non-respondents. However, there are some significant differences. The survey over-samples committee staffers and legislative staffers, which is not-unexpected given its frame as a study of congressional capacity. The largest difference between respondents and non-respondents is in gender: according to LegiStorm's coding 34.7 % of survey respondents are women while 50.2 % of the non-respondent sample are women. To some degree, these imbalances are not independent. Men are over represented among legislative staffers and committee staffers within Congress.[1] The only roles in which women are over-represented in Congress are communication professionals and administrative positions such as staff assistants or schedulers, which were under-represented in the survey responses. This is not entirely unexpected as staffers in these roles act as gatekeepers for the rest of their offices and as such are likely to receive especially high volumes of email inquiries and be some of the most selective in who they respond to.

1. 59 percent of legislative staffers and 54 percent of committee staffers in Congress are men.

Figure D.1: **Balance Between Survey Respondents and Random Sample of Staffers**



95% confidence intervals shown

Covariate balance between respondents and non-respondents is extremely good on several key career variables. Both groups have nearly identical mean salaries, number of years working in Congress, and a similar number of total employers during their time in Congress (a sum of the number of different members of Congress and committees for which the staffer worked).

In addition to the good partisan balance between respondents' and non-respondents' offices, the two samples work for ideologically indistinguishable sets of bosses according to their first dimension DW-Nominate scores (Poole and Rosenthal 2000). Committee staffers are coded as working for either the committee chair or ranking member depending on whether they are majority or minority staff.[2] While respondents' bosses are slightly more conservative than the bosses of non-respondents for both Democrats

2. Committee staff that are assigned to a committee generally rather than the minority or majority are coded as working for the committee chair.

and Republicans, the ~ 0.025 difference in means in their DW-Nominate scores is only about 1.5 percent of the full range $(-0.758, 0.94)$ of the variable.

APPENDIX E

Linear Models of main results

	Right TT	**Left TT**	**Univ**	**CRS**	**CBO**	**GAO**
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
Intercept	1.587	1.629	2.333	3.729	3.715	3.084
	(0.733)	(0.731)	(0.767)	(0.695)	(0.698)	(0.814)
Staffer Ideology	0.153	-0.247	-0.21	-0.136	-0.137	-0.191
	(0.052)	(0.055)	(0.057)	(0.052)	(0.052)	(0.058)
Boss Ideology	0.226	-0.091	-0.097	-0.092	-0.091	-0.019
	(0.056)	(0.058)	(0.060)	(0.054)	(0.055)	(0.061)
Log(Salary	0.026	0.033	0.021	-0.073	-0.072	0.016
	(0.072)	(0.071)	(0.074)	(0.068)	(0.068)	(0.080)
Junior	0.497	0.287	0.439	0.288	0.287	-0.052
	(0.303)	(0.293)	(0.301)	(0.252)	(0.252)	(0.281)
Mid-Level	0.47	0.284	0.17	0.312	0.31	0.14
	(0.306)	(0.292)	(0.300)	(0.248)	(0.248)	(0.277)
Senior	0.583	0.123	-0.012	0.254	0.251	0.069
	(0.328)	(0.311)	(0.320)	(0.267)	(0.267)	(0.300)
Health Issue	0.155	0.176	0.195	0.036	0.037	-0.045
	(0.093)	(0.098)	(0.100)	(0.092)	(0.092)	(0.102)
Nat Sec Issue	0.141	0.201	0.019	0.148	0.149	0.03
	(0.084)	(0.088)	(0.090)	(0.084)	(0.084)	(0.094)
IssueKnowledge	0.083	-0.039	0.219	0.371	0.371	0.238
	(0.143)	(0.149)	(0.153)	(0.141)	(0.141)	(0.158)
Committee Office	-0.202	-0.019	-0.036	-0.002	-0.003	0.013
	(0.099)	(0.101)	(0.105)	(0.095)	(0.096)	(0.109)
Leadership Office	-0.241	0.007	-0.175	-0.09	-0.092	-0.649
	(0.178)	(0.176)	(0.184)	(0.167)	(0.167)	(0.191)
Senate	0.088	0.012	-0.058	-0.019	-0.019	0.055
	(0.077)	(0.077)	(0.081)	(0.072)	(0.072)	(0.082)
IMR	-0.386	-0.191	-0.294	0.064	0.063	-0.246
	(0.174)	(0.171)	(0.175)	(0.153)	(0.153)	(0.172)
R Squared	0.301	0.255	0.236	0.153	0.153	0.167
F statisitc	10.13	8.10	7.33	4.412	4.409	4.853
Deg of Freedom	13 and 306	13 and 307	13 and 304	13 and 318	13 and 318	13 and 316
AIC	608.665	641.490	653.172	642.631	642.668	710.174

Table E.1: **Second stage of 2SLS regression models**
DV: Trust of information sources

	Right TT	**Left TT**	**Univ**	**CRS**	**CBO**	**GAO**
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
Intercept	1.788	1.906	2.027	2.249	2.378	1.27
	(0.696)	(0.670)	(0.687)	(0.764)	(0.727)	(0.786)
Staffer Ideology	0.022	-0.224	-0.174	0.013	-0.015	-0.033
	(0.050)	(0.048)	(0.051)	(0.056)	(0.054)	(0.058)
Boss Ideology	0.311	-0.07	0.063	0.001	0.016	0.035
	(0.053)	(0.051)	(0.053)	(0.058)	(0.056)	(0.060)
Log(Salary)	-0.018	-0.005	-0.015	-0.087	-0.023	0.026
	(0.068)	(0.066)	(0.067)	(0.074)	(0.071)	(0.077)
Junior	0.035	0.033	0.195	0.643	0.262	0.191
	(0.263)	(0.251)	(0.265)	(0.278)	(0.268)	(0.286)
Mid-Level	0.22	0.182	0.359	0.781	0.376	0.533
	(0.261)	(0.249)	(0.263)	(0.273)	(0.263)	(0.282)
Senior	0.271	0.198	0.265	0.987	0.345	0.573
	(0.281)	(0.268)	(0.282)	(0.295)	(0.284)	(0.304)
Health Issue	0.151	0.049	0.053	-0.122	-0.134	-0.133
	(0.091)	(0.086)	(0.091)	(0.100)	(0.097)	(0.104)
Security Issue	0.137	0.02	-0.09	-0.317	0.016	-0.09
	(0.083)	(0.079)	(0.083)	(0.091)	(0.088)	(0.095)
IssueKnowledge	0.095	-0.064	-0.112	0.33	0.245	0.248
	(0.141)	(0.134)	(0.141)	(0.155)	(0.150)	(0.160)
Committee Office	-0.065	-0.04	-0.163	0.161	-0.12	0.345
	(0.096)	(0.092)	(0.096)	(0.105)	(0.101)	(0.108)
Leadership Office	-0.554	-0.219	-0.499	-0.302	-0.523	-0.278
	(0.155)	(0.153)	(0.155)	(0.169)	(0.163)	(0.175)
Senate	-0.015	0.017	0.088	-0.06	-0.151	0.02
	(0.072)	(0.070)	(0.072)	(0.079)	(0.076)	(0.082)
IMR	-0.103	-0.254	-0.138	0.082	0.098	-0.094
	(0.162)	(0.169)	(0.151)	(0.161)	(0.154)	(0.174)
R Squared	0.286	0.239	0.133	0.124	0.077	0.137
F statatistic	9.580	7.498	3.655	3.529	2.078	3.941
Deg of Freedom	12 and 311	12 and 311	13 and 311	13 and 324	13 and 323	13 and 323
AIC	614.336	581.120	619.256	720.003	692.867	737.181

Table E.2: **Second stage of 2SLS regression models DV: Use of information sources**

	Right TT	Left TT	Univ	CRS	CBO	GAO
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Intercept	1.796	1.634	2.226	4.166	4.173	3.345
	(0.780)	(0.772)	(0.809)	(0.724)	(0.721)	(0.859)
StaffLeft	-0.267	-0.164	-0.037	-0.188	-0.189	0.045
	(0.165)	(0.173)	(0.179)	(0.158)	(0.158)	(0.179)
Staffer Extremism	0.014	-0.296	-0.207	-0.363	-0.363	-0.346
	(0.086)	(0.090)	(0.100)	(0.084)	(0.084)	(0.094)
BossLeft	0.052	-0.098	-0.251	-0.056	-0.053	-0.062
	(0.288)	(0.295)	(0.305)	(0.268)	(0.268)	(0.306)
BossExtremism	0.192	-0.092	-0.077	-0.213	-0.214	-0.035
	(0.150)	(0.152)	(0.158)	(0.140)	(0.141)	(0.161)
Log(Salary)	0.026	0.036	0.024	-0.08	-0.081	0.004
	(0.074)	(0.072)	(0.075)	(0.068)	(0.068)	(0.081)
Junior	0.493	0.32	0.507	0.307	0.307	-0.013
	(0.311)	(0.303)	(0.312)	(0.253)	(0.253)	(0.286)
Mid-Level	0.468	0.321	0.241	0.336	0.336	0.163
	(0.313)	(0.300)	(0.309)	(0.248)	(0.248)	(0.280)
Senior	0.591	0.153	0.049	0.309	0.31	0.13
	(0.336)	(0.320)	(0.329)	(0.267)	(0.267)	(0.304)
Health Issue	0.148	0.169	0.191	0.035	0.036	-0.042
	(0.094)	(0.099)	(0.102)	(0.091)	(0.091)	(0.103)
Nat Sec Issue	0.138	0.19	0.008	0.153	0.153	0.043
	(0.084)	(0.089)	(0.091)	(0.083)	(0.083)	(0.094)
IssueKnowledge	0.094	-0.041	0.217	0.399	0.399	0.264
	(0.143)	(0.150)	(0.155)	(0.140)	(0.139)	(0.158)
Committee Office	-0.214	-0.022	-0.04	-0.031	-0.03	0.003
	(0.104)	(0.105)	(0.108)	(0.097)	(0.097)	(0.112)
Leadership Office	-0.221	0.034	-0.157	-0.056	-0.056	-0.623
	(0.183)	(0.179)	(0.188)	(0.166)	(0.166)	(0.194)
Senate	0.092	0.03	-0.03	-0.021	-0.021	0.054
	(0.080)	(0.080)	(0.084)	(0.074)	(0.074)	(0.085)
IMR	-0.437	-0.208	-0.303	-0.017	-0.016	-0.284
	(0.189)	(0.188)	(0.190)	(0.159)	(0.158)	(0.182)
StaffLeft:Staffer Extremism	-0.178	0.563	0.438	0.368	0.368	0.354
	(0.131)	(0.138)	(0.146)	(0.127)	(0.127)	(0.145)
BossLeft:Boss Extremism	-0.386	0.357	0.449	0.298	0.296	0.071
	(0.267)	(0.273)	(0.283)	(0.249)	(0.249)	(0.286)
R Squared	0.317	0.260	0.244	0.191	0.191	0.183
F Statistic	8.086	6.291	5.696	4.351	4.354	4.125
Deg of Freedom	17 and 302	17 and 303	17 and 300	17 and 314	17 and 314	17 and 312
AIC	611.211	647.077	658.904	635.465	635.421	711.338

Table E.3: **Second stage of 2SLS regression models with interactions DV: Trust in information sources**

	Right TT	Left TT	Univ	CRS	CBO	GAO
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Intercept	1.825	1.876	1.907	2.427	2.761	1.519
	(0.727)	(0.700)	(0.719)	(0.786)	(0.744)	(0.817)
StaffLeft	0.049	0.147	-0.013	-0.212	-0.168	-0.038
	(0.154)	(0.146)	(0.156)	(0.167)	(0.160)	(0.172)
Staffer Extremism	-0.04	-0.142	-0.143	-0.053	-0.227	-0.06
	(0.083)	(0.079)	(0.084)	(0.093)	(0.089)	(0.096)
BossLeft	0.115	0.016	0.127	-0.078	-0.166	-0.333
	(0.273)	(0.268)	(0.275)	(0.293)	(0.282)	(0.303)
Boss Extremism	0.367	-0.11	0.12	-0.094	-0.088	-0.166
	(0.142)	(0.138)	(0.142)	(0.153)	(0.148)	(0.161)
Log(Salary)	-0.025	-0.003	-0.013	-0.087	-0.031	0.029
	(0.069)	(0.066)	(0.068)	(0.074)	(0.070)	(0.077)
Junior	0.058	-0.004	0.195	0.647	0.307	0.18
	(0.272)	(0.258)	(0.274)	(0.285)	(0.271)	(0.293)
Mid-Level	0.223	0.146	0.352	0.801	0.42	0.546
	(0.268)	(0.255)	(0.270)	(0.278)	(0.264)	(0.287)
Senior	0.298	0.16	0.251	1.006	0.423	0.59
	(0.288)	(0.275)	(0.290)	(0.300)	(0.285)	(0.309)
Health Issue	0.152	0.061	0.048	-0.129	-0.14	-0.124
	(0.092)	(0.088)	(0.093)	(0.101)	(0.097)	(0.106)
Nat Sec Issue	0.147	0.028	-0.09	-0.332	0.012	-0.098
	(0.084)	(0.080)	(0.084)	(0.092)	(0.089)	(0.096)
IssueKnowledge	0.109	-0.071	-0.121	0.344	0.278	0.266
	(0.142)	(0.135)	(0.143)	(0.156)	(0.149)	(0.161)
Committee Office	-0.055	-0.038	-0.15	0.146	-0.146	0.309
	(0.099)	(0.096)	(0.098)	(0.108)	(0.103)	(0.112)
Leadership Office	-0.556	-0.205	-0.502	-0.322	-0.54	-0.288
	(0.156)	(0.154)	(0.157)	(0.171)	(0.162)	(0.178)
Senate	-0.022	0.002	0.084	-0.049	-0.137	0.029
	(0.075)	(0.073)	(0.075)	(0.082)	(0.078)	(0.086)
IMR	-0.098	-0.249	-0.112	0.044	0.027	-0.168
	(0.173)	(0.181)	(0.161)	(0.170)	(0.163)	(0.183)
staff_left:staff_extremism	-0.082	0.366	0.344	0.081	0.119	0.104
	(0.129)	(0.123)	(0.131)	(0.143)	(0.136)	(0.148)
boss_left:boss_extremism	-0.735	0.077	-0.224	0.156	0.178	0.238
	(0.252)	(0.247)	(0.254)	(0.274)	(0.263)	(0.284)
R squared	0.289	0.245	0.134	0.132	0.109	0.144
F Statistic	7.356	5.869	2.798	2.858	2.302	3.154
Deg of Freedom	17 and 307	17 and 307	17 and 307	17 and 320	17 and 319	17 and 319
AIC	620.737	586.346	626.658	724.982	688.924	742.442

Table E.4: **Second stage of 2SLS regression models with interactions DV: Use of information sources**

APPENDIX F

Study 1 Experiment Question Wording

Legislative staff like yourself rely on information from a variety of sources.

Suppose you received a request for a meeting with a \${e://Field/ident}.

The individual is asking your office to \${e://Field/action}.

They offered to give your office \${e://Field/info}.

ident Factor 1: source identity

(1) constitutent

(2) donor to your Member's election campaign

(3) lobbyist representing a large, national business

(4) lobbyist representing a national consumer group

ident_ short factor 1

(0) Constituent (n=131)

(1) Donor (n=128)

(2) Corporation (n=154)

(3) Consumer (n=136)

action Factor 2: requested legislative action from source

(1) propose a new bill

(2) stop a bill currently under consideration

action_ short factor 2

(0) Propose (n=279)

(1) Stop (n=270)

info Factor 3: information provided to support legislative action request

(1) evidence of how their proposal would help jobs and employment in your constituency from a center-left think-tank.

(2) evidence of how their proposal would help jobs and employment in your constituency from a center-right think-tank.

(3) evidence of how their proposal would help jobs and employment in your constituency from an analysis they conducted.

(4) polling from your constituency that shows support for their position

Info_ short factor 3

(0) Left tank (n=152)

(1) Right tank (n=136)

(2) Self (n=123)

(3) Polling (n=138)

takemeeting: How likely would you be to take a meeting with this individual?

(1) Very unlikely (n=35)

(2) Somewhat unlikely (n=31)

(3) Neither likely nor unlikely (n=64)

(4) Somewhat likely (n=151)

(5) Very likely (n=155)

useinfo: How likely would you be to use the information this individual provided to
prepare recommendations for your boss?
(1) Very unlikely (n=35)
(2) Somewhat unlikely (n=42)
(3) Neither likely nor unlikely (n=183)
(4) Somewhat likely (n=150)
(5) Very likely (n=26)

recommendtoboss: How likely would you be to side with this individual in your recommendation to your boss?
(1) Very unlikely (n=25)
(2) Somewhat unlikely (n=45)
(3) Neither likely nor unlikely (n=306)
(4) Somewhat likely (n=55)
(5) Very likely (n=5)

representativeness: How representative do you think this individual is of your district or state's opinion as a whole?
(1) Very unlikely
(2) Somewhat unlikely (n=63)
(3) Neither likely nor unlikely (n=222)
(4) Somewhat likely (n=115)
(5) Very likely (n=10)

APPENDIX G

Descriptive Patterns for Legislative Action Responses

Previous legislative staff experiments measure the construct of access to infer influence. Our design uses three sequenced questions to differentiate access (variable: *takemeeting*) with more costly or difficult legislative actions (variables: *useinfo* and *recommendtoboss*). All three use five-point Likert-type responses anchored on the likelihood of taking the action. Table G.3 presents response frequencies for each question as conditioned on the previous response. For ease of display, we have collapsed "Very [un]likey" and "Somewhat [un]likely" response categories to a tripartite variable. All raw frequencies may be found in the 2017 CCS codebook.

Take Meeting	Use Info	Recommend to Boss	Frequency
Neither	Neither	Neither	41
Neither	Neither	Very/Somewhat likely	3
Neither	Neither	Very/Somewhat unlikely	2
Neither	Very/Somewhat likely	Neither	8
Neither	Very/Somewhat likely	Very/Somewhat unlikely	2
Neither	Very/Somewhat unlikely	Neither	4
Neither	Very/Somewhat unlikely	Very/Somewhat unlikely	4
Very/Somewhat likely	Neither	Neither	100
Very/Somewhat likely	Neither	Very/Somewhat likely	6
Very/Somewhat likely	Neither	Very/Somewhat unlikely	8
Very/Somewhat likely	Very/Somewhat likely	Neither	93
Very/Somewhat likely	Very/Somewhat likely	Very/Somewhat likely	43
Very/Somewhat likely	Very/Somewhat likely	Very/Somewhat unlikely	14
Very/Somewhat likely	Very/Somewhat unlikely	Neither	24
Very/Somewhat likely	Very/Somewhat unlikely	Very/Somewhat likely	2
Very/Somewhat likely	Very/Somewhat unlikely	Very/Somewhat unlikely	16
Very/Somewhat unlikely	Neither	Neither	21
Very/Somewhat unlikely	Neither	Very/Somewhat unlikely	2
Very/Somewhat unlikely	Very/Somewhat likely	Neither	11
Very/Somewhat unlikely	Very/Somewhat likely	Very/Somewhat likely	3
Very/Somewhat unlikely	Very/Somewhat likely	Very/Somewhat unlikely	2
Very/Somewhat unlikely	Very/Somewhat unlikely	Neither	4
Very/Somewhat unlikely	Very/Somewhat unlikely	Very/Somewhat likely	3
Very/Somewhat unlikely	Very/Somewhat unlikely	Very/Somewhat unlikely	20

Table G.3: **Response counts to the three action dependent variables**

APPENDIX H

Study 1 Analysis of Variance and Pairwise T-tests

Here we report the results of the analyses of variance (ANOVA) and pairwise t-tests between sets of treatment conditions that we originally pre-registered. Anticipating a significantly higher response rate, we expected to have the statistical power necessary to conduct pairwise tests between the treatment conditions. Because of our lower than anticipated sample size, we have chosen to test our pre-registered hypotheses in terms of average marginal effects of each component we manipulated. However, for the sake of transparency, in this appendix we report the ANOVA and pairwise t-test analysis that we pre-registered. It is important to note that these tests are considerably under-powered to adequately draw inferences.

Table H.1 displays ANOVA results for all four of our dependent variables in the full sample of staffers. The general pattern here is one of null results, with a few notable exceptions: 1) The likelihood of staffers using information differs by the identity of the petitioner, 2) the likelihood that a staffer will side with a petitioner varies depending on what action the petitioner is requesting, and 3) how representative a staffer finds a petitioner varies depending on the identity of the petitioner and the information they provide. The direction and magnitude of these effects is shown in the AMCE estimates we provide in the main text.

Dep Var	Term	Df	Sum Sq	Mean Sq	F Statistic	P Value
Take Meeting	ident	3.00	0.44	0.15	1.58	0.19
	action	1.00	0.03	0.03	0.37	0.54
	info	3.00	0.07	0.02	0.23	0.87
	ident:action	3.00	0.01	0.00	0.04	0.99
	ident:info	9.00	0.65	0.07	0.77	0.64
	action:info	3.00	0.30	0.10	1.06	0.36
	ident:action:info	9.00	0.38	0.04	0.45	0.91
	Residuals	404.00	37.70	0.09		
Use Info	ident	3.00	0.79	0.26	4.45	0.00
	action	1.00	0.05	0.05	0.90	0.34
	info	3.00	0.02	0.01	0.12	0.95
	ident:action	3.00	0.04	0.01	0.21	0.89
	ident:info	9.00	0.65	0.07	1.22	0.28
	action:info	3.00	0.06	0.02	0.34	0.79
	ident:action:info	9.00	0.60	0.07	1.13	0.34
	Residuals	404.00	24.02	0.06		
Recommend to Boss	ident	3.00	0.12	0.04	1.26	0.29
	action	1.00	0.14	0.14	4.71	0.03
	info	3.00	0.11	0.04	1.17	0.32
	ident:action	3.00	0.13	0.04	1.41	0.24
	ident:info	9.00	0.44	0.05	1.59	0.12
	action:info	3.00	0.02	0.01	0.26	0.85
	ident:action:info	9.00	0.34	0.04	1.22	0.28
	Residuals	404.00	12.43	0.03		
Representativeness	ident	3.00	0.56	0.19	4.19	0.01
	action	1.00	0.02	0.02	0.44	0.51
	info	3.00	0.37	0.12	2.73	0.04
	ident:action	3.00	0.14	0.05	1.05	0.37
	ident:info	9.00	0.36	0.04	0.90	0.52
	action:info	3.00	0.02	0.01	0.17	0.92
	ident:action:info	9.00	0.41	0.05	1.02	0.43
	Residuals	403.00	18.04	0.04		

Table H.1: **Factorial ANOVA using the full sample of respondents**

In Table H.2 we show ANOVA results for all four of our dependent variables in just the sample of staffers working in Democratic offices. Once again, we see no significant relationships between any of the manipulated factors and the reported likelihood of a staffer to take a meeting with the petitioner. However, in this partisan subsample we observe more pronounced effects for identity and information source. The identity of the petitioner and the source information they provide do effect the likelihood that a staffer will use the information provided as they craft recommendations for their boss.

Similarly, the identity of the petitioner and the information source they present are associated with different likelihoods that a staffer will side with the petitioner in their recommendations to their boss and that they will view the petitioner as representative of district/state constituents.

Dep Var	Term	Df	Sum Sq	Mean Sq	F Statistic	P Value
Take Meeting	ident	3.00	0.41	0.14	1.74	0.16
	action	1.00	0.03	0.03	0.36	0.55
	info	3.00	0.13	0.04	0.53	0.66
	ident:action	3.00	0.11	0.04	0.45	0.72
	ident:info	9.00	0.84	0.09	1.20	0.30
	action:info	3.00	0.13	0.04	0.53	0.66
	ident:action:info	9.00	0.36	0.04	0.51	0.86
	Residuals	176.00	13.82	0.08		
Use Info	ident	3.00	0.75	0.25	5.18	0.00
	action	1.00	0.01	0.01	0.31	0.58
	info	3.00	0.49	0.16	3.40	0.02
	ident:action	3.00	0.06	0.02	0.38	0.77
	ident:info	9.00	0.75	0.08	1.72	0.09
	action:info	3.00	0.08	0.03	0.56	0.64
	ident:action:info	9.00	0.41	0.05	0.95	0.48
	Residuals	176.00	8.51	0.05		
Recommend to Boss	ident	3.00	0.30	0.10	5.02	0.00
	action	1.00	0.09	0.09	4.55	0.03
	info	3.00	0.61	0.20	10.17	0.00
	ident:action	3.00	0.11	0.04	1.81	0.15
	ident:info	9.00	0.11	0.01	0.62	0.78
	action:info	3.00	0.03	0.01	0.49	0.69
	ident:action:info	9.00	0.39	0.04	2.14	0.03
	Residuals	176.00	3.53	0.02		
Representativeness	ident	3.00	0.31	0.10	3.17	0.03
	action	1.00	0.04	0.04	1.18	0.28
	info	3.00	0.25	0.08	2.54	0.06
	ident:action	3.00	0.07	0.02	0.75	0.52
	ident:info	9.00	0.39	0.04	1.32	0.23
	action:info	3.00	0.06	0.02	0.58	0.63
	ident:action:info	9.00	0.18	0.02	0.60	0.80
	Residuals	175.00	5.77	0.03		

Table H.2: **Factorial ANOVA of Respondents in Democratic Offices**

Finally, in Table H.3 we show ANOVA results for all four of our dependent variables in just the sample of staffers working in Republican offices. Once again, we see no significant relationships between the any of the manipulated factors and the

reported likelihood of a staffer to take a meeting with the petitioner. We observe particularly pronounced effects for the information source in how likely a republican staffer is to side with the petitioner as they make recommendations to their boss. We also find that identity, information source, and the interaction of all three factors are significantly associated with how representative a republican staffer perceives a constituent. A comparison of these individual conditions are shown in table H.4, which presents the results of pairwise t-tests.

Dep Var	**Term**	**Df**	**Sum Sq**	**Mean Sq**	**F Statistic**	**P Value**
Take Meeting	ident	3.00	0.23	0.08	0.69	0.56
	action	1.00	0.15	0.15	1.35	0.25
	info	3.00	0.18	0.06	0.56	0.64
	ident:action	3.00	0.04	0.01	0.12	0.95
	ident:info	9.00	0.67	0.07	0.68	0.73
	action:info	3.00	0.34	0.11	1.03	0.38
	ident:action:info	9.00	0.59	0.07	0.60	0.80
	Residuals	196.00	21.48	0.11		
Use Info	ident	3.00	0.24	0.08	1.19	0.31
	action	1.00	0.04	0.04	0.62	0.43
	info	3.00	0.47	0.16	2.37	0.07
	ident:action	3.00	0.07	0.02	0.33	0.80
	ident:info	9.00	0.30	0.03	0.50	0.87
	action:info	3.00	0.42	0.14	2.13	0.10
	ident:action:info	9.00	0.67	0.07	1.12	0.35
	Residuals	196.00	12.98	0.07		
Recommend to Boss	ident	3.00	0.04	0.01	0.39	0.76
	action	1.00	0.05	0.05	1.59	0.21
	info	3.00	0.84	0.28	8.31	0.00
	ident:action	3.00	0.01	0.00	0.10	0.96
	ident:info	9.00	0.56	0.06	1.84	0.06
	action:info	3.00	0.13	0.04	1.30	0.27
	ident:action:info	9.00	0.29	0.03	0.94	0.49
	Residuals	196.00	6.63	0.03		
Representativeness	ident	3.00	0.35	0.12	2.46	0.06
	action	1.00	0.00	0.00	0.01	0.94
	info	3.00	1.60	0.53	11.14	0.00
	ident:action	3.00	0.05	0.02	0.33	0.80
	ident:info	9.00	0.45	0.05	1.04	0.41
	action:info	3.00	0.09	0.03	0.60	0.62
	ident:action:info	9.00	0.94	0.10	2.18	0.02
	Residuals	196.00	9.38	0.05		

Table H.3: **Factorial ANOVA of Respondents in Republican Offices**

The $4 \times 2 \times 4$ factorial design of this survey experiment yielded 32 possible treatment conditions. There are, therefore, 992 treatment conditions that can be tested pairwise for each of four dependent variables, which results in a total of 3,968 pairwise tests on the full data set. However, because we are interested in differential effects of identity and information source among Democratic or Republican staffers, we also need to conduct these test in partisan sub-samples of staffers. All told, this amounts to 11,904 pairwise t-tests. Of course, when testing such a high number of hypotheses it is *extremely* important to account for multiple testing. Here we correct for false discovery rate (Benjamini and Hochberg 1995). Of these nearly twelve thousand pairwise tests, there were 828 pairs that were statistically distinguishable from one another at a generous $\alpha = 0.10$ level, prior to correcting for the false discover rate in this large number of tests. After accounting for multiple testing, 46 pairs are statistically significant at $\alpha = 0.10$ according to their false discovery rate corrected p-value. These pairs are listed in the Table H.4 below.

These results are broadly in line with the average marginal component affects we report in our main analysis. We observe significant pairwise differences only in the dependent variables for a staffer recommending that their boss side with the petitioner, and for the staffer's perception of how representative a petitioner is of their boss's constituency. And, in particular, we observe these differences in the partisan sub populations when at least one of the sources of information being offered by the petitioner has a clear ideological valence. Most frequently, the two conditions with significantly different means are conditions with opposite source valences.

The clear implication of these (mis)alignment between the ideology information source provided by the petitioner and the partisanship of the staffer responding have a large effect on the the likelihood of the staffer to recommend siding with the petitioner or viewing the petitioner as representative of their boss's constituency.

Condition 1	> or <	Condition 2	Dep Var	Subset	Adj P Value
Constit, Stop, RightTT	<	Constit, Propose, LeftTT	Recommend	Dems	0.10
Constit, Stop, RightTT	<	Constit, Stop, LeftTT	Recommend	Dems	0.10
Constit, Stop, RightTT	<	Constit, Stop, Polls	Recommend	Dems	0.10
ConsLob, Propose, LeftTT	>	BizLob, Propose, Polls	Recommend	Dems	0.10
ConsLob, Propose, LeftTT	>	BizLob, Propose, RightTT	Recommend	Dems	0.03
ConsLob, Propose, LeftTT	>	BizLob, Stop, RightTT	Recommend	Dems	0.10
ConsLob, Propose, LeftTT	>	Constit, Stop, RightTT	Recommend	Dems	0.00
ConsLob, Propose, RightTT	<	ConsLob, Propose, LeftTT	Recommend	Dems	0.04
ConsLob, Stop, LeftTT	>	Constit, Stop, RightTT	Recommend	Dems	0.02
ConsLob, Stop, OwnAnalysis	>	Constit, Stop, RightTT	Recommend	Dems	0.09
ConsLob, Stop, Polls	>	BizLob, Propose, RightTT	Recommend	Dems	0.09
ConsLob, Stop, Polls	>	Constit, Stop, RightTT	Recommend	Dems	0.01
ConsLob, Stop, Polls	>	ConsLob, Propose, RightTT	Recommend	Dems	0.10
ConsLob, Stop, RightTT	<	ConsLob, Propose, LeftTT	Recommend	Dems	0.10
Donor, Propose, RightTT	<	BizLob, Stop, LeftTT	Recommend	Dems	0.10
Donor, Propose, RightTT	<	Constit, Propose, LeftTT	Recommend	Dems	0.05
Donor, Propose, RightTT	<	Constit, Stop, LeftTT	Recommend	Dems	0.06
Donor, Propose, RightTT	<	Constit, Stop, Polls	Recommend	Dems	0.05
Donor, Propose, RightTT	<	ConsLob, Propose, LeftTT	Recommend	Dems	0.00
Donor, Propose, RightTT	<	ConsLob, Stop, LeftTT	Recommend	Dems	0.00
Donor, Propose, RightTT	<	ConsLob, Stop, OwnAnalysis	Recommend	Dems	0.06
Donor, Propose, RightTT	<	ConsLob, Stop, Polls	Recommend	Dems	0.00
Donor, Stop, OwnAnalysis	<	ConsLob, Propose, LeftTT	Recommend	Dems	0.10
Donor, Stop, RightTT	<	ConsLob, Propose, LeftTT	Recommend	Dems	0.10
BizLob, Stop, RightTT	>	BizLob, Propose, LeftTT	Recommend	Reps	0.02
Constit, Propose, Polls	<	BizLob, Stop, RightTT	Recommend	Reps	0.10
Constit, Propose, RightTT	>	BizLob, Propose, LeftTT	Recommend	Reps	0.08
Donor, Propose, Polls	>	BizLob, Propose, LeftTT	Recommend	Reps	0.06
ConsLob, Stop, LeftTT	<	BizLob, Propose, Polls	Representative	Reps	0.10
ConsLob, Stop, LeftTT	<	BizLob, Propose, RightTT	Representative	Reps	0.10
ConsLob, Stop, LeftTT	<	BizLob, Stop, LeftTT	Representative	Reps	0.10
ConsLob, Stop, LeftTT	<	BizLob, Stop, RightTT	Representative	Reps	0.00
ConsLob, Stop, LeftTT	<	Constit, Propose, OwnAnalysis	Representative	Reps	0.00
ConsLob, Stop, LeftTT	<	Constit, Propose, RightTT	Representative	Reps	0.00
ConsLob, Stop, LeftTT	<	Constit, Stop, LeftTT	Representative	Reps	0.08
ConsLob, Stop, LeftTT	<	Constit, Stop, Polls	Representative	Reps	0.03
ConsLob, Stop, LeftTT	<	Constit, Stop, RightTT	Representative	Reps	0.00
ConsLob, Stop, LeftTT	<	ConsLob, Propose, Polls	Representative	Reps	0.04
ConsLob, Stop, LeftTT	<	ConsLob, Propose, RightTT	Representative	Reps	0.01
ConsLob, Stop, OwnAnalysis	>	ConsLob, Stop, LeftTT	Representative	Reps	0.04
ConsLob, Stop, RightTT	<	ConsLob, Stop, LeftTT	Representative	Reps	0.01
Donor, Propose, LeftTT	<	Constit, Stop, RightTT	Representative	Reps	0.10
Donor, Propose, OwnAnalysis	>	ConsLob, Stop, LeftTT	Representative	Reps	0.06
Donor, Propose, Polls	>	ConsLob, Stop, LeftTT	Representative	Reps	0.04
Donor, Propose, RightTT	>	ConsLob, Stop, LeftTT	Representative	Reps	0.00
Donor, Stop, Polls	<	ConsLob, Stop, LeftTT	Representative	Reps	0.05

Note: Conditions are given as an (Identity, Action, Information provided) tuple. Identities: Constit = Constituent, ConsLob = Consumer Lobbyist, BizLob = Business Lobbyist. Actions: Propose = Propose Bill, Stop = Stop Bill. Information: LeftTT = information about jobs and employment from a center-left think tank, Right TT = information about jobs and employment from a center-right think tank, Own Analysis = information about jobs and employment from an analysis they (Identity) conducted, and Polls = polling about the issue in your boss's constituency. P values are corrected for false discovery rate.

Table H.4: **Pairwise T-tests between treatment conditions which are significant at $\alpha = .10$**

APPENDIX I

Full Models for Main Effects, Study 1

Models in this appendix correspond to the coefficients shown in Figures 2-5 in the main text. All models are Ordinary Least Squares estimates of the Average Marginal Component Effect of the three factors randomized in the 2017 Congressional Capacity Survey lobbying vignette experiment. Models are estimated with post-stratification weights and the standard errors shown are HC3 heteroskedastic-consistent standard errors as Long and Ervin 2000 recommend.

	AMCE via OLS		
	All Staff	**Dem Staff**	**Rep Staff**
Donor	−0.066	−0.112**	−0.009
	(0.045)	(0.057)	(0.073)
Business Lobbyist	−0.028	−0.063	0.005
	(0.041)	(0.055)	(0.063)
Consumer Lobbyist	−0.076*	−0.069	−0.059
	(0.045)	(0.060)	(0.066)
Stop Bill	0.020	−0.025	0.064
	(0.031)	(0.041)	(0.046)
Policy Evidence from own analysis	0.009	−0.041	0.056
	(0.045)	(0.063)	(0.066)
Policy Evidence from Center-Right Think-Tank	−0.023	−0.070	0.017
	(0.043)	(0.058)	(0.063)
Policy Evidence from Center-Left Think-Tank	−0.015	−0.023	−0.021
	(0.041)	(0.052)	(0.062)
Constant	0.749***	0.834***	0.671***
	(0.045)	(0.053)	(0.071)
N	436	208	228
R-squared	0.014	0.036	0.024
Adj. R-squared	−0.002	0.002	−0.008
Residual Std. Error	0.302 (df = 428)	0.276 (df = 200)	0.324 (df = 220)
F Statistic	0.851 (df = 7; 428)	1.058 (df = 7; 200)	0.757 (df = 7; 220)

***p < 0.01; **p < 0.05; *p < 0.1

Table I.1: **How likely would you be to take a meeting with this individual?**

	AMCE via OLS		
	All Staff	**Dem Staff**	**Rep Staff**
Donor	−0.111***	−0.154***	−0.052
	(0.036)	(0.043)	(0.057)
Business Lobbyist	−0.011	−0.061	0.036
	(0.032)	(0.044)	(0.047)
Consumer Lobbyist	−0.038	−0.064	−0.003
	(0.036)	(0.051)	(0.052)
Stop Bill	0.021	0.020	0.038
	(0.026)	(0.033)	(0.039)
Policy Evidence from own analysis	0.006	−0.022	0.034
	(0.035)	(0.048)	(0.051)
Policy Evidence from Center-Right Think-Tank	0.016	−0.058	0.083*
	(0.034)	(0.050)	(0.048)
Policy Evidence from Center-Left Think-Tank	0.017	0.075*	−0.038
	(0.035)	(0.044)	(0.053)
Constant	0.569***	0.613***	0.515***
	(0.035)	(0.040)	(0.056)
N	436	208	228
R-squared	0.033	0.114	0.049
Adj. R-squared	0.017	0.083	0.019
Residual Std. Error	0.243 (df = 428)	0.221 (df = 200)	0.256 (df = 220)
F Statistic	2.095** (df = 7; 428)	3.668*** (df = 7; 200)	1.630 (df = 7; 220)

***p < 0.01; **p < 0.05; *p < 0.1

Table I.2: **How likely would you be to use the information this individual provided to prepare recommendations for your boss?**

	AMCE via OLS		
	All Staff	**Dem Staff**	**Rep Staff**
Donor	−0.037	−0.048	−0.001
	(0.025)	(0.032)	(0.038)
Business Lobbyist	−0.035	−0.046	−0.020
	(0.023)	(0.028)	(0.032)
Consumer Lobbyist	−0.011	0.042	−0.030
	(0.027)	(0.036)	(0.037)
Stop Bill	0.038**	0.043*	0.045*
	(0.018)	(0.022)	(0.026)
Policy Evidence from own analysis	−0.023	−0.035	−0.016
	(0.021)	(0.025)	(0.032)
Policy Evidence from Center-Right Think-Tank	−0.024	−0.121***	0.059*
	(0.024)	(0.036)	(0.031)
Policy Evidence from Center-Left Think-Tank	−0.044*	0.025	−0.107***
	(0.026)	(0.024)	(0.041)
Constant	0.508***	0.514***	0.490***
	(0.023)	(0.024)	(0.037)
N	436	208	228
R-squared	0.027	0.194	0.110
Adj. R-squared	0.011	0.166	0.081
Residual Std. Error	0.177 (df = 428)	0.144 (df = 200)	0.186 (df = 220)
F Statistic	1.690 (df = 7; 428)	6.892*** (df = 7; 200)	3.866*** (df = 7; 220)

***p < 0.01; **p < 0.05; *p < 0.1

Table I.3: **How likely would you be to side with this individual in your recommendation to your boss?**

	AMCE via OLS		
	All Staff	**Dem Staff**	**Rep Staff**
Donor	−0.064**	−0.081**	−0.026
	(0.030)	(0.039)	(0.046)
Business Lobbyist	−0.087***	−0.105***	−0.066
	(0.030)	(0.039)	(0.043)
Consumer Lobbyist	−0.096***	−0.073	−0.102**
	(0.033)	(0.045)	(0.046)
Stop Bill	0.014	0.030	0.015
	(0.021)	(0.028)	(0.030)
Policy Evidence from own analysis	−0.008	0.0002	−0.016
	(0.028)	(0.036)	(0.042)
Policy Evidence from Center-Right Think-Tank	0.051*	−0.025	0.119***
	(0.028)	(0.042)	(0.036)
Policy Evidence from Center-Left Think-Tank	−0.028	0.069**	−0.114***
	(0.028)	(0.034)	(0.042)
Constant	0.563***	0.548***	0.560***
	(0.030)	(0.036)	(0.046)
N	435	207	228
R-squared	0.048	0.085	0.152
Adj. R-squared	0.032	0.053	0.125
Residual Std. Error	0.211 (df = 427)	0.180 (df = 199)	0.223 (df = 220)
F Statistic	3.053*** (df = 7; 427)	2.654** (df = 7; 199)	5.626*** (df = 7; 220)

***p < 0.01; **p < 0.05; *p < 0.1

Table I.4: **How representative do you think this individual is of your district or state's opinion as a whole?**

APPENDIX J

Subgroup Analysis Variable Construction

In this appendix we detail the variable construction for the factors analyzed in the subgroup analysis.

Ideology: We measure *Staffer Ideology* as a latent variable derived from a five question battery taken from Heinz 1993, validated by Esterling 2018. We use the items in this battery to create an ideal point estimate for each staffer using a Partial Credit Model (PCM), a Rasch model extension of item-response theory (IRT) that is appropriate for ordinal variables (Fischer and Molenaar 2012; Mair and Hatzinger 2007).[1] We standardize this ideology score to have a mean of 0 and a standard deviation of 1. For more information on question wording see Appendix C.

To classify staffers as moderate or extreme ideologues, we take the absolute value of this scale, and then split it at the median. Staffers above the median we consider "extreme" and those below the median we consider "moderate."

Party Identification: We ask staffers the standard American National Election Study partisanship question battery, reproduced in Appendix B. The results of these questions were combined into the seven category party identification scale shown below:

1. Results were substantively the same using a simple additive index of the ideology battery question items.

```
partyid: 7-point party identification derived from Q21, Q23, Q25, and Q27
(0)        Strong Democrat (n=120)
(1)        Democrat (n=19)
(2)        Lean Democrat (n=25)
(3)        Independent / Independent (n=3)
(4)        Lean Republican (n=22)
(5)        Republican (n=44)
(6)        Strong Republican (n=96)
```

Staffers who answered that they would call themselves strong Republicans or Democrats are classified as "strong partisans" and staffers that identify as Democrats/ Republicans or leaners are classified as "weak partisans" for our subgroup analysis.

Knowledge: Staffers were asked four procedural knowledge questions specifically tailored to the chamber in which they worked, reproduced in Appendix B for reference. A knowledge scale was constructed by summing the number of correct answers that a staffer gave on the procedural knowledge batteries. Staffers were categorized as "knowledgeable" or "less knowledgeable" based on whether they were above or below the median value on this scale.

Chamber: Staffers are categorized according to whether they work for offices in the House or the Senate. Staff employed by joint committees were arbitrarily classified by their physical office location. This data comes from LegiStorm, the provider of our sampling frame.

Office Type: Staffers are categorized according to whether they work in members' of Congress personal offices, committee offices, or in party leadership offices. This data comes from LegiStorm, the provider of our sampling frame.

APPENDIX K

Subgroup Analysis Full Models

Models in this appendix correspond to the coefficients shown in Figure 6 in the main text. All models are Ordinary Least Squares estimates of the Average Marginal Component Effect of the three factors randomized in the 2017 Congressional Capacity Survey lobbying vignette experiment. Models are estimated with post-stratification weights and the standard errors shown are HC3 heteroskedastic-consistent standard errors as Long and Ervin 2000 recommend.

	How likely would you be to take a meeting with this individual?				
	AMCE via OLS				
	Personal	**Cmmte/Ldr**	**Moderate**	**Extreme**	**Str Partisan**
Donor	−0.015	−0.187*	−0.093	−0.028	−0.083
	(0.052)	(0.097)	(0.065)	(0.073)	(0.073)
Business Lobbyist	−0.033	−0.030	−0.005	−0.043	0.006
	(0.048)	(0.088)	(0.061)	(0.067)	(0.064)
Consumer Lobbyist	−0.076	−0.098	−0.099	−0.035	−0.045
	(0.052)	(0.091)	(0.065)	(0.072)	(0.069)
Stop Bill	−0.010	0.108**	−0.014	0.066	0.029
	(0.037)	(0.052)	(0.045)	(0.046)	(0.045)
Policy Evidence from own analysis	−0.041	0.126	−0.033	0.081	0.029
	(0.053)	(0.091)	(0.066)	(0.069)	(0.065)
Policy Evidence from Non-aligned TT	−0.0005	0.024	−0.007	0.044	−0.014
	(0.048)	(0.084)	(0.055)	(0.068)	(0.065)
Policy Evidence from Aligned TT	−0.077	0.054	−0.022	−0.048	−0.080
	(0.051)	(0.082)	(0.064)	(0.064)	(0.063)
Constant	0.791***	0.647***	0.794***	0.667***	0.739***
	(0.049)	(0.097)	(0.057)	(0.077)	(0.068)
N	296	140	219	195	214
R-squared	0.021	0.092	0.028	0.037	0.033
Adj. R-squared	−0.003	0.044	−0.005	0.001	−0.0004
Residual Std. Error	0.301	0.294	0.301	0.305	0.313
	(df = 288)	(df = 132)	(df = 211)	(df = 187)	(df = 206)
F Statistic	0.876	1.913*	0.860	1.032	0.989
	(df = 7; 288)	(df = 7; 132)	(df = 7; 211)	(df = 7; 187)	(df = 7; 206)

***p < .01; **p < .05; *p < .1

Table K.1: **Take meeting full models part 1**

	How likely would you be to take a meeting with this individual?				
	AMCE via OLS				
	Wk Partisan	**Senate**	**House**	**Less Knwl**	**More Knwl**
Donor	−0.024	−0.077	−0.080	−0.070	−0.053
	(0.097)	(0.075)	(0.057)	(0.064)	(0.075)
Business Lobbyist	−0.015	−0.014	−0.050	−0.028	−0.024
	(0.088)	(0.067)	(0.051)	(0.060)	(0.065)
Consumer Lobbyist	−0.061	−0.017	−0.122**	−0.062	−0.091
	(0.106)	(0.073)	(0.056)	(0.065)	(0.074)
Stop Bill	0.085	−0.011	0.060	0.011	0.069
	(0.070)	(0.051)	(0.038)	(0.044)	(0.050)
Policy Evidence from own analysis	0.00001	−0.046	0.023	−0.012	0.109
	(0.087)	(0.079)	(0.053)	(0.063)	(0.067)
Policy Evidence from Non-aligned TT	−0.00004	0.039	−0.033	−0.011	0.015
	(0.093)	(0.069)	(0.053)	(0.060)	(0.075)
Policy Evidence from Aligned TT	0.016	0.027	−0.098*	−0.083	0.020
	(0.090)	(0.070)	(0.054)	(0.060)	(0.073)
Constant	0.696***	0.706***	0.790***	0.792***	0.643***
	(0.107)	(0.071)	(0.059)	(0.062)	(0.080)
N	111	171	265	226	158
R-squared	0.029	0.016	0.053	0.023	0.041
Adj. R-squared	−0.036	−0.026	0.028	−0.008	−0.004
Residual Std. Error	0.306	0.318	0.288	0.304	0.301
	(df = 103)	(df = 163)	(df = 257)	(df = 218)	(df = 150)
F Statistic	0.447	0.385	2.074**	0.749	0.912
	(df = 7; 103)	(df = 7; 163)	(df = 7; 257)	(df = 7; 218)	(df = 7; 150)

***p < .01; **p < .05; *p < .1

Table K.2: **Take meeting full models part 2**

	How likely would you be to use the information this individual provided to prepare recommendations for your boss?				
	AMCE via OLS				
	Personal	**Cmmte/Ldr**	**Moderate**	**Extreme**	**Str Partisan**
Donor	−0.149***	0.001	−0.131***	−0.103*	−0.137***
	(0.043)	(0.063)	(0.047)	(0.058)	(0.052)
Business Lobbyist	−0.013	0.020	−0.034	0.002	−0.046
	(0.038)	(0.056)	(0.045)	(0.054)	(0.047)
Consumer Lobbyist	−0.052	0.021	−0.022	−0.072	−0.053
	(0.041)	(0.065)	(0.049)	(0.060)	(0.047)
Stop Bill	−0.008	0.097**	−0.010	0.072*	0.067*
	(0.030)	(0.046)	(0.037)	(0.040)	(0.036)
Policy Evidence from own analysis	0.008	−0.0003	0.036	−0.032	−0.019
	(0.043)	(0.060)	(0.046)	(0.056)	(0.048)
Policy Evidence from Non-aligned TT	0.123***	−0.035	0.109**	0.054	0.072
	(0.038)	(0.063)	(0.047)	(0.053)	(0.049)
Policy Evidence from Aligned TT	−0.037	−0.101	0.007	−0.091*	−0.115**
	(0.042)	(0.069)	(0.055)	(0.052)	(0.053)
Constant	0.590***	0.511***	0.583***	0.562***	0.590***
	(0.040)	(0.066)	(0.046)	(0.058)	(0.047)
N	296	140	219	195	214
R-squared	0.116	0.057	0.080	0.090	0.120
Adj. R-squared	0.095	0.007	0.050	0.055	0.090
Residual Std. Error	0.239	0.233	0.232	0.254	0.244
	(df = 288)	(df = 132)	(df = 211)	(df = 187)	(df = 206)
F Statistic	5.415***	1.136	2.628**	2.626**	4.022***
	(df = 7; 288)	(df = 7; 132)	(df = 7; 211)	(df = 7; 187)	(df = 7; 206)

***p < .01; **p < .05; *p < .1

Table K.3: **Use information full models part 1**

	How likely would you be to use the information this individual provided to prepare recommendations for your boss?				
	AMCE via OLS				
	Wk Partisan	**Senate**	**House**	**Less Knwl**	**More Knwl**
Donor	−0.133*	−0.089	−0.117***	−0.087*	−0.168***
	(0.071)	(0.058)	(0.044)	(0.045)	(0.065)
Business Lobbyist	−0.009	−0.036	0.011	−0.030	−0.044
	(0.074)	(0.052)	(0.038)	(0.048)	(0.051)
Consumer Lobbyist	0.025	0.00000	−0.050	−0.053	−0.035
	(0.088)	(0.056)	(0.046)	(0.049)	(0.064)
Stop Bill	0.009	0.076*	0.008	0.019	0.045
	(0.060)	(0.040)	(0.031)	(0.034)	(0.044)
Policy Evidence from own analysis	0.092	−0.014	−0.002	−0.056	0.143**
	(0.075)	(0.055)	(0.044)	(0.046)	(0.056)
Policy Evidence from Non-aligned TT	0.149*	0.179***	−0.002	0.042	0.163***
	(0.077)	(0.051)	(0.040)	(0.047)	(0.056)
Policy Evidence from Aligned TT	0.083	0.048	−0.120***	−0.094*	0.057
	(0.079)	(0.059)	(0.045)	(0.052)	(0.057)
Constant	0.538***	0.471***	0.628***	0.615***	0.509***
	(0.094)	(0.052)	(0.047)	(0.048)	(0.063)
N	111	171	265	226	158
R-squared	0.094	0.134	0.097	0.068	0.139
Adj. R-squared	0.032	0.097	0.073	0.038	0.099
Residual Std. Error	0.245	0.243	0.230	0.239	0.238
	(df = 103)	(df = 163)	(df = 257)	(df = 218)	(df = 150)
F Statistic	1.520	3.617***	3.953***	2.276**	3.470***
	(df = 7; 103)	(df = 7; 163)	(df = 7; 257)	(df = 7; 218)	(df = 7; 150)

***p < .01; **p < .05; *p < .1

Table K.4: **Use information full models part 2**

	How likely would you be to side with this individual in your recommendation to your boss?				
	AMCE via OLS				
	Personal	**Cmmte/Ldr**	**Moderate**	**Extreme**	**Str Partisan**
Donor	−0.045	0.016	−0.024	−0.053	−0.036
	(0.027)	(0.054)	(0.034)	(0.038)	(0.037)
Business Lobbyist	−0.040	−0.003	−0.038	−0.042	−0.035
	(0.025)	(0.045)	(0.031)	(0.038)	(0.029)
Consumer Lobbyist	−0.015	0.021	−0.022	−0.009	0.023
	(0.027)	(0.054)	(0.038)	(0.040)	(0.029)
Stop Bill	0.032	0.063*	0.023	0.079***	0.079***
	(0.020)	(0.036)	(0.027)	(0.026)	(0.024)
Policy Evidence from own analysis	−0.031	0.001	−0.018	−0.028	−0.051*
	(0.023)	(0.046)	(0.026)	(0.037)	(0.027)
Policy Evidence from Non-aligned TT	0.058***	0.013	0.029	0.073**	0.036
	(0.022)	(0.043)	(0.026)	(0.035)	(0.029)
Policy Evidence from Aligned TT	−0.136***	−0.064	−0.083*	−0.137***	−0.200***
	(0.030)	(0.058)	(0.046)	(0.038)	(0.037)
Constant	0.526***	0.440***	0.523***	0.485***	0.509***
	(0.023)	(0.050)	(0.026)	(0.043)	(0.027)
N	296	140	219	195	214
R-squared	0.191	0.050	0.072	0.198	0.274
Adj. R-squared	0.171	−0.0003	0.041	0.168	0.250
Residual Std. Error	0.160 (df = 288)	0.181 (df = 132)	0.165 (df = 211)	0.174 (df = 187)	0.160 (df = 206)
F Statistic	9.717*** (df = 7; 288)	0.994 (df = 7; 132)	2.342** (df = 7; 211)	6.598*** (df = 7; 187)	11.131*** (df = 7; 206)

***p < .01; **p < .05; *p < .1

Table K.5: **Recommend to Boss full models part 1**

	How likely would you be to side with this individual in your recommendation to your boss?				
	AMCE via OLS				
	Wk Partisan	**Senate**	**House**	**Less Knwl**	**More Knwl**
Donor	0.002	−0.038	−0.015	−0.012	−0.039
	(0.051)	(0.037)	(0.032)	(0.032)	(0.050)
Business Lobbyist	0.012	−0.088***	0.015	−0.041	−0.012
	(0.054)	(0.033)	(0.028)	(0.032)	(0.043)
Consumer Lobbyist	0.037	−0.013	0.005	−0.032	0.052
	(0.074)	(0.044)	(0.032)	(0.034)	(0.054)
Stop Bill	0.020	0.070**	0.027	0.027	0.037
	(0.044)	(0.029)	(0.021)	(0.024)	(0.031)
Policy Evidence from own analysis	0.012	−0.044	−0.013	−0.050*	0.011
	(0.054)	(0.030)	(0.028)	(0.028)	(0.041)
Policy Evidence from Non-aligned TT	0.069	0.039	0.048*	0.020	0.062
	(0.045)	(0.028)	(0.029)	(0.029)	(0.043)
Policy Evidence from Aligned TT	−0.017	−0.125**	−0.102***	−0.149***	−0.076
	(0.067)	(0.053)	(0.031)	(0.037)	(0.052)
Constant	0.444***	0.498***	0.497***	0.531***	0.470***
	(0.063)	(0.031)	(0.032)	(0.027)	(0.053)
N	111	171	265	226	158
R-squared	0.035	0.192	0.108	0.144	0.125
Adj. R-squared	−0.031	0.158	0.084	0.117	0.084
Residual Std. Error	0.186 (df = 103)	0.172 (df = 163)	0.163 (df = 257)	0.170 (df = 218)	0.175 (df = 150)
F Statistic	0.529 (df = 7; 103)	5.548*** (df = 7; 163)	4.450*** (df = 7; 257)	5.250*** (df = 7; 218)	3.053*** (df = 7; 150)

***p < .01; **p < .05; *p < .1

Table K.6: **Recommend to Boss full models part 2**

	How representative do you think this individual is of your district or state's opinion as a whole?				
	AMCE via OLS				
	Personal	**Cmmte/Ldr**	**Moderate**	**Extreme**	**Str Partisan**
Donor	−0.057	−0.027	−0.082**	−0.041	−0.020
	(0.035)	(0.052)	(0.038)	(0.051)	(0.042)
Business Lobbyist	−0.095***	−0.047	−0.094**	−0.082*	−0.056
	(0.035)	(0.048)	(0.040)	(0.047)	(0.041)
Consumer Lobbyist	−0.130***	0.002	−0.106**	−0.081*	−0.026
	(0.041)	(0.045)	(0.044)	(0.049)	(0.041)
Stop Bill	0.0003	0.046	−0.011	0.042	0.019
	(0.026)	(0.034)	(0.028)	(0.033)	(0.029)
Policy Evidence from own analysis	−0.043	0.071	−0.002	−0.011	−0.001
	(0.036)	(0.048)	(0.039)	(0.045)	(0.036)
Policy Evidence from Non-aligned TT	0.092***	0.092*	0.096***	0.105**	0.048
	(0.029)	(0.049)	(0.034)	(0.041)	(0.040)
Policy Evidence from Aligned TT	−0.103***	−0.016	−0.021	−0.102**	−0.084**
	(0.036)	(0.049)	(0.042)	(0.047)	(0.042)
Constant	0.597***	0.464***	0.596***	0.526***	0.538***
	(0.034)	(0.054)	(0.037)	(0.050)	(0.036)
N	295	140	219	194	214
R-squared	0.145	0.089	0.105	0.123	0.059
Adj. R-squared	0.124	0.040	0.075	0.090	0.027
Residual Std. Error	0.216	0.171	0.193	0.219	0.204
	(df = 287)	(df = 132)	(df = 211)	(df = 186)	(df = 206)
F Statistic	6.969***	1.838*	3.530***	3.712***	1.844*
	(df = 7; 287)	(df = 7; 132)	(df = 7; 211)	(df = 7; 186)	(df = 7; 206)

***p < .01; **p < .05; *p < .1

Table K.7: **Representativeness full models part 1**

	How representative do you think this individual is of your district or state's opinion as a whole?				
	AMCE via OLS				
	Wk Partisan	**Senate**	**House**	**Less Knwl**	**More Knwl**
Donor	−0.069	−0.063	−0.042	−0.041	−0.083
	(0.064)	(0.046)	(0.039)	(0.038)	(0.053)
Business Lobbyist	−0.110	−0.103**	−0.065	−0.046	−0.155***
	(0.068)	(0.041)	(0.040)	(0.040)	(0.052)
Consumer Lobbyist	−0.124	−0.095*	−0.079*	−0.055	−0.131**
	(0.080)	(0.051)	(0.041)	(0.043)	(0.055)
Stop Bill	−0.004	0.045	0.004	−0.014	0.057
	(0.049)	(0.033)	(0.026)	(0.028)	(0.036)
Policy Evidence from own analysis	0.007	−0.019	−0.010	−0.003	0.027
	(0.065)	(0.051)	(0.035)	(0.040)	(0.050)
Policy Evidence from Non-aligned TT	0.139**	0.119***	0.072**	0.052	0.163***
	(0.057)	(0.040)	(0.033)	(0.034)	(0.047)
Policy Evidence from Aligned TT	−0.002	−0.050	−0.094**	−0.097**	−0.007
	(0.069)	(0.046)	(0.040)	(0.040)	(0.053)
Constant	0.545***	0.523***	0.577***	0.563***	0.540***
	(0.082)	(0.042)	(0.042)	(0.037)	(0.061)
N	110	171	264	227	156
R-squared	0.129	0.155	0.094	0.087	0.171
Adj. R-squared	0.069	0.118	0.069	0.058	0.132
Residual Std. Error	0.214	0.200	0.207	0.197	0.208
	(df = 102)	(df = 163)	(df = 256)	(df = 219)	(df = 148)
F Statistic	2.154**	4.265***	3.777***	2.975***	4.354***
	(df = 7; 102)	(df = 7; 163)	(df = 7; 256)	(df = 7; 219)	(df = 7; 148)

***p < .01; **p < .05; *p < .1

Table K.8: **Representativeness full models part 2**

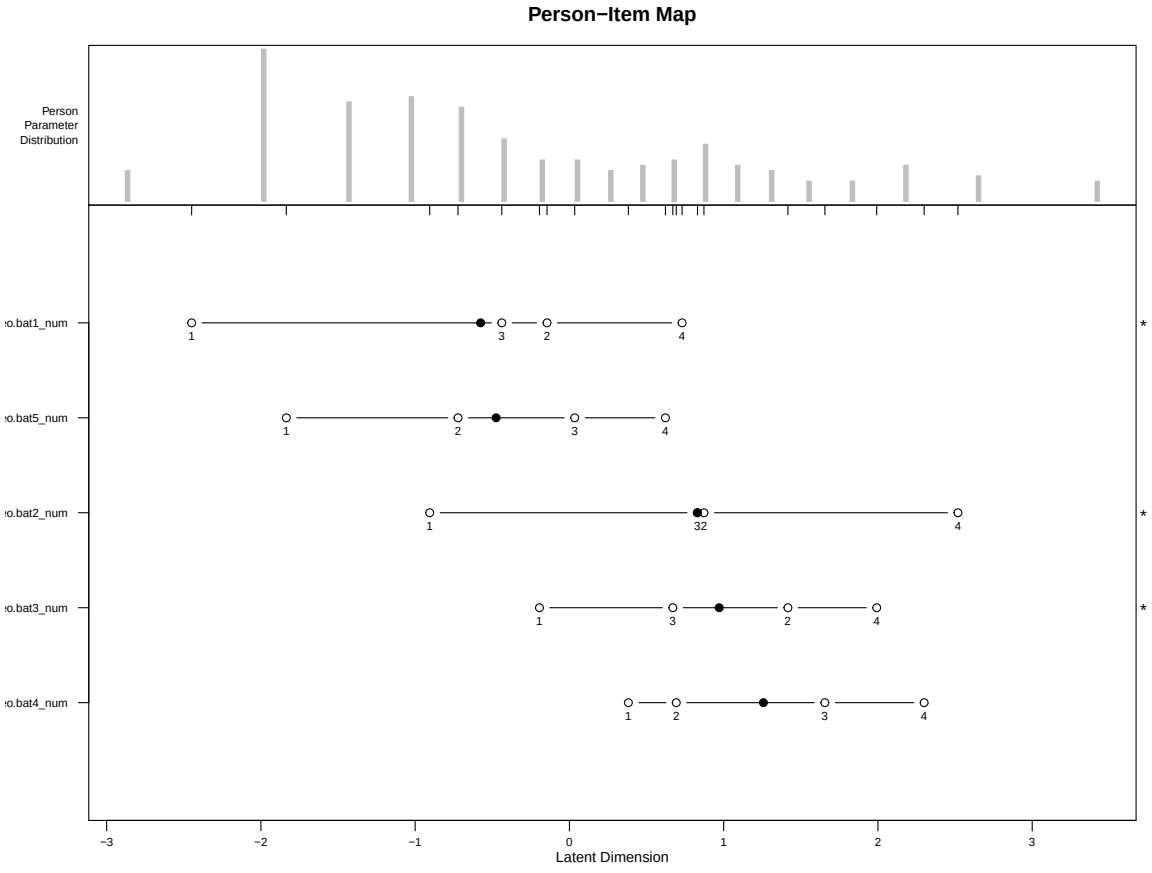
APPENDIX L

White Paper Conjoint Full Marginal Effects

	All	Drug Prices	Min Wage	Dem	Rep
Aligned Content	0.223	0.224	0.222	0.206	0.246
	(0.029)	(0.039)	(0.038)	(0.034)	(0.049)
Aligned Institution	0.241	0.286	0.193	0.302	0.166
	(0.028)	(0.039)	(0.041)	(0.033)	(0.049)
Aligned Content:Aligned Institution	-0.098	-0.053	-0.149	-0.145	- 0.055
	(0.055)	(0.074)	(0.087)	(0.067)	(0.089)
N Obs	1224	634	590	820	404
N Respondents	317	317	295	211	106

Table L.1: **Full Models of Marginal Effects from White Paper Conjoint**

Figure L.1: **Person and Item characteristics from PCM for staffer ideology**



APPENDIX M

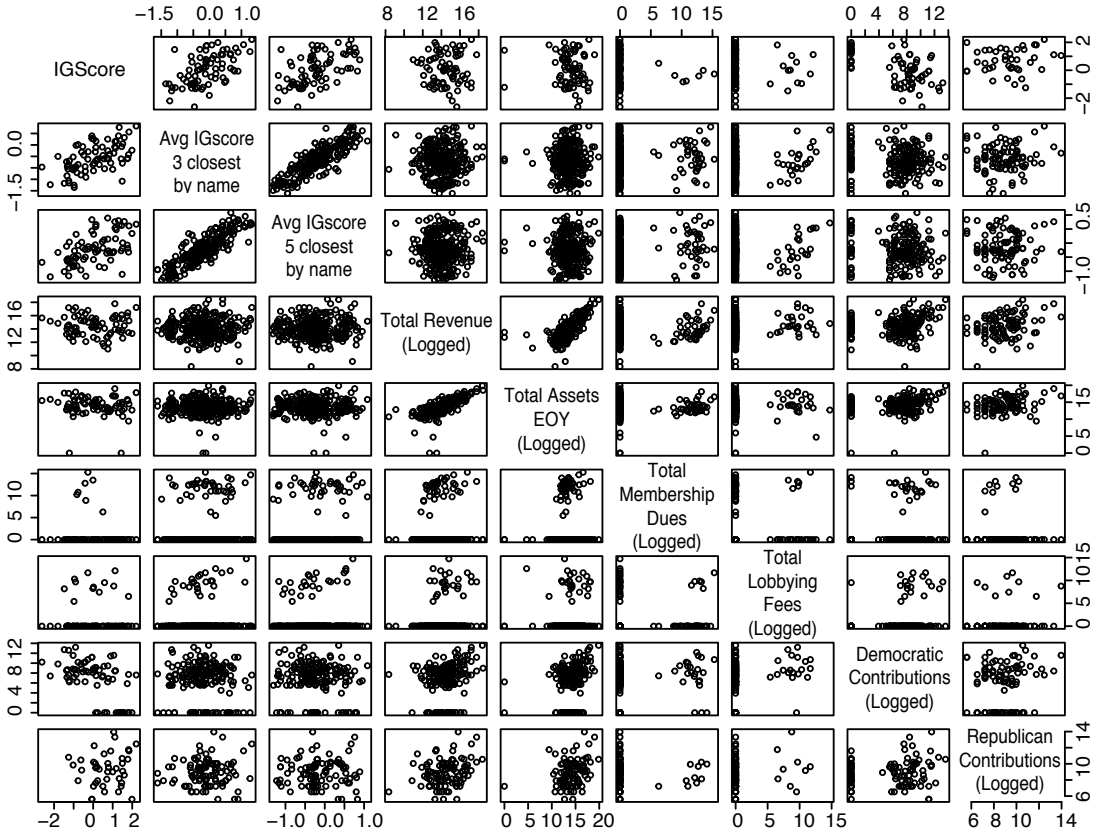
Imputation for Chapter 4 models

In this appendix I provide information about the imputation model used, and diagnostic results of the imputation of IGScores conduced using `Amelia II`Honaker, King, Blackwell, et al. 2011. Because this analysis was not conducted temporally, I took the the variables presented here are averages for each think tank across the time series from GuideStar. I took the yearly averages for total revenue, total end of year assets, total membership dues, total lobbying fees and total number of contractors. These variables were all logged in the imputation model, while NTEE-CC code was treated as a nominal variable. I begin by providing a scatter plot matrix of the numeric variables used in the imputation process for the IGscores, shown in Figure M.1. In particular, the avberage IGScore of three and five organizations with the most semantically similar names have strong relationships with the true IGscores.

Figure M.2 shows the paths of EM chains when started from over-dispersed start values, plotted in the first two principle components of the multidimensional space that the chains move through. This demonstrates that even with quite different start values, the imputations converge to the same region of the probability space, suggesting stable convergence in the imputation model.

Figure M.3 reports the results of an over-imputation diagnostic on the IGScore

Figure M.1: **Scatterplot matrix of variables used in imputation of IGScores for think tanks**



imputation. This diagnostic imputed values for some observations for which true IGScores already exist, and plots the true values relative to the imputed values, with appropriate confidence intervals.

The results of the over-imputation diagnostic make it clear that the imputed scores are correlated with the observed values. However, we also observe substantial moderation in these values, with the imputed values tending to be closer to zero than their observed counterparts. This, along with the comparison of observed and imputed score distributions in Figure 4.2 indicates that the average absolute distance between think tanks IGScores will be smaller because of the imputation, than if we had complete data. This should bias results of ideological homophily within groups

Figure M.2: **Imputation convergence over 2 principal components**

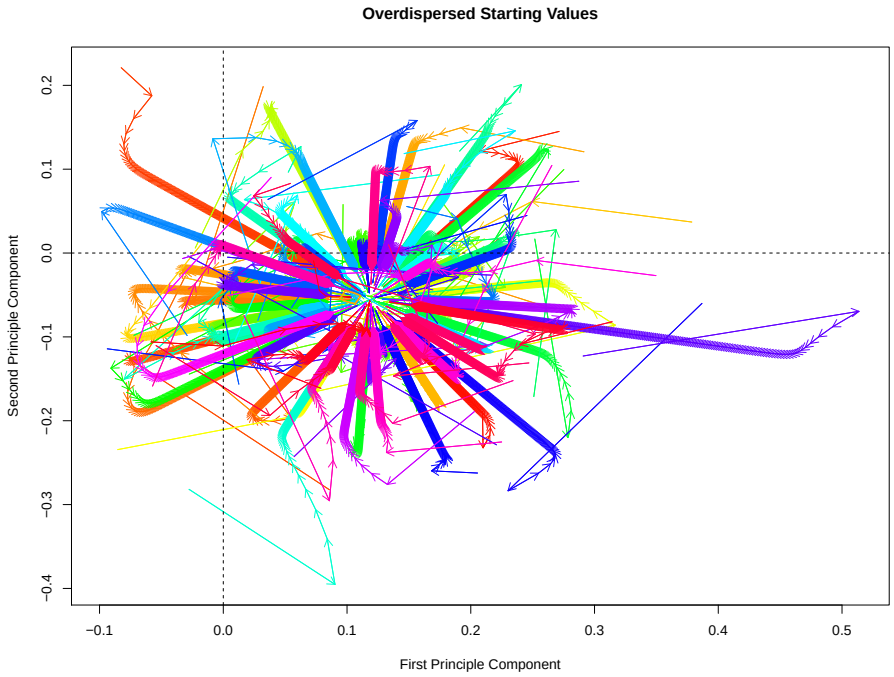
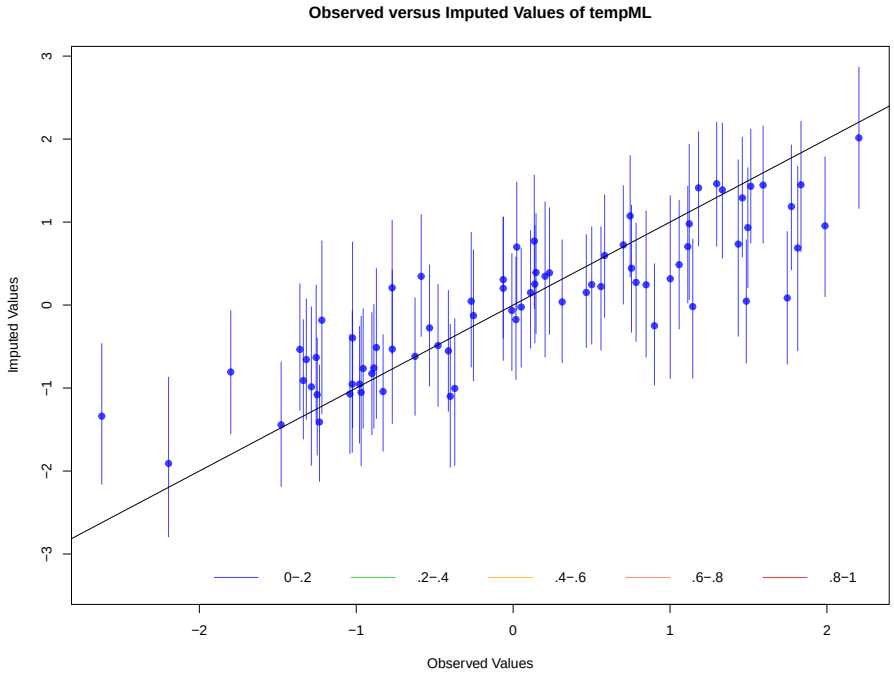


Figure M.3: **Over-imputation plot**



downwards.

APPENDIX N

ERGM Diagnostics

In this appendix, I report ERGM convergence and goodness of fit diagnostics for a sample model fit using the same specifications as the 100 replications reported in table 4.4. Figures N.1 - N.4 show good mixing in the chains, and roughly normal distributions of sample statistics. This suggests that the models are not degenerate, but rather converged appropriately. Similarly, all models reported in the paper had p values above .95 associate for multivariate geweke diagnostic tests.

Finally, I report goodness of fit diagnostics for the ERGM specification reported as model 4 in Table 4.4. These results indicate excellent fit of the ERGM model, with very similar distributions for endogenous network statistics in the model produced networks as the observed network, as shown in Figure N.5. The full ERGM specification also does a good job of capturing the distributions of node and edge covariates as Figure N.6 demonstrates.

Figure N.1: **ERGM sample statistic chains and distributions pt. 1.**

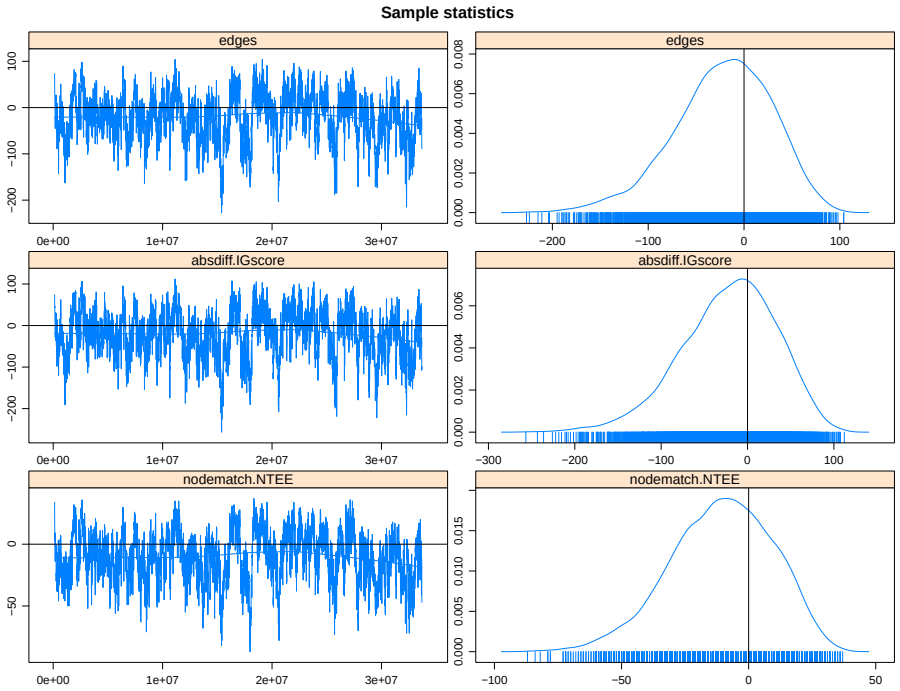


Figure N.2: **ERGM sample statistic chains and distributions pt. 2.**

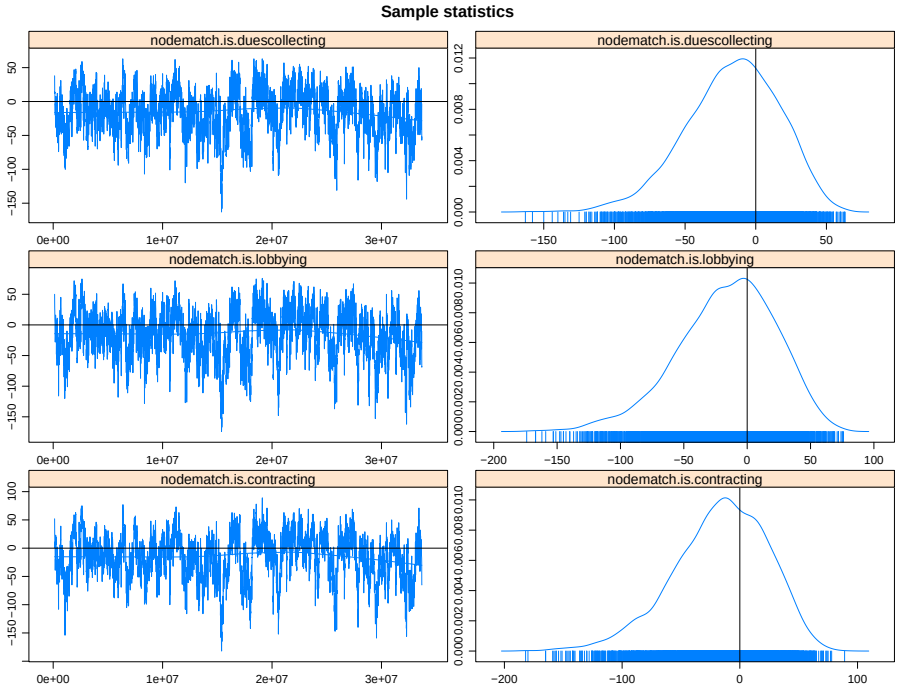


Figure N.3: **ERGM sample statistic chains and distributions pt. 3.**

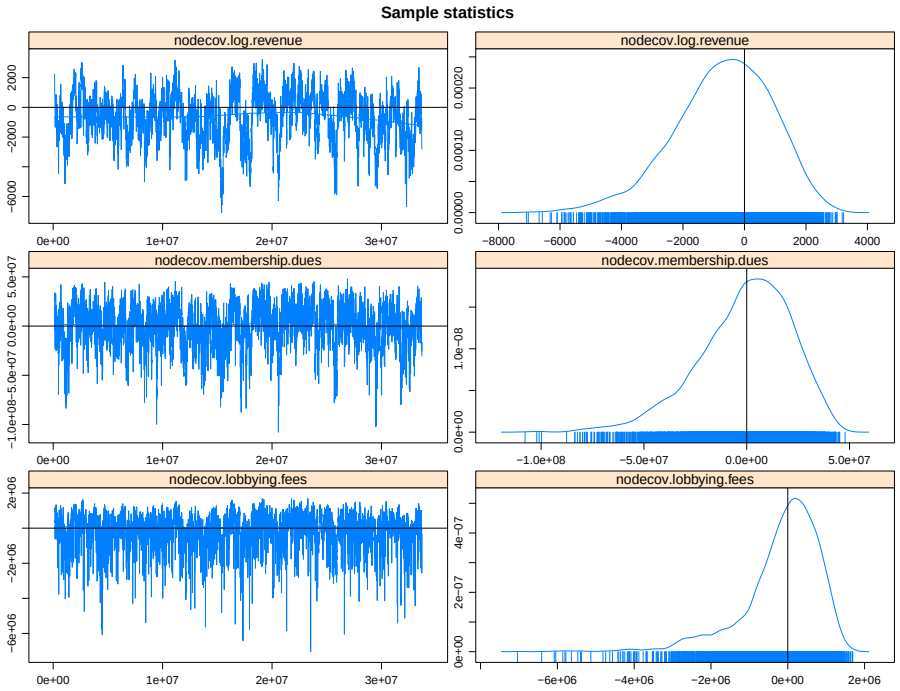


Figure N.4: **ERGM sample statistic chains and distributions pt. 4.**

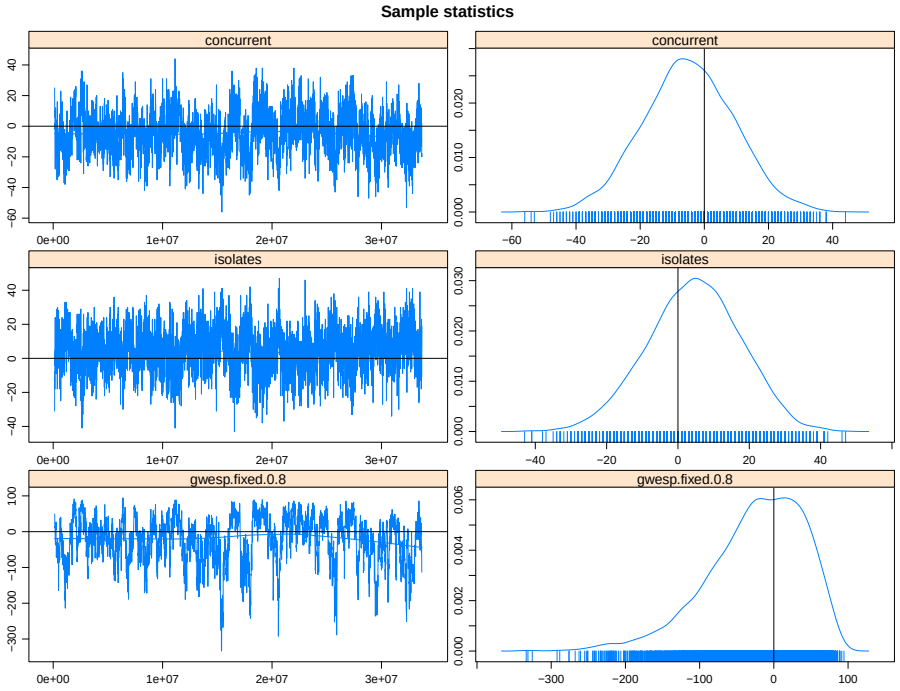


Figure N.5: **Goodness-of-fit diagnostics for endogenous network statistics for a sample ERGM.**

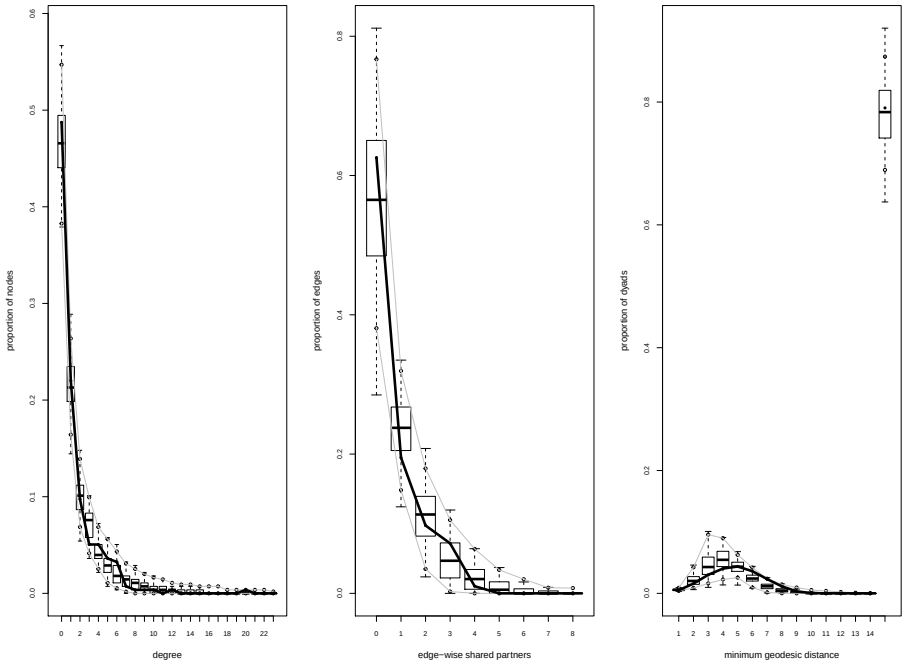
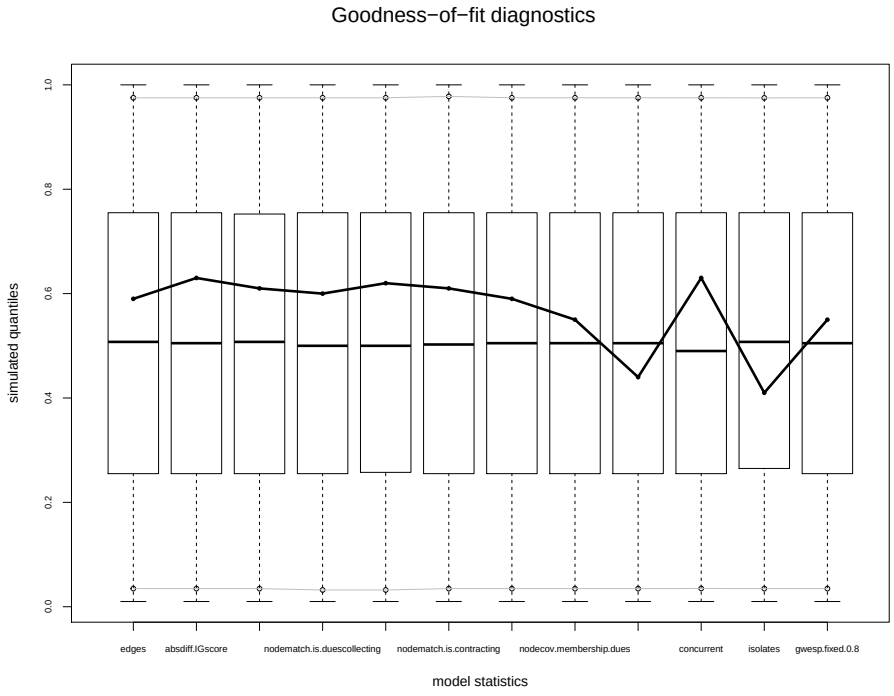


Figure N.6: **Goodness-of-fit diagnostics for node and edge covariates for a sample ERGM**



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