What Goes with Red and Blue? Assessing Partisan Cognition Through Conjoint Classification Experiments[*]

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February 28, 2016

Abstract

Political parties can provide valuable information to voters by cultivating distinct associations between their labels, issue priorities, policies and group traits. Yet, there is considerable debate over which associations voters incorporate, and whether these are accurate. In this study, we develop a novel conjoint classification experiment designed to map voters' *partisan associative networks*. We ask respondents to 'guess' the party and ideology of hypothetical candidates given randomized issue priorities and biographical details. Notably, this inferential approach minimizes the biasing effects of partisan boosting in measuring the relative associations voters make between attributes and parties, and the impact these mappings have on candidate evaluations. We find voters consistently link many issues with party and ideological labels, but agree far less on associations with candidate attributes. Our study highlights important heterogeneity in the information value of party reputations, with implications for theories of democratic competence and empirical findings emerging from candidate-vignette designs.

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1   Introduction

> The contextual grasp of 'standard' political belief systems fades out very rapidly ... Increasingly, simpler forms of information about 'what goes with what' (or even information about the simple identity of objects) turn up missing (Converse 1964, p. 213).

> Partisan stereotypes are rich cognitive categories, containing not only policy information but group alliances, trait judgments, specific examples of group members, and performance assessments (Rahn 1993, p. 474).

Since at least Converse (1964), scholars have sought to understand "what goes with what" in the minds of voters, and especially what cluster of things people associate with the parties and political ideologies (e.g., Ansolabehere and Jones 2010; Conover and Feldman 1984; Rahn 1993). By cultivating reputational associations, parties may provide their candidates with important electoral resources, like low-cost policy signals or issue ownership advantages (Butler and Powell 2014; Petrocik 1996; Pope and Woon 2009; Sniderman and Stiglitz 2012). When reasonably accurate, such associations can give voters cheap information about competing candidates or complex policy proposals, facilitating a minimal form of democratic competence (Dancey and Sheagley 2013; Lupia and McCubbins 1998). More broadly, the transmission of these party stereotypes is also thought to play a role in attitude formation and change (Carsey and Layman 2006; Nicholson 2011; Zaller 1992), potentially mediating constraint or consistency in mass opinion (Converse 1964; Levendusky 2010).

While there is general agreement that voters possess some cognitive mapping of the parties, surprisingly little is known about what heuristic information voters incorporate, and how much partisanship or political interest mediates this process. Extensive prior research has considered whether party labels convey information to voters about the policy positions of the parties or candidates (Ansolabehere and Jones 2010; Dancey and Sheagley 2013; Feldman and Conover 1983), the groups, traits or demographics of those identifying with or voting for the parties (Cutler 2002; Petrocik 1996; Rahn 1993), the

issue priorities and candidate features of party politicians (Egan 2013; Hayes 2005), and ideological labels or orientations (Sniderman and Stiglitz 2012). Yet, other work finds that many voters possess few, shallow or biased mental images of the parties (Ahler and Sood 2015; Bullock et al. 2015; Converse 1964; Dancey and Sheagley 2016; Kuklinski et al. 2000; Levendusky 2009). Many voters, especially those with limited information, are often unaware of the many issue positions or priorities championed by each party (Levendusky 2009; Zaller 1992). Further, partisan 'rooting interest' can significantly bias beliefs or motivate expressive responses to survey questions that may fundamentally distort measures of voters' party stereotypes (Ahler and Sood 2015; Arceneaux 2009; Berinsky 2012; Bullock et al. 2015; Dancey and Sheagley 2016; Einstein and Glick 2013; Hartman and Newmark 2012; Slothuus and de Vreese 2010; Goggin and Theodoridis 2014; Theodoridis 2012).

Our aim in this study is threefold. First, we seek to clarify the cognitive role partisan and ideological associations play in voters' minds. We synthesize findings across research on party stereotyping to develop what we call the *partisan associative network*, the many-dimensional cluster of durable associations that cognitively cohere with partisan or ideological objects, and that come to mind when features in the network are referenced. Such cognitive associations have been the focus of disparate literatures, with many existing theoretical conceptions and empirical findings standing in conflict and unresolved. In bridging this research, we highlight two potential sources of disagreement, party identity (PID) and political knowledge, both of which are thought to mediate the formation and activation of associative networks.

Second, we develop and implement a novel experimental design to robustly measure voters' associative networks, minimizing the influence of partisan bias resulting from voters' PID. To do this, we call upon the conjoint experimental framework pioneered in political science by Hainmueller et al. (2014); Hainmueller and Hopkins (2015). We ask respondents to 'guess' the party or ideology of fictional candidates given a set of

randomly generated issues and candidate attributes. The method allows us to measure both the partisan direction and relative strength of associations across a wide variety of issues and candidate traits, as well as to assess how respondents' political knowledge and PID mediates these associative networks.

We implement this design fielding experiments in two modules of the 2014 Cooperative Congressional Election Survey (CCES). From the analysis, we find that issue associations largely mirror expectations from work on issue ownership, though interesting exceptions emerge. We find remarkably similar results in analyzing ideology rather than party guessing, as well as when stratifying associations by party identification (PID), providing strong evidence that both Democrats and Republicans agree about which issues go with which parties and ideological orientations. Yet, in breaking down *candidate evaluations* by PID we see clear evidence of polarization in affective orientations, bolstering concerns that partisan rooting interest could be introducing a source of bias in previous studies of party stereotyping. We also find that voters associate a number of candidate traits with the parties, though some are more consistently linked (e.g., gender, religion, occupation) than others (e.g., family background, military service). In line with expectations from research on political interest (e.g., Converse 1964; Levendusky 2009; Zaller 1992), we find clearer ideological and partisan images for those with higher knowledge, reflecting a better understanding of how issues, candidates and parties "go together."

Lastly, we examine whether the party and ideological associations present in voters' minds resemble the parties' actual priorities and coalitions. A great deal of research has studied, with somewhat mixed results, whether *politicians* prioritize issues in Congress (Egan 2013; Woon and Pope 2008) or elections (Damore 2004; Sides 2006) consistent with measures of voter stereotyping. Much less work has investigated whether voters accurately incorporate the associative information being projected by parties. We find little evidence that information emerging from election competition is driving the party associations we observe, as candidates systematically deviate from prioritizing issues as

expected by voters. Regarding candidates' personal attributes, we find voters rarely hold inaccurate stereotypes, though they do often miss meaningful associations that are present.

This study provides perhaps the best evidence to date about the mental images voters carry around of the parties and their ideological labels. As such, our findings have a number of implications for work on democratic competence, representation and political communication. We find stronger associations between issues than traits, indicating that voters are more aware of differences in the parties' policy priorities, rather than in the descriptive composition of their standard bearers. A possible explanation is that parties avidly seek to differentiate their legislative priorities, while simultaneously aiming to expand their demographic coalition. More generally, the presence (and absence) of associations across particular domains can provide greater insight into the way voters incorporate and use political information, as well as how party reputations facilitate this effort. Our findings also help clarify conditions under which the party brands may constrain candidate behavior, and thus improve electoral accountability.

Finally, our study makes a significant contribution to experimental design by separating association from evaluation. In utilizing quiz-like inferences rather than direct survey instruments, our approach minimizes one of the core pitfalls in previous efforts to examine cognitive maps of partisan space, namely the tendency of partisan identifiers to overweight positive associations with their favored party's candidates. We suggest caution in interpreting the results from candidate vignettes or other studies that prime party-correlated information, and recommend the use of similar quiz-like designs to minimize partisan boosting when crafting future experimental analyses.

2 Understanding Partisan and Ideological Associations

Most prior work on party stereotyping is rooted in a basic idea: voters possess certain mental images of the parties, which they use to evaluate parties, policies or candidates

in elections (Arceneaux 2009; Feldman and Conover 1983; Nicholson and Segura 2012; Rahn 1993; Sniderman and Stiglitz 2012; Snyder and Ting 2002; Woon and Pope 2008). Fundamental to the partisan stereotyping process, these mental images can be signaled simply through reference to the party label. This notion of stereotyping underpins many important theoretical findings in political science, including how parties manage elite ambition (Fiorina 1980; Snyder and Ting 2002) and facilitate electoral competition (Petrocik 1996; Sniderman and Stiglitz 2012), as well as how voters incorporate and use heuristic information (Lee 2009; Lupia and McCubbins 1998), or come to form and change opinions on policies (Carsey and Layman 2006; Levendusky 2010; Nicholson 2011). While many of these theories consider party stereotypes as positive public goods, others explore more problematic implications of party reputations, including biases in voter decision-making (Rahn 1993), learning (Dancey and Sheagley 2013), and information recall (Coronel et al. 2014), as well as broader concerns about democratic accountability (Arceneaux 2009; Damore 2004).

2.1   Connecting Ownership Theories to the Party Policy Brands

Though scholars generally agree that voters engage in some stereotyping, there is considerable disagreement about the information that voters incorporate, or how that information relates to their choices. One important debate is over the extent to which party labels clarify the ideological or positional differences between parties and candidates (Fiorina 1980; Levendusky 2010; Lupia and McCubbins 1998; Snyder and Ting 2002; Sniderman and Stiglitz 2012), or serve mostly as non-policy or 'valence' heuristics for competence, good government or policy success (Cox and McCubbins 2005; Lee 2009; Petrocik 1996). Notably, each has important consequences for how voters would balance rewards for legislative unity against enacting undesirable policies (e.g., Cox and McCubbins 2005; Egan 2013; Lee 2009). Yet, it has proven difficult to empirically adjudicate between the two accounts (e.g., Butler and Powell 2014).

A part of the challenge is in determining how voters weigh competing types of reputational information when evaluating candidates. Most valence accounts, including party ownership, see voters as indifferent to the policy orientations of politicians, so long as they "do something" to resolve problems arising when governing (Egan 2013). Yet, with polarization in Congress, the parties' reputations appear to be increasingly grounded in their persistent divergence on policies, and around policy successes that divide electorates. As consequence, this could lead voters to link particular *ideological labels* to the parties, rather than just issue priorities, and to use those labels when choosing candidates (Sniderman and Stiglitz 2012; Snyder and Ting 2002). However, voters may not incorporate such positional reputations, especially when these require additional information about how particular issues or policy proposals map on to ideological conflict (Butler and Powell 2014). Indeed, many voters mistake which party is the more liberal on a range of policy items, and overall (Levendusky 2010; Sniderman and Stiglitz 2012). This may lead less informed voters to focus on keeping score of legislative wins rather on the specific policy details being fought over (Egan 2013). On the other hand, since parties, policies and ideologies tend to cluster, candidates may be able to signal some ideological information simply by highlighting issue priorities (Henderson 2015*a*).

A particularly influential valence account of party stereotyping is the theory of party ownership. In traditional form, articulated most clearly by Petrocik (1996), ownership derives from voters' overall beliefs that some parties do better handling certain *issues* when in office than do their partisan competitors. More recently, scholars have incorporated candidate *traits* and biographies alongside issues into the basic framework, arguing parties have cornered certain candidate-level qualities alongside their issue portfolios (Goggin and Theodoridis 2014; Hayes 2005, 2010). Accordingly, parties have incentives to cultivate such impressions, so that, once in place, candidates can use them to win elections. By defining elections to be about the issues owned by that candidate's party, candidates remind voters that the most important issues of the day are the ones that she and her

team are better equipped to handle or care more about in office. Further, certain traits may lead voters to see candidates as more competent in handling related issues, may be desirable on their own, or may resonate with certain subsets of voters. By coming to own particular traits, parties can further enhance the credibility or electability of their candidates (Hayes 2005, 2010).

Within ownership accounts there is considerable ambiguity over whether 'trait ownership' is merely a byproduct of parties owning issues, or the reverse. For example, parties trusted to resolve national defense crises may also be viewed as more likely to demonstrate strong leadership abilities. Yet, the opposite causal direction is also clearly plausible: parties that draw candidates with military backgrounds of leadership may be viewed as better able to handle issues of national defense. Measuring how voters evaluate candidates given variation in traits and issue priorities cannot clarify whether either type of ownership independently influences voter behavior, since biographical and policy signals are likely to be correlated in voters' minds. Ultimately, what is needed is a way to decouple these signals when measuring party associations and candidate evaluations.

Not surprisingly, scholars also disagree about where exactly party stereotypes originate. According to ownership accounts, parties cultivate reputations by repeatedly addressing or resolving problems in particular issue-areas (Egan 2013; Petrocik 1996). Yet, other scholars see party reputations as emerging specifically from legislative enactments in Congress (Butler and Powell 2014; Cox and McCubbins 2005; Woon and Pope 2008), ideological screening in primaries (Snyder and Ting 2002), the party platforms or party coalition maintenance (Karol 2009), or even the biographical traits of candidates (Hayes 2005). Naturally, each source implies very different information is being signaled to and incorporated by voters in the party label.

2.2 Defining *Party Associative Networks*

In this study, we aim to clarify what information voters incorporate into their mental images of the parties, and whether such information systematically varies across the electorate. To this end, we synthesize a number of findings from prior research on party stereotyping into what we call *party associative networks*. By associative networks, we mean the multi-dimensional cluster of political information that tends to cohere at a cognitive level with other related objects in voters' minds. We focus primarily on the *content* of these networks, which includes the issues, positions, biographical attributes, and personality traits that get associated with the party labels, or affiliated ideologies. Most prior research on party stereotypes studies the consequences of activating particular associations in the political world. In contrast, our focus is on conceptualizing broader characteristics of this network as a whole, including how such durable associations form and relate to each other, as well as interact with voter partisanship or political interest.

In broad terms, party associative networks define "what goes with what" in voters' minds when thinking about the parties. This concept is based off of Converse's (1964) work on belief systems, which offers a framework for considering the presence, strength and consistency of associations between "idea elements." Using a variety of survey techniques, Converse (1964) examines the extent to which voters grasp how ideas fit together, and are unconstrained in their own thinking, both at a given moment and longitudinally. Of course his major finding is that voters are largely not able to recall or recognize affiliated *attitudes* between parties, candidates, issues and ideologies. Here we extend what Converse calls "static constraint" into thinking about the cluster of political information voters map together: "In the static case, 'constraint' may be taken to mean the success we would have in predicting, given initial knowledge that an individual holds a specific attitude, that he holds certain further ideas and attitudes" (Converse 1964, p. 207). In linking this constraint to information rather than opinion, we aim to exploit the predictive value particular dimensions have on partisanship as a way to estimate the relative

weight of that association on voters' minds when the party label is primed in political context.

A major concern to Converse (1964), and much of the subsequent research on stereo-typing, is that voters may selectively access certain kinds of information in ways that distort the mental images they possess and utilize. Numerous scholars have found that political interest significantly mediates the amount and type of information voters receive or accept (Converse 1964; Levendusky 2010; Lupia and McCubbins 1998; Zaller 1992). A number of important findings, including Converse's (1964) seminal study, suggest that many voters possess rather shallow or inconsistent policy attitudes, attributable to their limited knowledge, interest or experience in politics. Exposure to political information then may be a predicate to forming stereotypes about the parties, which themselves are necessary to form or change opinions on policies (Carsey and Layman 2006; Levendusky 2010; Zaller 1992). By implication, constraint in voter opinion may significantly depend on the combination of clear policy signals being sent by party elites and sufficient voter interest to receive and incorporate these signals into beliefs about the parties. In the extreme, this raises the possibility that politically uninterested voters may even be unin-formed about the kinds of stereotypical information they would most require to effectively use the party label when voting.

Beyond political engagement, rooting interest stemming from party identification can also significantly mediate the mental images voters form about parties. Similar to polit-ical interest, partisanship may serve as an information screen yielding selectivity in the kinds of sources voters seek out or avoid (Arceneaux and Johnson 2013; Henderson and Theodoridis 2016). More powerfully, however, partisanship can distort the images voters possess about the demographic traits of party voters or candidates (Ahler and Sood 2015; Goggin and Theodoridis 2014), or their policy attitudes and ideological extremity (Ahler 2014; Rahn 1993; Feldman and Conover 1983). Party identification can bias how people use issue primes or other party heuristic information (Arceneaux 2009; Dancey and Shea-

gley 2016; Slothuus and de Vreese 2010). Finally, partisanship can even lead voters to be susceptible to rumors or misinformation about out-party politicians, reflecting a mix of either meaningful beliefs (Einstein and Glick 2013; Hartman and Newmark 2012) or expressive attitudes (Berinsky 2012; Bullock et al. 2015).

Crucially, partisanship can distort not only the images voter possess, but also scholars' abilities to measure voter stereotypes. For example, the standard measure of issue ownership asks voters which party they think would "do a better job handling" a number of specific issues. Responses are usually interpreted as tapping unbiased evaluations of the parties' abilities. However, there is an obvious concern that many partisans will (expressively or genuinely) state they trust their own party to handle *every* issue (Egan 2013; Goggin and Theodoridis 2014). Independent identifiers in contrast, though unbiased, may be less informed about the parties' priorities or performance in office. In the extreme case, partisans' responses could cancel out, so that relatively uninformed independents tell us which issues the parties handle better in office. This concern is not unique to issue ownership, and is likely to emerge in many other measures of party stereotyping. As consequence, many previous findings about party stereotypes could reflect the mental images of the least rather than the most informed voters, or could be distorted by the way motivated partisans respond to survey items.

In the experiments presented below, we aim to add some conceptual and empirical clarity to the examination of party brands. We do so by mapping which traits and issues get linked to the parties, and assessing how these linkages influence voter evaluations of particular candidates who exemplify those features. The conjoint experimental task we develop allows us to consider a large number of features simultaneously. In this study, we examine two particular dimensions in the associative network: issue priorities and candidate traits. This focus is motivated by major theoretical findings and challenges in work on both ownership and party policy brands, including distinguishing the independent influence of traits and issues, as well as whether these carry any ideological or

positional information. In contrast to these literatures on the consequences of stereotyping, however, we aim to investigate the extent to which the central associations advanced in this work are present in voters minds in order to function as hypothesized.

3   Developing a Robust Measure of Cognitive Associations

To provide a robust measure of *party associative networks*, we utilize a novel conjoint experimental design (Hainmueller et al. 2014). In our application, we ask respondents to infer the party and ideology of fictional candidates given a set of issues and candidate attributes randomly presented to them. Notably, the method allows us to measure both the direction and strength of associations across a wide variety of issues and traits, as well as to assess how respondents' characteristics influence these associations. Conjoint studies, long used in product marketing research, have recently been introduced in political science (Hainmueller et al. 2014; Hainmueller and Hopkins 2015). This method is especially well-suited to our analysis, as it allows for manipulation of multiple attributes within a variety of factors. Our study differs in significant ways from previous applications of the conjoint design in that we do not use a paired comparison. Rather, in each task, respondents are asked to assign a single fictional candidate to one of two categories - either the two parties (Democrat or Republican), or the two ideological labels (Liberal or Conservative). Paired comparisons, while common in conjoint studies, are not an essential feature of the method. In fact, the single target actually reduces the number of assumptions necessary for analysis of the data.[1]

In our experimental frame, respondents are shown a set of hypothetical candidate

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[1]Inferences from conjoint data require a few important assumptions. Most notably, we
assume stability of evaluations, that there are no carry-over effects, and that there are no
profile-order effects (Hainmueller et al. 2014). These assumptions are necessary because
we gain statistical power by having each respondent evaluate four different hypothetical
candidates. In this case, we believe a paired comparison would have proven unwieldy for

characteristics, presented in a table format that includes the randomly manipulated candidate attributes drawn from a number of trait and issue dimensions. Figure 1 shows both the introductory page seen by respondents prior to the task and a sample candidate categorization page. In prefacing the experiment, we depict the candidate information as coming from a questionnaire to increase the verisimilitude of the task. As seen in Figure 1, the left side of the table shown to respondents indicates the category of attribute information requested in our fictitious questionnaire (e.g., Gender, 1st Issue Priority), while the right side presents the fictional candidates' response to that particular item. The full list of categories and levels in the experiment is shown in Table 1.[2] Each candidate had one of the levels for each factor randomly inserted into each category with equal probability.[3] The order of the factors was randomly assigned (with the three issue priorities always listed together and in numerical order) at the level of the respondent. The wording of the issue priority levels was designed to avoid signaling an issue position or policy direction, while still specifying a priority. For example, "Tax reform" was used as opposed to language referencing either tax cuts or increases.

We examine results from two separate conjoint experiments. The first of these was fielded in two pre-election survey modules (Henderson 2015*b*; Theodoridis 2015) of the

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respondents, especially given the binary nature of our primary outcome measure. This is partly because, unlike the paired choices in other conjoint tasks (e.g. selecting which immigrant should be admitted or which candidate deserves your vote), there is no real-world analogue for guessing which candidate is *more* likely a Democrat or Republican.

[2]The factors were selected to provide a reasonably detailed candidate description and based upon characteristics often linked to political outcomes. A notable omission is race. We elected to remove race for fear that the anticipated massive Democratic effect for black candidates would mask associations on other dimensions.

[3]Each candidate had a 1st Issue Priority, a 2nd Issue Priority, and a 3rd Issue Priority, with these issues sampled without replacement from the list in Table 1.

2014 Cooperative Congressional Election Study (CCES) (Ansolabehere 2015).[4] In this experiment, we ask respondents to guess whether each presented candidate was a Democrat or Republican, rate how sure they were about their guess, and evaluate the candidate from "very unfavorable" to "very favorable" on a 11-point scale. A total of 2000 respondents completed this task four times during the survey, resulting in 8000 observations.[5] The second conjoint experiment, presented in the post-election portion of Henderson (2015b), was identical in design, except respondents were asked to guess the candidate's ideology (liberal or conservative) rather than the candidate's party. This conjoint experiment was completed by a total of 1000 respondents, each completing the task four times, resulting in 4000 observations.[6] For all analyses, standard errors are clustered at the level of the respondent.

In asking respondents to guess party or ideology given various features, we provide some of the first empirical evidence (rather than making the assumption) that certain issue priorities and candidates traits are in fact associated with different parties. Further, the quiz-like feature of guessing minimizes the possibility that partisan bias is producing the recovered associations between features and parties (Henderson 2015a). In this vein,

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[4]The CCES is fielded online by YouGov in the weeks just prior to and just after November 2014's Election Day. The analysis in this paper does not use sampling weights. This is done to avoid the risk of post-hoc weights exacerbating balance issues across experimental conditions or impacting estimates within cells, something of particular concern with a conjoint design.

[5]Within this sample, 48.7% of respondents were Democratic or Democratic leaners, 13.4% were pure independents, and 33.0% were Republican or Republican leaners, with 5.0% listing "other" or declining to answer.

[6]Within this sample, 46.9% of respondents were Democratic or Democratic leaners, 15.3% were pure independents, and 33.0% were Republican or Republican leaners, with 4.8% listing "other" or declining to answer.

YouGov

On the next few screens, you will be shown information about randomly selected candidates for political office.

This information is based upon a questionnaire filled out by each candidate. The responses are designed to provide voters with information about the candidate's policy priorities and their personal and professional background. They were asked for their top 3 issue priorities (in order) and about their background.

We want to see how well people do at guessing the political parties of the candidates with just these pieces of information. For each profile, we will ask you a few short questions. Please read the profiles carefully.

[<] [>]

(a) Intro

YouGov

Candidate 1 of 4

Candidate Questionnaire Responses	
Occupation	Political Staffer
Military Experience	National Guard
1st Issue Priority	Promoting strong moral values
2nd Issue Priority	Strengthening the economy
3rd Issue Priority	Preventing future terrorist attacks
Religion	Catholic
Gender	Female
Family	Married with three daughters

If you had to guess, do you think this candidate is a Democrat or Republican?

○ Democrat

○ Republican

How sure are you about the candidate's party?

○ Very sure

○ Somewhat sure

○ Somewhat unsure

○ Very unsure

How favorably or unfavorably do you feel toward this candidate?

Very Unfavorable [|||||||||||||||||||||||||||||||||||||||] Very Favorable

☐ Not sure

[<] [>]

(b) Conjoint Task

Figure 1: **Conjoint Task:** This is how the conjoint task was presented to respondents.

Table 1: **Experimentally Manipulated Factors and Levels**

Factor	Levels
Gender	Male Female
Family	Unmarried Married Married with one son Married with one daughter Married with one daughter and one son Married with three sons Married with three daughters
Religion	Catholic Jewish Mainline Protestant Evangelical Protestant None Listed
Military	None National Guard US Army Major in US Army
Occupation	Small Business Owner Attorney Doctor CEO Farmer Teacher Factory Foreman Construction Contractor Political Staffer Retail Manager
1st, 2nd and 3rd Issue Priorities (without replacement)	Strengthening national defense Preventing future terrorist attacks Promoting strong moral values Addressing the immigration problem Tax reform Fighting against illegal drugs Reducing crime Promoting trade with other nations Reducing the budget deficit Creating new jobs Strengthening the economy Promoting energy independence Improving education Strengthening Social Security Preserving Medicare Protecting the environment Improving health care Assistance to the poor and needy

the subsequent evaluations frame can actually show how serious rooting interest may be in leading voters to make different evaluations about candidates in observing different issue priorities and traits. Finally, in quizzing about ideological as well as party labels, we can investigate more general theoretical views of party reputations, and in particular, whether voters do perceive certain issues and traits as informative about the policy orientations of candidates.

4   Mapping Partisan and Ideological Associations

4.1   Associations with Party

The main results of our first conjoint task asking respondents to guess the party of a hypothetical candidate are shown in Figure 2. The Figure displays the marginal effect each attribute had on the probability a respondent classified the candidate as a Republican, relative to the omitted level of each experimental factor.[7] Within each factor, the omitted variable is displayed first, with no 95% confidence interval. It is important to note that estimated effects are relative to the omitted categories. If we omit a different level for each category, while the direction and appearance of the plot may change, the relative distance between levels will not change.

Several important patterns among the personal attributes emerge in Figure 2. First, female candidates were guessed to be more likely Democratic candidates. Second, familial status - one's marital status and children - appears to have little effect on the guessed party, even as the gender and quantity of children varies significantly. Third, both Mainline and Evangelical Protestants were guessed to be more likely Republican, with Evangelical even significantly more Republican than Mainline. Fourth, while mili-

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[7]Because the classification task is binary and no "don't know" option was given, a negative effect signals a respondent was more likely to classify the candidate as a Democrat in the presence of that attribute.
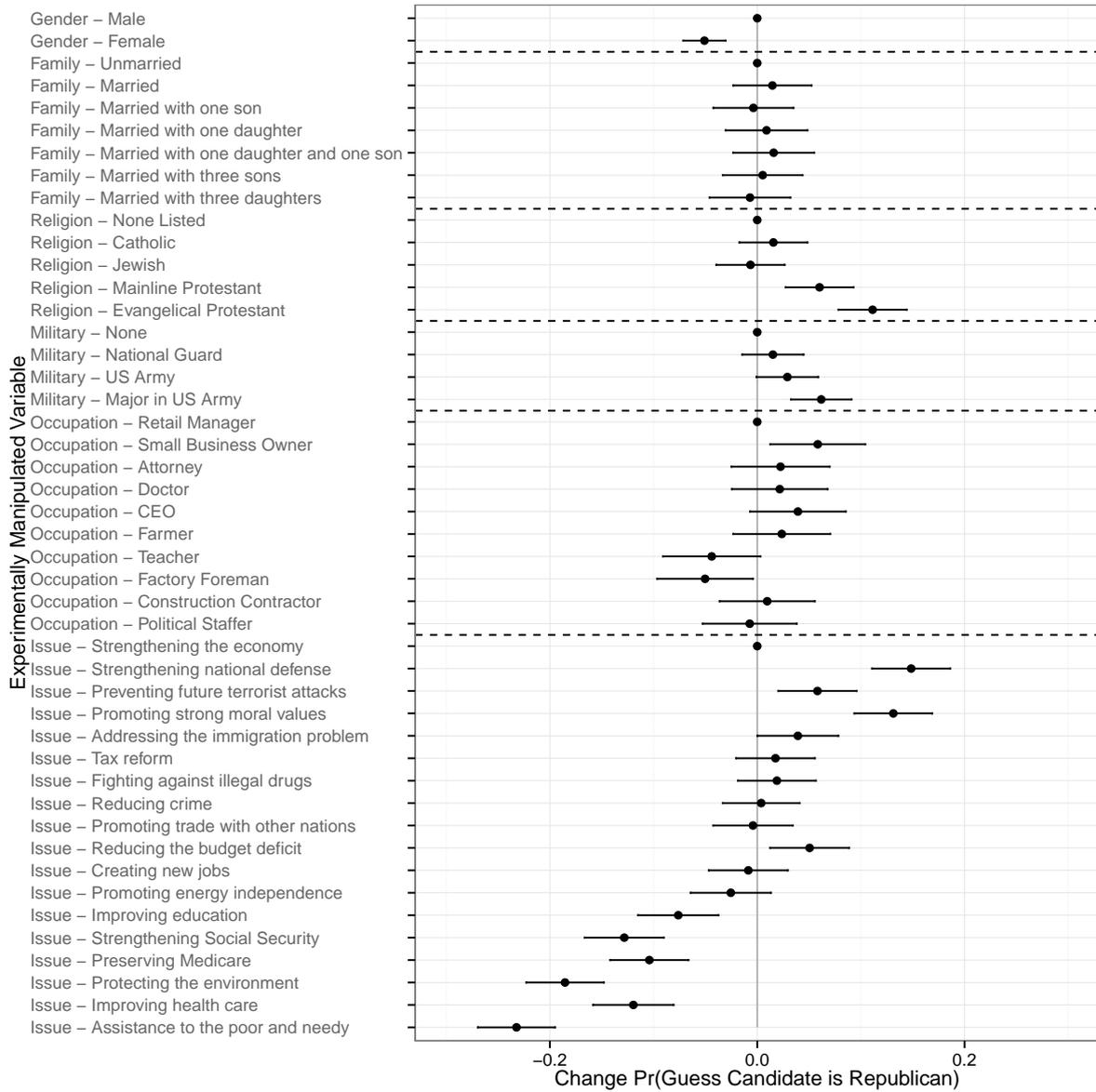
Figure 2: **Guessing Candidate's Party**: Estimates are OLS regressing party guesses on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are the excluded levels of each experimental factor. Issues are coded as present if they were in either the first, second, or third issue priority for the candidate. All variables are coded 0-1, with the dependent variable coded as 1=Republican, 0=Democrat.

tary service trends toward guessing Republican in all conditions, it is the strongest signal of being a Republican when paired with officer status. Finally, several important patterns regarding the occupational background of the candidate emerge. Relatively high-status backgrounds - attorney, CEO, doctor - have little effect on the candidate's guessed party. However, 'small business owner' leads to more Republican guesses, while 'teacher' and 'factory foreman' lead to more Democratic guesses. Several other occupations - farmer, construction contractor, and political staffer - all have negligible effects as well.

Figure 2 also provides important evidence regarding the brand content of issues for both parties. Candidates presented to respondents noted three issue priorities - the figure displays the effect of having an issue listed in any of the three positions.[8] First, when the candidate highlighted national defense, preventing terrorist attacks, promoting moral values, and reducing the budget deficit, respondents were all more likely to guess the candidate was Republican. Second, when the candidate highlighted education, Social Security, Medicare, the environment, health care, and assistance to the poor and needy, respondents were more likely to guess the candidate was Democratic. Third, immigration, tax reform, drugs, crime, trade, creating jobs, and energy independence were all *not* significant signals of partisanship, when compared to the baseline (strengthening the economy). Some of these are surprising given expectations regarding "owned" issues.

The above results largely comport with existing theoretical accounts of party stereo-typing, especially for issue priorities, but also for some personal attributes. However, it is unclear whether these cognitive party associations are being inflated or masked by respondents' partisan identities. For this reason, we break the effects apart by respondent

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[8]Separating the issues by 1st priority, 2nd priority, and 3rd priority leads to substantially the same conclusions. Issues were much stronger signals (leading to more significant results and smaller confidence intervals) when they were higher priority, but the direction and relative magnitude of the effects were very similar across the three positions. For clarity of presentation, we collapse across positions here.

PID in Figure 3(a).[9]

As shown in Figure 3(a), Republicans and Democrats infer similar partisan signals coming from many of the candidate trait dimensions. Perhaps the most notable of these is candidate gender, where female politicians are much more likely to be inferred as Democrats by both Democratic and Republican identifiers. We find similar agreement for military service and occupation attributes.[10] In contrast, we find that partisans strongly disagree in their inferences given variation in family status. This is likely because each family category is viewed positively in voters' minds relative to being unmarried, so that partisans are attributing these positively valenced characteristics more to in-party, rather than out-party candidates. Interestingly, the reverse is true for the religious cues, including Catholic, Jewish, and Evangelical Protestant. For all these, respondents of one party are more likely to guess the cue belongs to a partisan of the other party. However, these effects do not always overwhelm the main party signal - both Republicans and Democrats rate Evangelical Protestants as more likely to be Republican.

With respect to issues, there is generally strong agreement about which issue priorities Democratic and Republican identifiers associate with each party. Moreover, similar to the findings in Figure 2, these associations largely resemble core predictions emerging from issue ownership accounts. Assistance to the poor, improving health care or education,

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[9]We exclude independent respondents for clarity in presentation. In virtually all cases, the estimate for independents lies between that for Democrats and Republicans, though with relatively wide confidence intervals given their smaller proportion of the survey sample.

[10]Within the occupation factor, we see some positive and negative effects of partisan identification. For instance, small business owner appears to have a positive valence and is claimed by partisans from both sides. However, occupations such as attorney and political staffer have a negative valence and are pushed toward the out-party by partisans.

and strengthening or preserving Medicare and Social Security are all expected to be prioritized by Democrats, while strengthening national defense, promoting moral values and preventing terrorist attacks are (mostly) expected to be promoted by Republican politicians. Interestingly, partisan identifiers also largely agree about which issues are 'contested', that is roughly equally likely (off the economy baseline) to be promoted by Republican and Democratic office-seekers, such as tax reform, reducing crime, and promoting trade, for example. However, there are a few issues where partisans, though agreeing on party direction, disagree on the magnitude of the associations they infer. Relative to the beliefs of Democratic identifiers, Republicans appear to believe that Social Security and Medicare are more likely to be prioritized by some Republicans, though both are firmly on the Democratic side of the spectrum. Finally, with respect to the environment, we see a negatively valenced issue priority, with Republicans taking it as a very strong cue of the candidate being Democratic, while Democratic respondents viewing it as a much weaker cue of a candidate being Democratic.

All these results highlight several important findings - while there is substantial agreement in many domains on the association of certain personal attributes and issue priorities with party, there is also significant heterogeneity by the partisanship of respondents on many attributes. That is, even when tasked with a relatively objective guessing task, respondent partisanship leads them to be more likely to assign positively valenced attributes as copartisan, while negatively valenced attributes are more likely to be assigned to the other party. However, despite these significant effects of partisan boosting, many of these disagreements among partisan respondents still do not lead to the opposite inference of candidate party.

Finally, we can examine the patterns of guessing by the political knowledge of respondents, as shown in Figure 3(b). As it is quite clear for many of the biographical attributes and issues, there is very little disagreement between those with high political knowledge and low political knowledge. Where there is statistically significant disagreement, there is

a larger effect for those with high political knowledge. That is, those with more political knowledge are likely to see the association, especially over issue priorities.

4.2 Impact on Candidate Evaluations

Immediately after guessing the partisanship of the presented candidate, respondents were asked to evaluate how they felt about the candidate – from "very unfavorable" to "very favorable". This item helps us to evaluate the positive or negative valence of each piece of information within each factor, particularly how it may be differential among partisan subgroups of respondents. Figure 4(a) presents the marginal effect of each information item on the evaluation of the candidate, scaled from 0 to 1. Therefore, an effect of −0.05 means a 5% decrease in the evaluation of the candidate, relative to the omitted level of each factor.

The results in Figure 4(a) reveal several striking patterns. First, with a few prominent exceptions, many of the pieces of information have relatively little effect on the overall evaluation of the candidate. Notably, gender appears to have little effect on overall evaluation, and with the exception of Evangelical Protestant leading to a more negative evaluation, few religious categories do either. Familial status, while not significant, appears to indicate that married candidates are weakly preferred to unmarried ones. With respect to military service, little overall effect on evaluations emerges, although it appears those with military background are viewed weakly more positively than those with none. Occupational status is relatively mixed, with many of the occupations being evaluated as equivalent to the omitted category, retail manager. Small business owner and factory foreman, however, are both evaluated significantly more positively than many of the other occupations. With respect to issue priorities, it appears that many of the issues make little difference in the evaluation of the candidate.[11] Notably, protecting Social Security

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[11]The seemingly overall negative trend in evaluations among many of the issues is simply a result of the omitted issue priority being the near universal "strengthening the
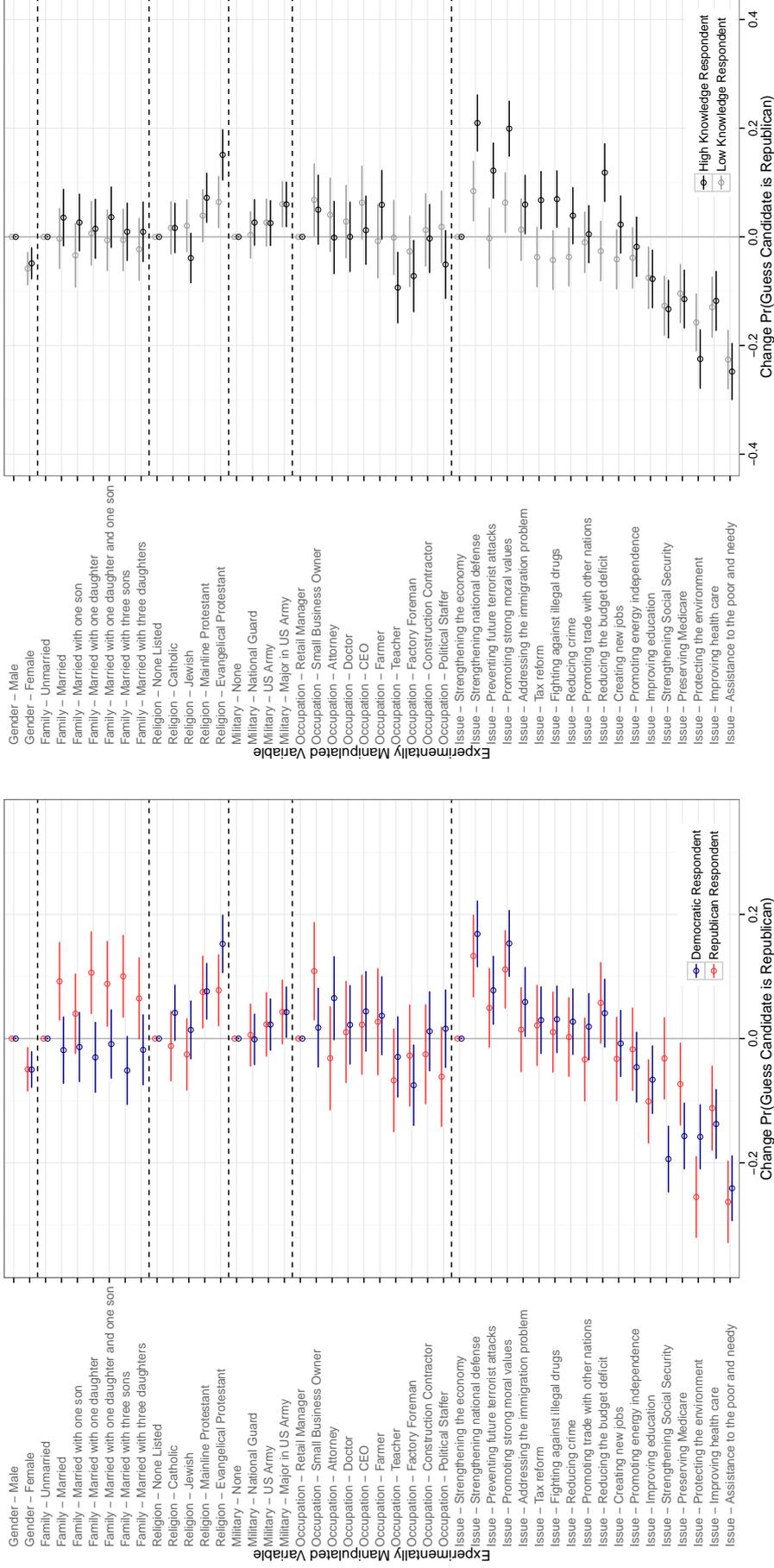
(a) Guessing Party by Party ID

(b) Guessing Party by Political Knowledge

Figure 3: **Guessing Candidate's Party by Respondent Party ID or Political Knowledge**: Estimates are OLS regressing party guesses on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are the excluded levels of each experimental factor. Issues are coded as present if they were in either the first, second, or third issue priority for the candidate. All variables coded 0-1, with the dependent variable coded as 1=Republican, 0=Democrat. Partisans include independent leaners. Pure independents are excluded. Political Knowledge was measured with a 6-item measure on the CCES Common Content, then median split.

and preserving Medicare result in significantly higher evaluations of the candidate when listed as priorities than many other issues.

Though interesting, these findings may disguise considerable heterogeneity by the partisanship of respondents. As noted in the previous section, respondents of both parties have distinctive views about what attributes are positive or negative in candidates. For this reason, we show the effects of the different pieces of information, broken down by respondent partisan identification, in Figure 4(b). As with the results from the previous section, the most interesting findings here emerge when the evaluations by Democratic and Republican respondents diverge. With respect to personal attributes, a candidate being female results in a positive evaluation among Democratic respondents, while such candidates are viewed quite negatively by Republican respondents. With respect to many of the levels of familial status and religion, there appear to be few differences. Notably, however, a candidate being an Evangelical Protestant yields a negative effect among Democratic respondents and a neutral (but not positive) effect among Republican respondents.

On military service, an interesting pattern emerges. Among Democratic respondents, military service results in a significantly less positive evaluation than among Republican respondents. Although many of these estimates are not significantly different from the no military background condition, they are significantly different from each other, with Democratic respondents viewing it as a weakly negative cue, and Republican respondents viewing it as a weakly positive cue. There is little divergence among occupations, with the exception of small business owner, which results in significantly higher evaluations among Republican respondents than among Democratic respondents.

Perhaps most striking is the large gaps that emerge in the candidate evaluations by partisan respondents across different issue priorities. Of particular note, candidates that prioritize typically Republican-owned issues (e.g., national defense, preventing terrorist

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economy", as that is viewed as more positive than the bulk of issue priorities.

(a) Evaluation Overall
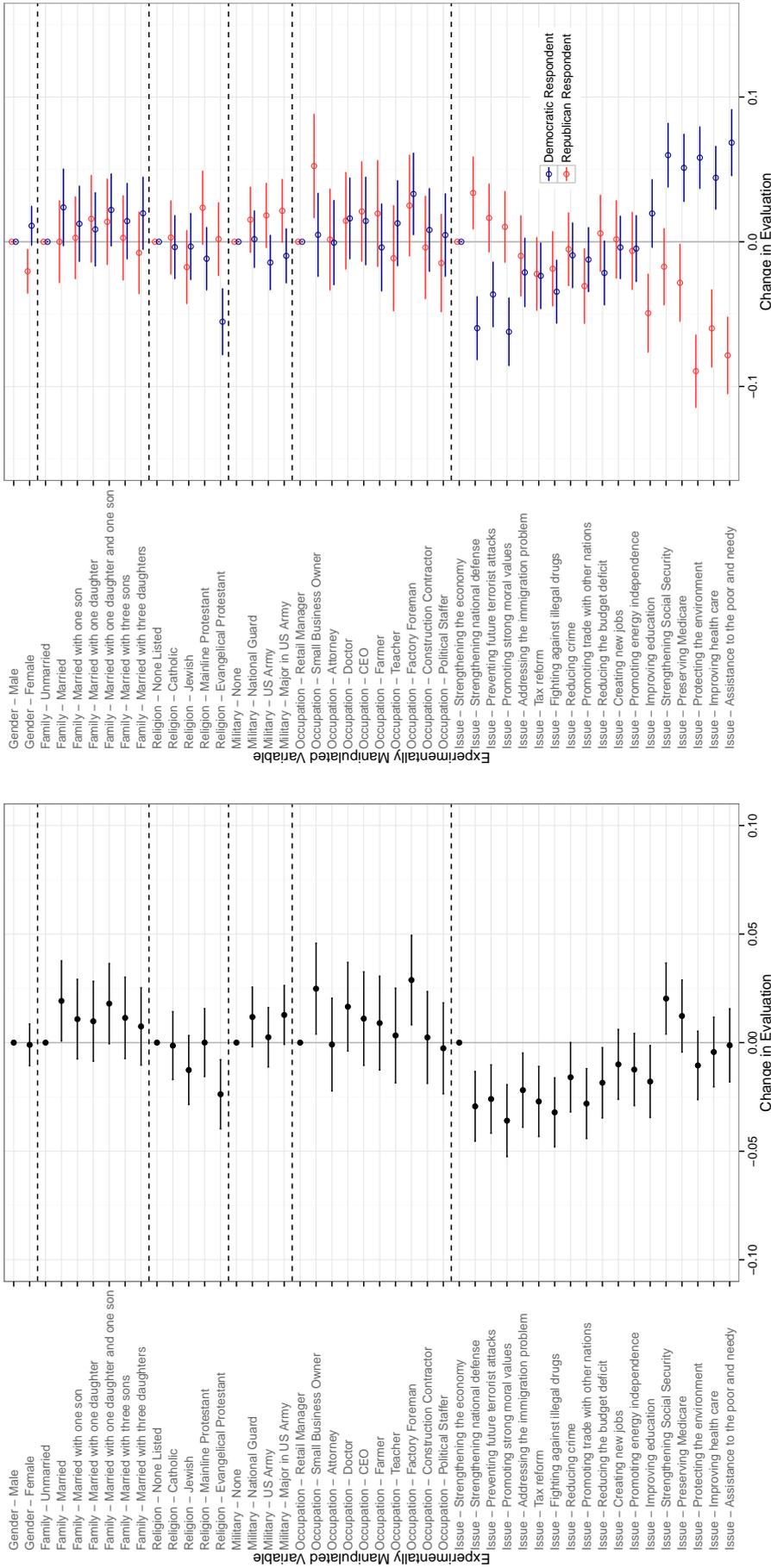
(b) Evaluation by Party ID

Figure 4: **Candidate Evaluations Overall and by Respondent Party ID**: Estimates are OLS regressing candidate evaluations on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are the excluded levels of each experimental factor. Issues are coded as present if they were in either the first, second, or third issue priority for the candidate. All variables coded 0-1, with the dependent variable originally presented to respondents as a 0-10 slider, with 0 indicating "very unfavorable" and 10 indicating "very favorable". Partisans include independent leaners. Pure independents are excluded.

attacks, promoting strong moral values), are evaluated very negatively by Democratic respondents, but very positively by Republicans. And the mirror-image of this emerges for candidates emphasizing Democratic-owned issues (e.g. environment, health care, assistance to the poor and needy), with Democratic respondents boosting their evaluations of the candidate and Republicans diminishing theirs. This pattern, while not surprising, is consistent with respondents reading the issue priorities as strong signals of a candidate's partisanship, leading them to adjust their evaluations in line with the assumed party.[12]

4.3   Associations with Ideology

In a separate conjoint experiment on the post-election module of Henderson (2015b), we asked respondents to guess the ideology of the candidate - a binary choice between "liberal" or "conservative" - rather than the party of the candidate. From this, we can compare the relative strength of association between the personal attributes and issue priorities with party and ideology. The main results of respondents' guessing, paralleling the results shown in Figure 2, are shown in Figure 5.[13]

One notable finding is the striking similarity between the results of Figure 2 and Figure 5, indicating that respondents see many of the cues that signal partisanship as similar

[12]Of course, it is not completely possible to separate this from the effect of the issue priority itself, wherein respondents simply view the issue priority as a positive or negative priority to hold, regardless of partisanship. To shed light on this question, one can plot the effect on evaluations among partisans, conditional upon the party they guessed for the candidate. This plot, however, is extraordinarily cumbersome to interpret and yields extremely large confidence intervals, given the small number of respondents in each cell, conditional upon guessing.

[13]The confidence intervals on Figure 5 and Figure 6(a) are wider than those in the previous sections, as the sample size for this conjoint experiment is half the size of the party conjoint previously presented.
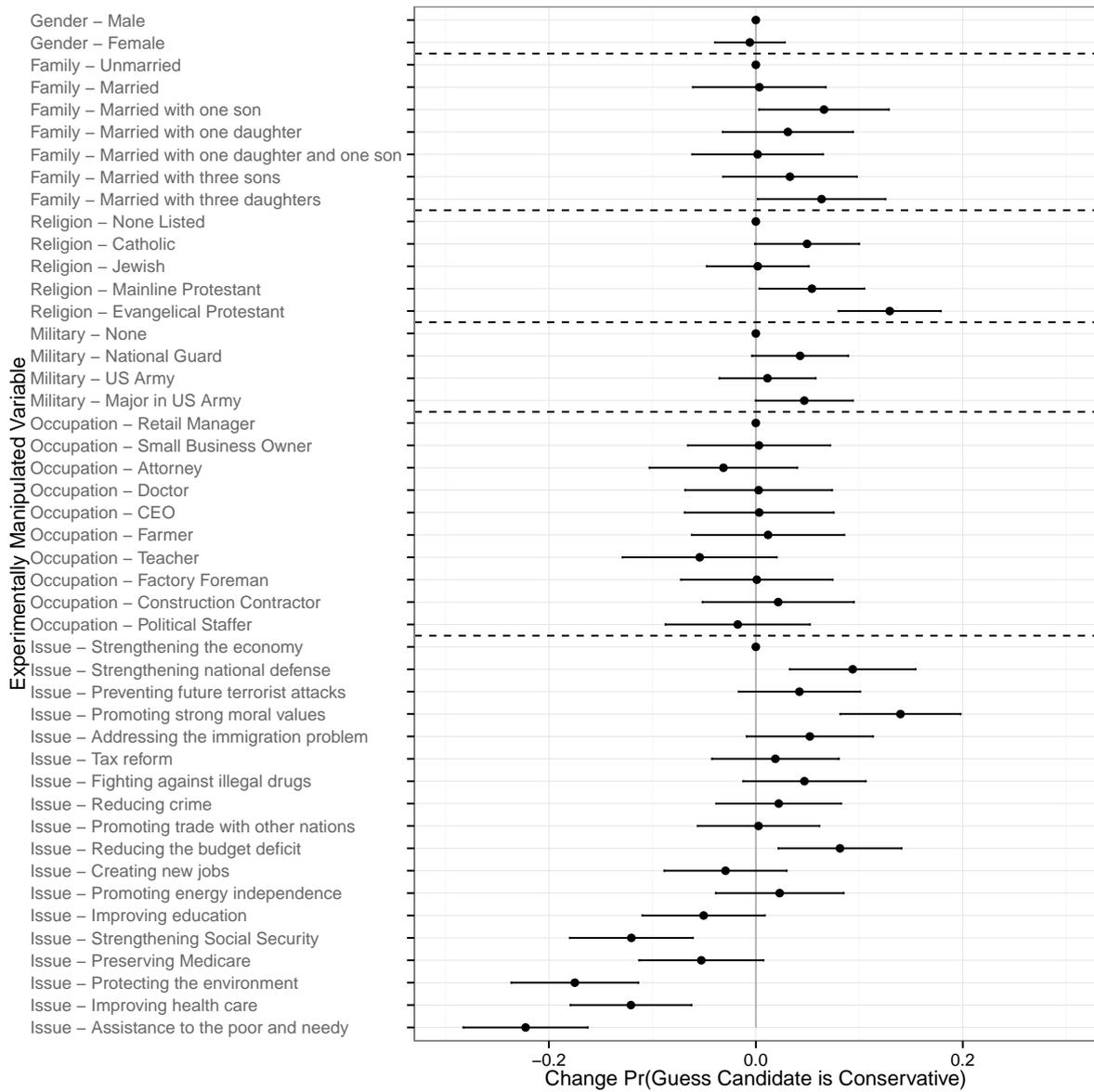
Figure 5: **Guessing Candidate's Ideology**: Estimates are OLS regressing ideology guesses on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are the excluded levels of each experimental factor. Issues are coded as present if they were in either the first, second, or third issue priority for the candidate. All variables coded 0-1, with the dependent variable coded as 1=Conservative, 0=Liberal.

cues of ideology. This strongly indicates that ideology and party are relatively closely linked in respondents' minds. However, the results importantly diverge in several places, and in particular for certain candidate attributes. While a candidate being female is taken as a signal of Democratic party membership, it does not result in respondents guessing the candidate is liberal. Among religious and military attributes, similar patterns emerge among ideology and party guessing. However, for familial status, it appears that having children is viewed as a stronger signal of conservative ideology than as a signal of a candidate being of either party. Finally, occupation traits are much weaker signals of ideology than they are of candidate partisanship.

In contrast, there is virtually no deviation in our results when respondents are asked to guess ideology instead of party given candidates' issue priorities. In other words, the ideological and partisan information being signaled to voters *simply by prioritizing particular issues* is strongly correlated. Thus, the issue priorities that Republicans 'own' are also significantly associated with being conservative, while the issues owned by Democrats are significantly linked with being liberal. This result significantly diverges from prior findings on constraint in mass opinion, suggesting that contemporary voters grasp much more of the ideological conflict in American politics than the voters analyzed by Converse (1964) in the middle of the last century. The finding also suggests that candidates may be able to influence the ideological or policy images voters form about them simply through valence-type appeals that prioritize party-owned issues (Henderson 2015*a*).

In Figure 6(b), we present the above guessing ideology results broken down by respondent political knowledge, analogous to Figure 3(b) for guessing candidates' party. As can be seen, many of these associations become stronger for those with high compared to low political knowledge. Quite interestingly, higher knowledge respondents see all occupations as more liberal than lower knowledge respondents, perhaps reflecting a socioeconomic bias in projection. With respect to issues, we again see that in nearly every case, higher knowledge respondents are more likely to register an association between

issue priorities and ideological labels than those with low knowledge.

As with associations with the party label, partisan identifiers may also infer different ideological signals from the traits and issue priorities of candidates. For this reason, we present ideology guessing results broken down by respondent PID in Figure 6(a). Compared to our previous findings about partisanship in party guessing, however, we find that PID is a much weaker mediator of voter inferences about candidate ideology, yielding few differences across partisan type.[14] Further, with the exception of Evangelical Protestant religion and Democratic-owned issues, in addition to finding little gap between the inferences of Democratic and Republican identifiers, we also see virtually no trends in how either partisan group associates attributes with the ideological labels. While ideology and party are clearly intertwined in voters' minds, this lack of partisan bias in ideological guessing may reflect a broader finding that ideological labels do not generate the same amount of rooting interest as do partisan ones. Though this could also emerge due to weaker statistical power from a smaller sample.

5   What *Really* Goes with Red and Blue?

In the above analysis, we demonstrate the existence and relative magnitude of many personal and policy associations with party labels. Now we compare these linkages to a much stronger benchmark – actual associations exhibited by real candidates. It is a somewhat difficult empirical question to examine whether the associations emerging in our experiments resemble real candidate profiles. This is the case since some of the

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[14]The figure looks nearly identical stratifying by self-reported ideology rather than partisanship. However, due to the larger number of respondents that choose "moderate" versus the number that view themselves as "pure independents", the confidence intervals are substantially wider for the "liberal" and "conservative" respondent categories. We omit independents merely for the clarity of the figure, as previously noted.

(a) Guessing Ideology by Party ID
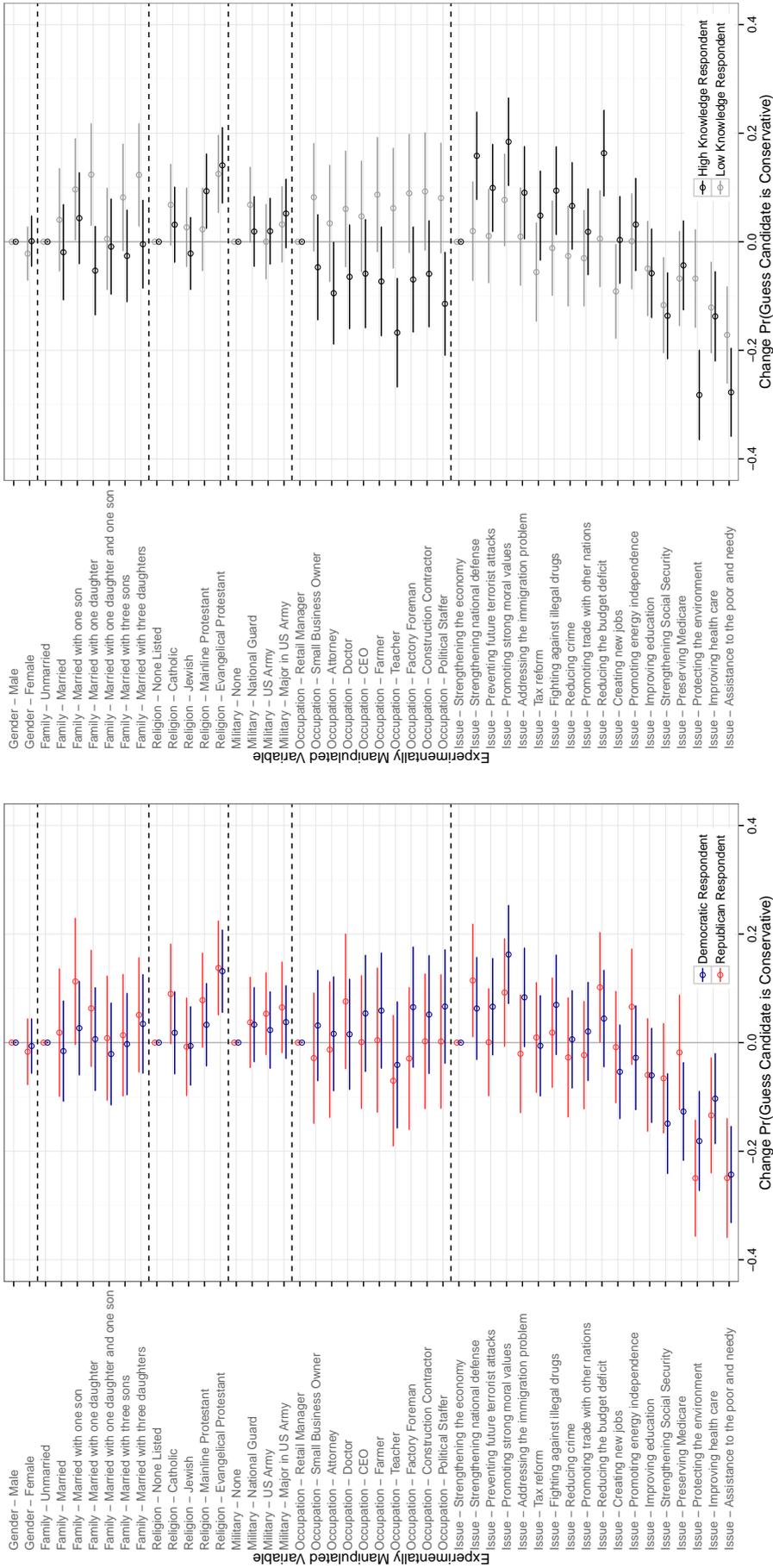
(b) Guessing Ideology by Political Knowledge

Figure 6: **Guessing Candidate's Ideology by Respondent Party ID or Political Knowledge**: Estimates are OLS regressing ideology guesses on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are the excluded levels of each experimental factor. Issues are coded as present if they were in either the first, second, or third issue priority for the candidate. All variables coded 0–1, with the dependent variable coded as 1=Conservative, 0=Liberal. Partisans include independent leaners. Pure independents are excluded. Political Knowledge was measured with a 6-item measure on the CCES Common Content, then split at the median.

attributes we study, and especially issue priorities, do not arise in elections in precisely the same fashion as they appear in our experiments. For example, candidates in their campaign advertisements may use different language than that depicted in our survey, including even particular policy proposals, when talking about their issue priorities. That said, our aim in these experiments is to present issue information to respondents in the most straightforward way possible as they might actually encounter it in a real campaign – through a candidate questionnaire. Further, to heighten the realism of the task, the issue priorities we included were drawn largely from the set of issues actually emphasized in real campaign ads in recent elections. We expect that biographical traits will have much less slippage across experimental and electoral contexts.

In interpreting these results, if voters are learning about partisan associations through information arising in electoral competition, we expect there to be some connection between the *direction* of party guesses and party predominance over particular attributes. Yet, as a general point, it is not clear that respondent guesses should necessarily correspond in *magnitude* to the actual distributions of attributes observed amongst candidates. There could be critical densities at which virtually all voters are capable of seeing an association, so that respondents overestimate the accordance between parties and attributes relative to reality (e.g., Ahler and Sood 2015). If real candidates from one party possessed a given trait 75% of the time, for instance, it could be reasonable for voters to always guess that party when presented with that trait.[15] Consequently, we look for the concordance between direction (and not magnitude) of party guesses and candidate features.

With respect to candidate attributes, Democratic candidates for Congress are indeed more likely to be female than are Republicans. Of the 2267 total unique Demo-

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[15]Given this logic, we would expect that our coefficients weakly correspond in magnitude with actual party distributions, driven mostly by attributes shared more evenly across parties.

cratic and Republican general election Congressional candidates from 2008-2014, 24.7% of Democratic candidates were female, while only 12.7% of Republican candidates were women.[16] Respondents clearly picked up on this association, with both Republican and Democratic respondents more likely to guess the candidate was Democratic when the candidate as female. However, respondents missed some real associations: 77.3% of Republican candidates reported being married, while 72.4% of Democrats reported being married. Additionally, Republican candidates reported having an average of 2.77 children, while Democratic candidates reported an average of 2.35 children.[17] Yet, in our survey sample, respondents did not significantly associate marriage or children with a particular political party. Respondents picked up on real associations between candidate religion and party: Republicans are indeed more likely to be Evangelical, with 10.7% of Republican candidates versus 6.7% of Democrats. Republicans are also more likely to be Protestant, with 33.8% of Republicans versus 26.7% of Democrats. Similarly, with military service, 42.4% of Democratic candidates reported no military service background, while only 38.3% of Republican candidates reported no military service. All these match the cognitive associations that respondents of both parties possessed.

Occupation is a harder personal attribute to measure and categorize. Yet, there is strong evidence respondents largely picked up on real associations by occupational categories.[18] Among the candidates in these data, 27.8% of Republicans described themselves

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[16]There were 1081 unique Republican candidates and 1186 unique Democratic candidates. See Goggin (2015) for more details about these data, which are compiled from Project VoteSmart candidate records. Candidates whose information is missing are included in all percentages reported here. Because missing data could be due to strategic omission on a candidate's part, it is an informative category.

[17]These differences are statistically significant at the $p < .001$ level.

[18]Candidates reported 3.7 occupations on average to Project VoteSmart, and these analyses report the percentage of candidates listing an occupation in that category, even if

as business owners, while only 14.9% of Democrats did so. Also, 19.6% of Democratic candidates reported being attorneys, while only 13.0% of Republican candidates did so, and 17.0% of Democratic candidates listed a service-based occupation (e.g. teacher), while only 7.6% of Republican candidates did so. While not all occupations exactly matched their associations in the real world, survey respondents mainly failed to detect actual associations when there were some, rather than falsely attributing differences when, in fact, the candidates were equally likely to possess a personal attribute.

With respect to issue priorities, the challenge of determining a 'real' benchmark is greater. As discussed above, there is no scholarly consensus on where voters learn about the parties' issue priorities. Egan (2013) and Woon and Pope (2008), for example, argue that the party issue reputations mostly emerge in Congress, while others like Holian (2004) and Snyder and Ting (2002) suggest these emerge in primary or general election competition. If indeed issue associations originate in Congress, we could expect these to be fairly consistent in voters' minds given the established cleavages of legislative conflict as emphasized, for example, by issue ownership theories. On the other hand, if voters are basing their stereotypes from the issues prioritized in campaign communication, voter party associations could be less consistent or reflect particular dynamics present in elections.

Examining candidate's issue priorities in their campaign ads can help clarify if voters are updating their party beliefs given information aired in elections. We present heatmaps in Figure 7 that show correlations among the actual issues discussed in 2008 by candidates for Congress in their campaign advertising. Issues are arrayed from most-to-least Democratic as determined in our party guessing experiments. Darker colored cells show a greater co-occurence between each pair of issues listed across rows and columns. Figure 7(b) shows the pattern we should expect to see if candidates from each party focused exclusively on different sets of issues (i.e., those 'owned' by their party), and if this focus

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it was not their most recent occupation.

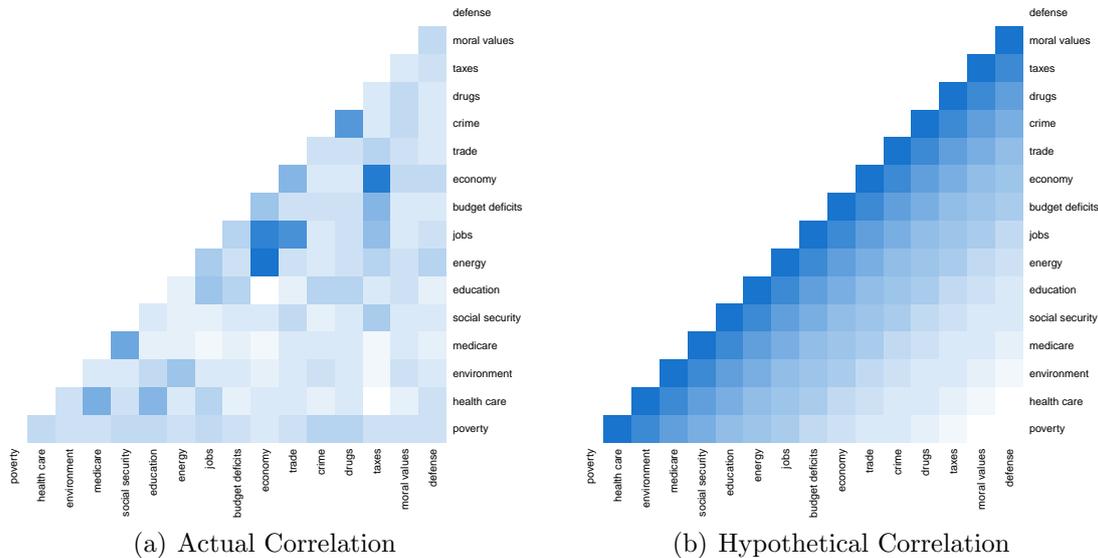(a) Actual Correlation   (b) Hypothetical Correlation

Figure 7: **Issue Co-occurrence Heatmaps**: These heatmaps illustrate the correlation, or lack thereof, in issues discussed in campaign ads by Republican and Democratic candidates for Congress in 2008. Darker blue signifies cells with greater correlation. Issues are ordered from most-Democratic to most-Republican associated in our party-guessing experiments.

reflected the issue associations in voters' minds. Figure 7(a) shows the actual relationship between issues. Reflecting much of the prior evidence about 'issue trespassing' (e.g., Sides 2006), there is no systematic relationship between issues actually prioritized by party candidates, and the issues voters expect them to emphasize. Thus, voters would find limited guidance in turning to congressional campaigning to learn about the issue priorities the parties are likely to pursue in the next Congress. So, while the voter issue associations we find with parties and ideologies largely match both conventional wisdom and the expectations laid out in the relevant literatures (especially work on ownership), they do not appear to emerge from the overall content of campaign discourse.

6   Discussion

We develop a novel experimental design to measure what we call the *party associative network* – the issues, positions, traits and other qualities that voters associate with

the parties. An important feature of these associative networks is that many different elements within them can be brought to mind simply by priming the party label. This priming process has been the focus of much prior research, especially on how voters use the label as a heuristic to choose between candidates given limited information about their individual positions or abilities. A major concern in this work, however, is that voter partisanship and political knowledge can distort the kinds of information voters associate with the party labels, as well as how they use party heuristics in elections. Consequently, there is considerable disagreement about how these associative networks take shape, and thus, what heuristic information is actually available to voters through the party label.

A principle aim in this study is to develop a new experimental approach to reduce partisan bias when measuring these associative networks. In our design, we ask respondents to *guess* the party (and ideological) label of candidates after learning about their issue priorities and traits. This approach can substantially reduce partisan bias in measuring associations, since it leads respondents to seek out "correct," rather than party-consistent or boosting answers, under conditions of uncertainty. Respondents, including party identifiers, are fundamentally unsure of whether they are being asked to evaluate and assess Democrats or Republicans. Thus, respondents may be more likely to mute their partisanship in our task, lest it be misdirected at in-party politicians. Further, by using a quiz-like item that taps voter inferences, we generate indirect (rather than direct) measures of party associations. This may further dampen partisanship by adding cognitive 'distance' between evaluating unlabeled candidates, and making factual judgments about them. Finally, our use of a wide variety of attributes shown about the candidates, may also minimize the possibility that the valence of any single dimension will activate partisan bias. While our experimental design cannot completely eliminate partisan boosting by construction, we present evidence that it does in many cases (e.g. inferences about issue associations). Similar evidence that quiz-like inferences can reduce or eliminate

partisan bias is also reported in Henderson (2015a), where Democratic and Republican identifiers provide virtually identical responses when guessing the party of Democratic- and Republican-sponsored congressional advertisements.

In implementing this guessing experimental design, we find that many, though not all, party associations conform to prior expectations. While most issue associations confirm predictions from ownership theories, some issues believed to be owned by Republicans do not appear to increase the rate at which respondents guess that party. Importantly, this 'misclassification' is recovered even when we focus exclusively on guesses made by Republican or Democratic identifiers. We do find considerable consistency in issue-based inferences across PID overall, indicating our design successfully minimized much of the effects of partisan boosting. However, we also observe important areas of disagreement across the aisle, particularly in issues like preserving Social Security or Medicare, and in family background traits. One conclusion we draw from this is that our respondents generally see marriage as a desirable candidate trait, indicating why partisans link that quality more to in-party politicians. Similar boosting for Social Security and Medicare likely reflects the relative popularity of those two programs among partisans as well.

In two other areas, religion and gender, we recover additional associations that reflect meaningful differences in the candidates running under each party's label. As discussed above, our respondents think of men and Protestant candidates (especially Evangelicals) as more likely to be Republican, than they do women, Catholic or Jewish politicians. In combination with our findings about voter evaluations, these results highlight potential difficulties some candidates may face running in primary and general elections with a particular party. Women in particular have faced significant challenges in securing nomination in primaries, especially in the Republican party (e.g., Lawless and Pearson 2008; Preece and Stoddard 2015). A party-gender asymmetry is similarly reflected in the negative evaluations (and Democratic associations) that Republican identifiers make of female candidates presented to them in our experiment. Following other work on can-

didate recruitment, this finding could indicate that Republican voters are less willing to support female candidates (Lawless and Pearson 2008; Preece and Stoddard 2015). Yet, we cannot preclude the possibility that Republican identifiers negatively evaluate women in our experiment because they think they are probably Democrats. We find a similar asymmetry for Democratic respondents negatively evaluating Evangelicals, whom they also infer to be Republicans, potentially suggesting an unfriendliness to such candidates among Democrats.

These partisan differences in gender and religious stereotypes are suggestive that at least some party-trait associations could be emerging through candidate screening in primaries or elections (e.g., Hayes 2005; Snyder and Ting 2002). The broader findings though are generally *inconsistent* with the claim that issue and trait associations are being forged in election competition. The stability and consistency of issue associations (especially across partisans), relative to the inconsistency of issue priorities in advertisements, provides strong evidence that campaign communication has little effect on voters' party stereotypes. Indeed, these associations much more closely reflect the stable issue agendas that the parties collectively promote in Congress (e.g., Egan 2013).

However, other predictions made by ownership theories do not fare as well. The evidence is fairly clear that 'party-owned issues' do not originate from differentiation in candidate traits, as most traits do not polarize across parties. In fact, very few 'party-owned traits' emerge alongside associations among related issue domains (e.g., military status and national defense, teacher and education). Intriguingly, Hayes (2005) argues that a potential source of party-trait ownership is that voters could be inferring particular traits about candidates from the issues they emphasize in campaigns. One possible explanation for the inconsistency in trait associations we find then, is that real campaigns do not prioritize the same set of partisan issues as expected by voters. Yet, that would require, somewhat awkwardly, that voters update beliefs about traits, but not about issues, following exposure to campaign advertising.

We find remarkable similarity between guessing of party and ideology, particularly in issue priorities, indicating that these two dimensions are strongly intertwined in the current polarized political context. This suggests that voters associate issues not only with the parties, but also with particular ideological orientations toward policy more generally. These ideological associations could merely stem from what voters know about the parties in light of polarization: Democrats are liberal, Republicans are conservative, and they prioritize or own different issues. Yet, it is also possible that issue priorities themselves signal ideological differences both across *and* within parties, by tapping voters' stereotypes about party associations. This raises an interesting implication that when candidates 'trespass', that is, highlight the owned issues of their partisan opponents (e.g., Sides 2006), this could have the (un)intended effect of cultivating more centrist or bipartisan impressions among voters (Henderson 2015*a*). Thus, rather than trying to 'steal' issues (e.g., Holian 2004), candidates may actually be trying to differentiate themselves from their more ideologically extreme parties (Henderson 2015*a*).

Our study also has broad implications for theories of heuristic voting and democratic competence. We find greater consistency in the issues rather than traits associated with the parties. This could indicate that issue priorities are more influential (or at least more coherent) in how party labels are used by voters. Many theories of democratic responsibility are concerned with whether citizens are capable of choosing candidates based policy disagreements, rather than non-policy considerations (e.g., Fiorina 1980). Our results here suggest that minimal information about differences in policy priorities is available to many, though not all, voters through the party labels. With few exceptions, we do not find that biographical traits are likely to override policy associations in ways that might obviously diminish issue-based heuristic voting. Consequently, voters possess at least some useful policy information that could help them constrain incumbent behavior in office.

Variation in the consistency of issue associations also suggests a possible explanation

for the limited constraint in attitudes exhibited by voters. We see the party associative networks as potential mediators for the formation and evolution of attitudes. It takes information about the policy views or priorities of the parties for voters to be able to realign their attitudes and partisanship. Thus, a lack of awareness of what issues "go with" which party, may limit the ability of voters to align their opinions in coherent ways. In this vein, we confirm one of the major claims made by Converse (1964), and explored by others (e.g., Zaller 1992), that 'informational constraint' may serve as a precursor to constraint in attitudes. Future work should extend this finding to investigate the extent to which manipulating constraint across issue associations alters voter opinions. Though we do find evidence of informational constraint, it is mostly exhibited by high and not low knowledge respondents – the latter rarely differentiate attributes across parties. This finding joins others that low information voters often make limited use of party heuristics, and may even lack an understanding of the party's ideological orientations. From the perspective of the parties, this finding underscores important limits to the effectiveness of party reputations as common-pool information resources that facilitate collective responsibility, which could be made worse by candidates differentiating themselves from their party through issue trespassing.

The analyses presented here represent the first examinations of data derived from this party guessing experimental design. Future effort will be devoted to exploring the rich data produced in our experiment, as well as to implement this inferential approach to additional questions beyond just partisan associations in the American context. Similar to list experiments, we believe our inferential design may help unlock new insights into important political debates that are difficult to study due to partisanship, social desirability or other biases. Yet, due to this feature, our experimental findings also raise methodological concerns about the use of candidate vignettes or priming survey experiments to study behavioral or attitudinal questions in the social sciences. We find that voters associate a great many things with party and ideological labels. Priming those

dimensions is likely to simultaneously bring any number of attributes to voters' minds, potentially altering how they respond to survey items (Dafoe et al. 2015; Hainmueller and Hopkins 2015; Theodoridis and Goggin N.d.). Further, 'controlling' for such factors by explicitly including fixed information (e.g., listing an issue priority alongside the party), may not reduce the influence of an association, since party attributes are highly clustered in partisan cognition. In future research, we recommend scholars evaluate whether any unobserved associations stemming from included vignette information could be influencing findings (Dafoe et al. 2015; Theodoridis and Goggin N.d.), and more generally to use care when studying attributes that are closely associated with parties, and thus likely to elicit partisan associative bias. In this regard, our findings, and this method generally, can offer some guidance to those wishing to know when an issue position or candidate trait may cause voters to infer candidates party, or when a party label may prompt imputation of an issue priority or trait.

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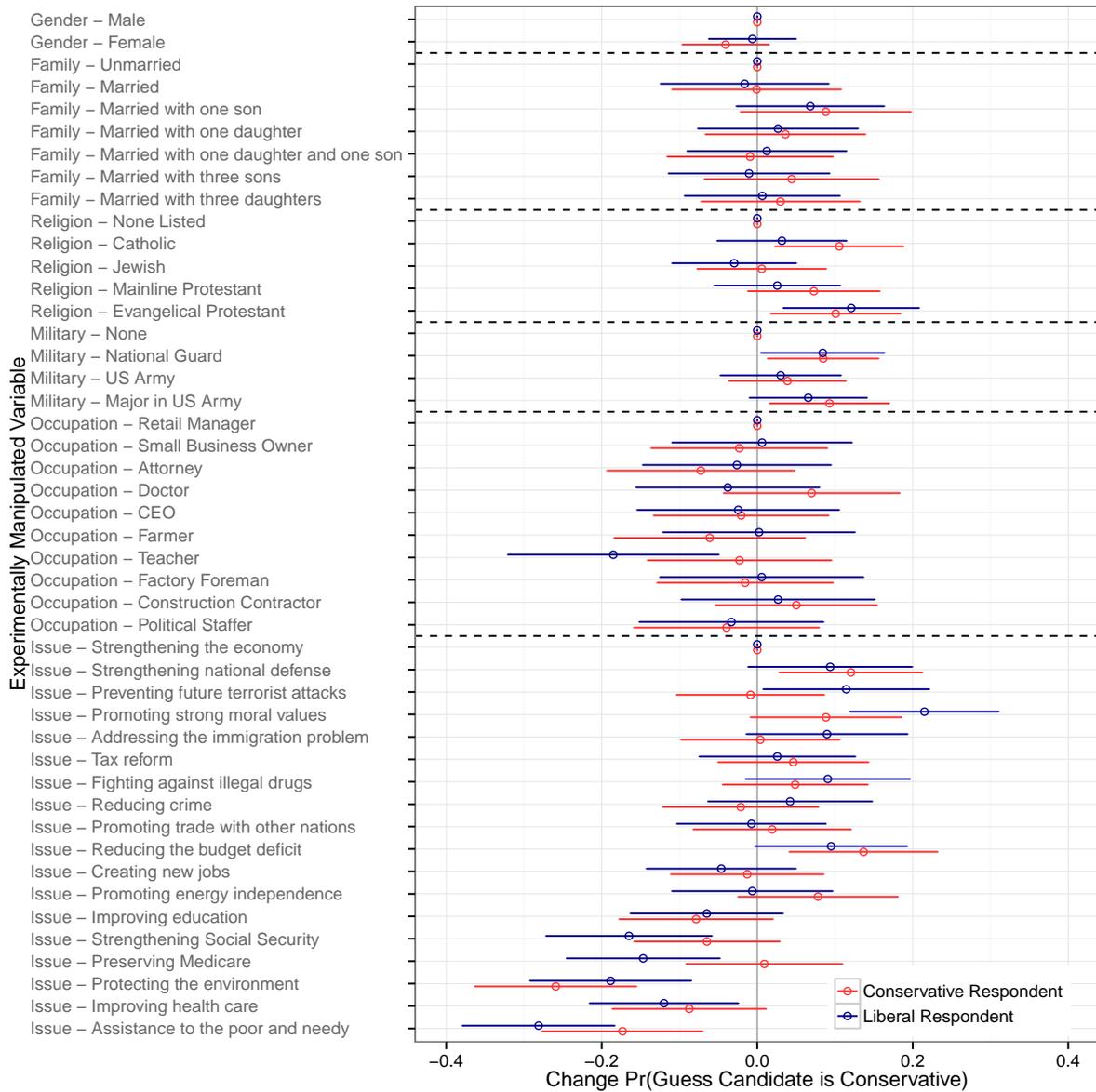
A   Online Appendix

Figure I: **Guessing Candidate's Ideology by Respondent Ideology**: Estimates are OLS regressing ideology guesses on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are the excluded levels of each experimental factor. Issues are coded as present if they were in either the first, second, or third issue priority for the candidate. All variables coded 0-1, with the dependent variable coded as 1=Conservative, 0=Liberal. Respondent ideology was collapsed from a 7-point ideology scale, with those placing themselves as moderate excluded from the analysis.
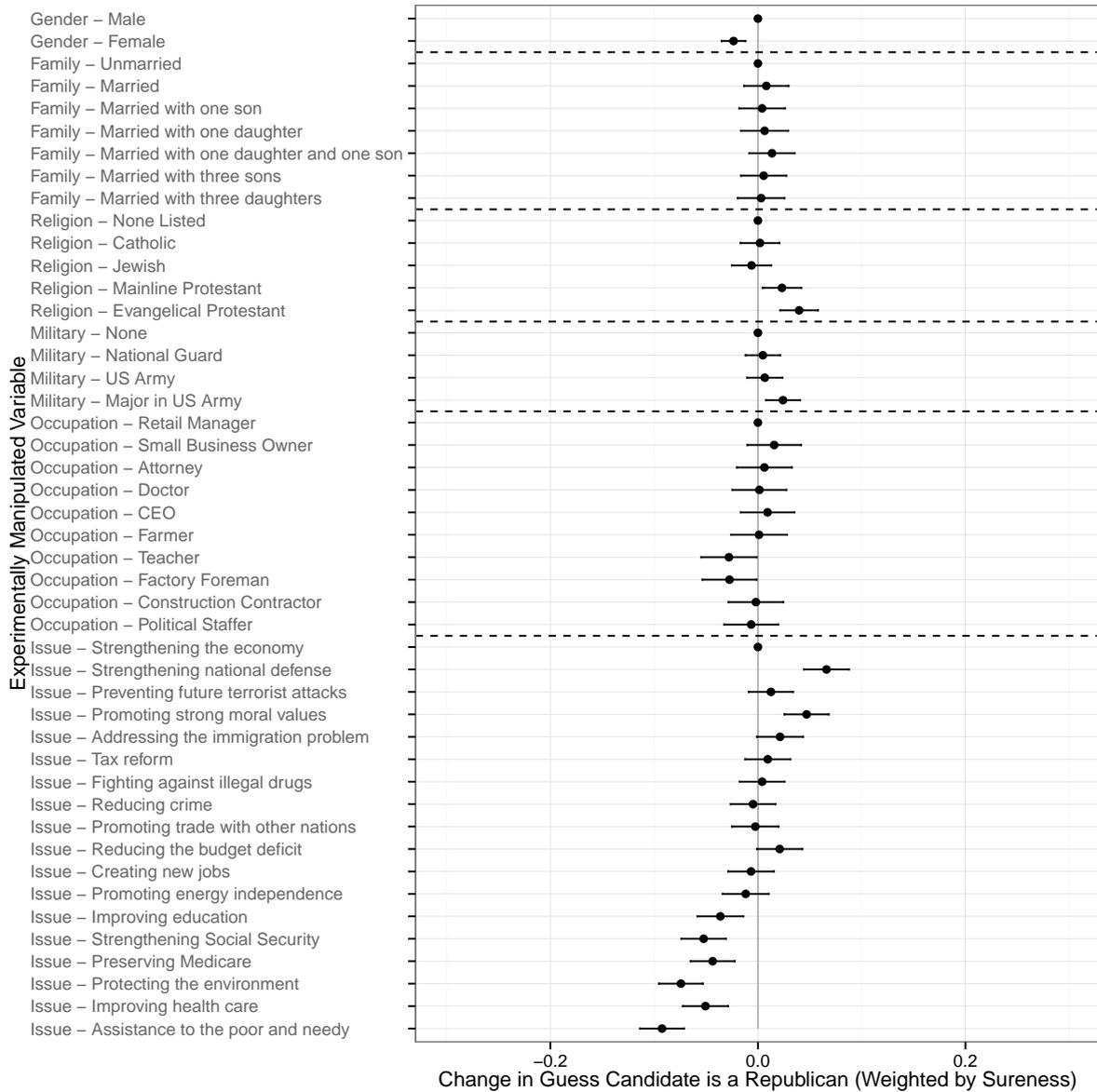
Figure II: **Guessing Candidate's Party (with Sureness)**: Estimates are OLS regressing party guesses, incorporating sureness, on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are the excluded levels of each experimental factor. Issues are coded as present if they were in either the first, second, or third issue priority for the candidate. All variables coded 0-1, with the dependent variable as a function of the dichotomous party guess and a 4-point sureness question from "very sure" to "very unsure" about the guess. A response of "Republican" with "very sure" yields a score of 1, while a "very sure" response of "Democrat" yields a 0, with the remainder of the six possible response permutations scored equidistant in the 0-1 interval.
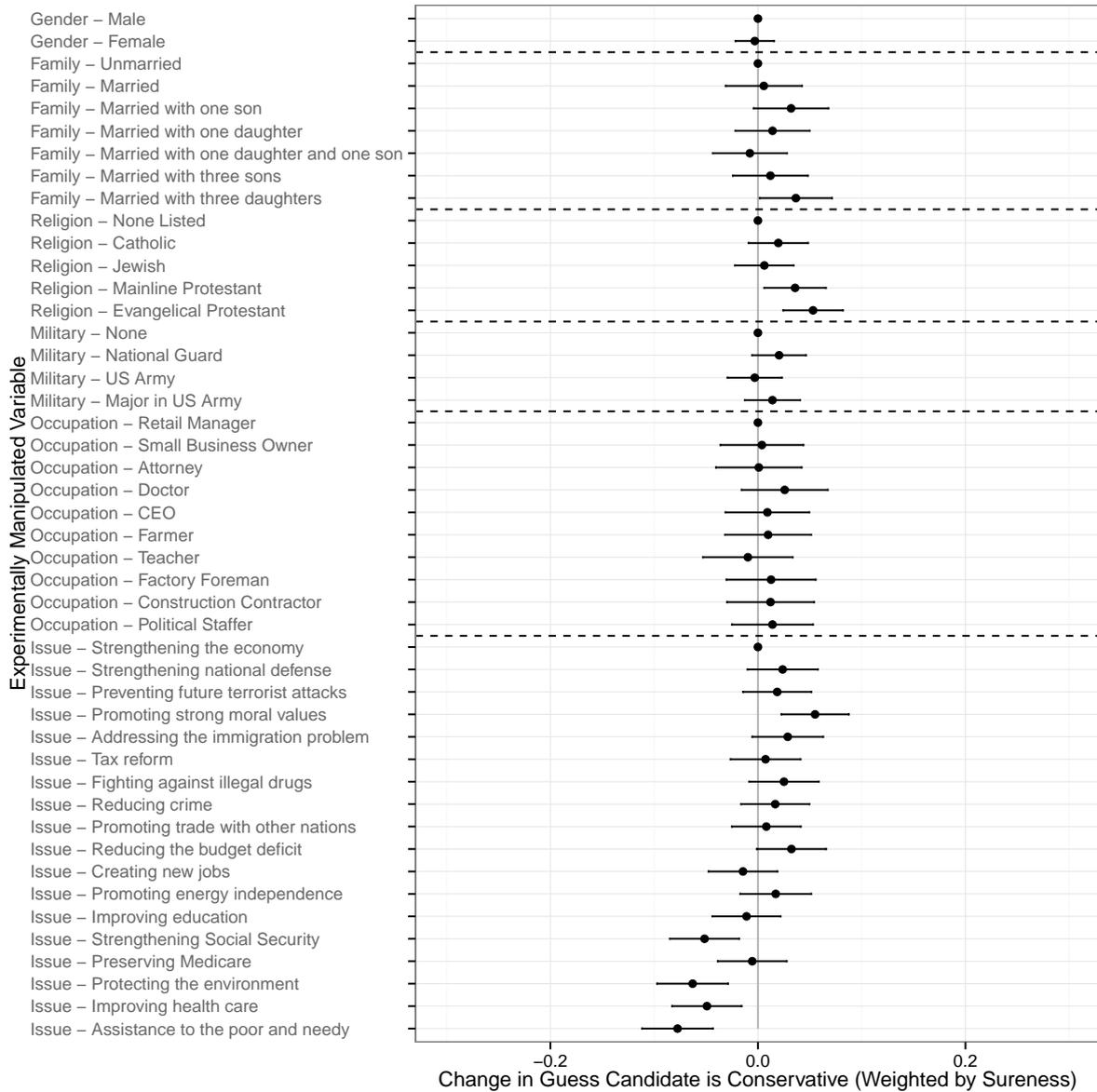
Figure III: **Guessing Candidate's Ideology (with Sureness)**: Estimates are OLS regressing ideology guesses, incorporating sureness, on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are the excluded levels of each experimental factor. Issues are coded as present if they were in either the first, second, or third issue priority for the candidate. All variables coded 0-1, with the dependent variable as a function of the dichotomous ideology guess and a 4-point sureness question from "very sure" to "very unsure" about the guess. A response of "Conservative" with "very sure" yields a score of 1, while a "very sure" response of "Liberal" yields a 0, with the remainder of the six possible response permutations scored equidistant in the 0-1 interval.
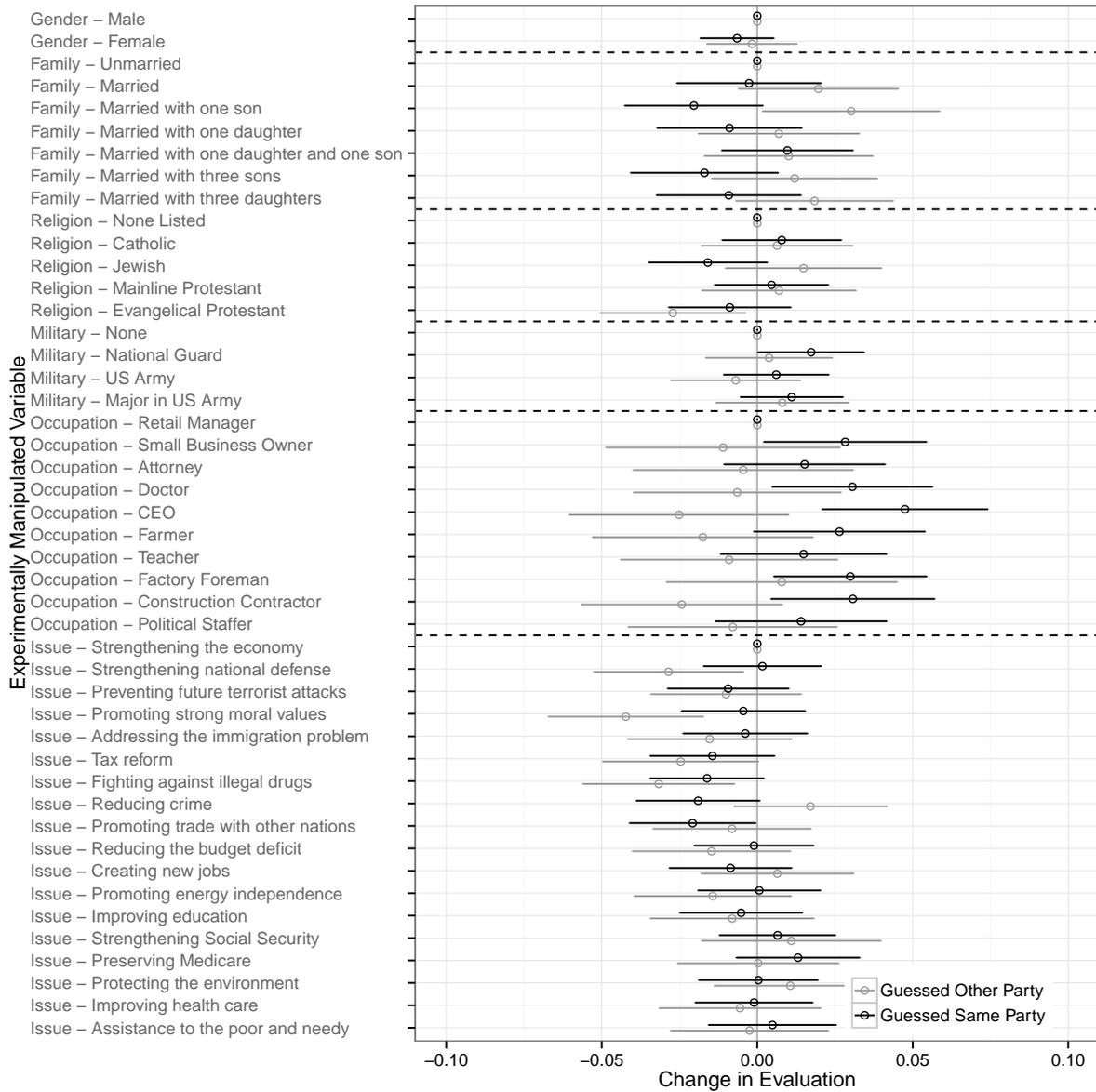
Figure IV: **Candidate Evaluations by Respondent Party Guess**: Estimates are OLS regressing candidate evaluations on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are the excluded levels of each experimental factor. Issues are coded as present if they were in either the first, second, or third issue priority for the candidate. All variables coded 0-1, with the dependent variable originally presented to respondents as a 0-10 slider, with 0 indicating "very unfavorable" and 10 indicating "very favorable". "Guessed Same Party" indicates a respondent guessed the candidate was of their own party immediately before evaluating the candidate. "Guessed Other Party" indicates the respondent guessed the candidate was of the other party immediately before evaluating the candidate. Pure independents are excluded.