Online Appendix for "What Goes with Red and Blue?
Mapping Partisan and Ideological Associations in the Minds of Voters"

Stephen N. Goggin*
Dept. of Political Science
San Diego St. University

John A. Henderson†
Dept. of Political Science
Yale University

Alexander G. Theodoridis‡
Dept. of Political Science
UC Merced

*<stephen.goggin@sdsu.edu>, http://sgoggin.org/, Department of Political Science, San Diego State University, 5500 Campanile Drive, San Diego, CA 92182-4427

†<john.henderson@yale.edu>, http://jahenderson.com/, Institution for Social and Policy Studies, Yale University, 77 Prospect Street, New Haven, CT 06520-8209

‡<atheodoridis@ucmerced.edu>, http://www.alexandertheodoridis.com, Department of Political Science, University of California, 5200 North Lake Rd., Merced, CA 95343

A Online Appendix

A.1 PID Bias in Measures of Partisan Stereotypes

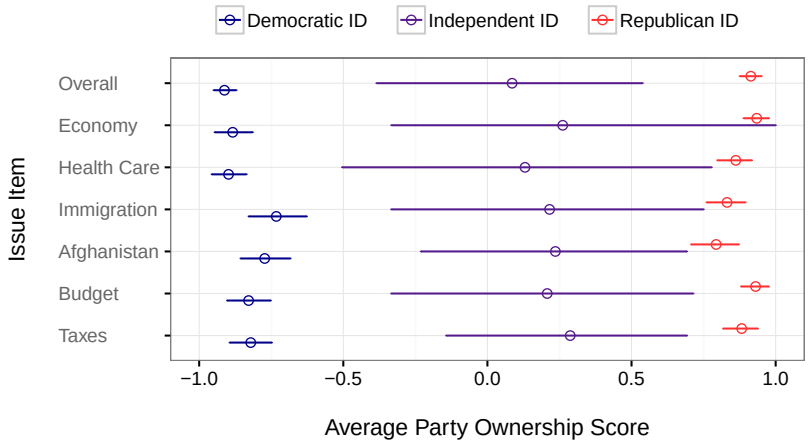

Figure I: **Partisanship in Issue Ownership Scores**: Figure presents average responses to the standard ownership question ("Which political party do you trust to do a better job handling...") for six issues items and overall (ABC News/Washington Post 2010). Responses are broken down by respondent PID, with leaners included as partisans. The figure illustrates clear polarization in evaluations of how well the parties handle each issue.

A.2 Experimental Factors and Levels

Table I: **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

A.3 Supplementary Figures

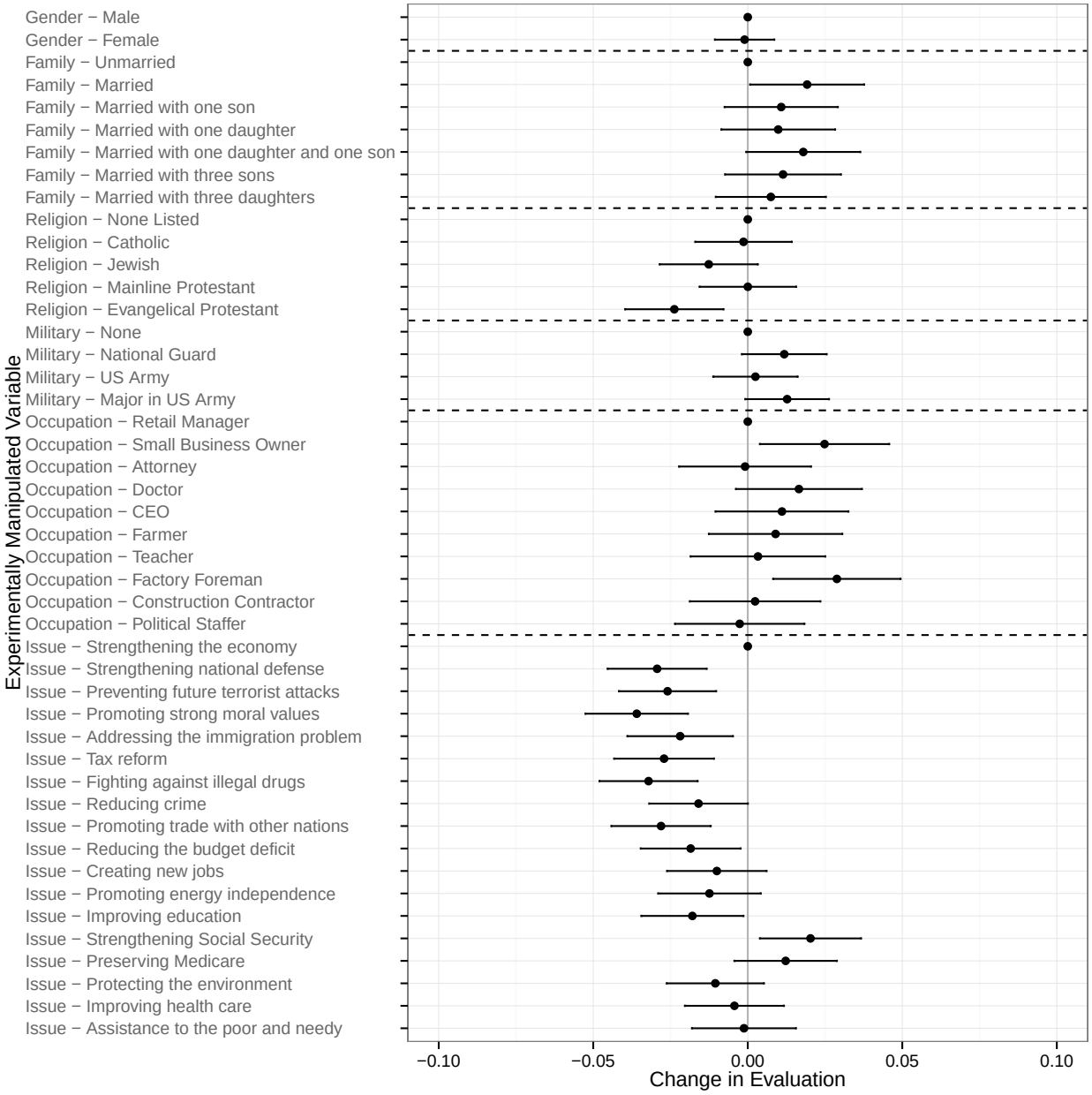

Figure II: **Candidate Evaluations After Guessing Party**: Estimates are OLS regressing candidate evaluation on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are the excluded levels of each experimental 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".

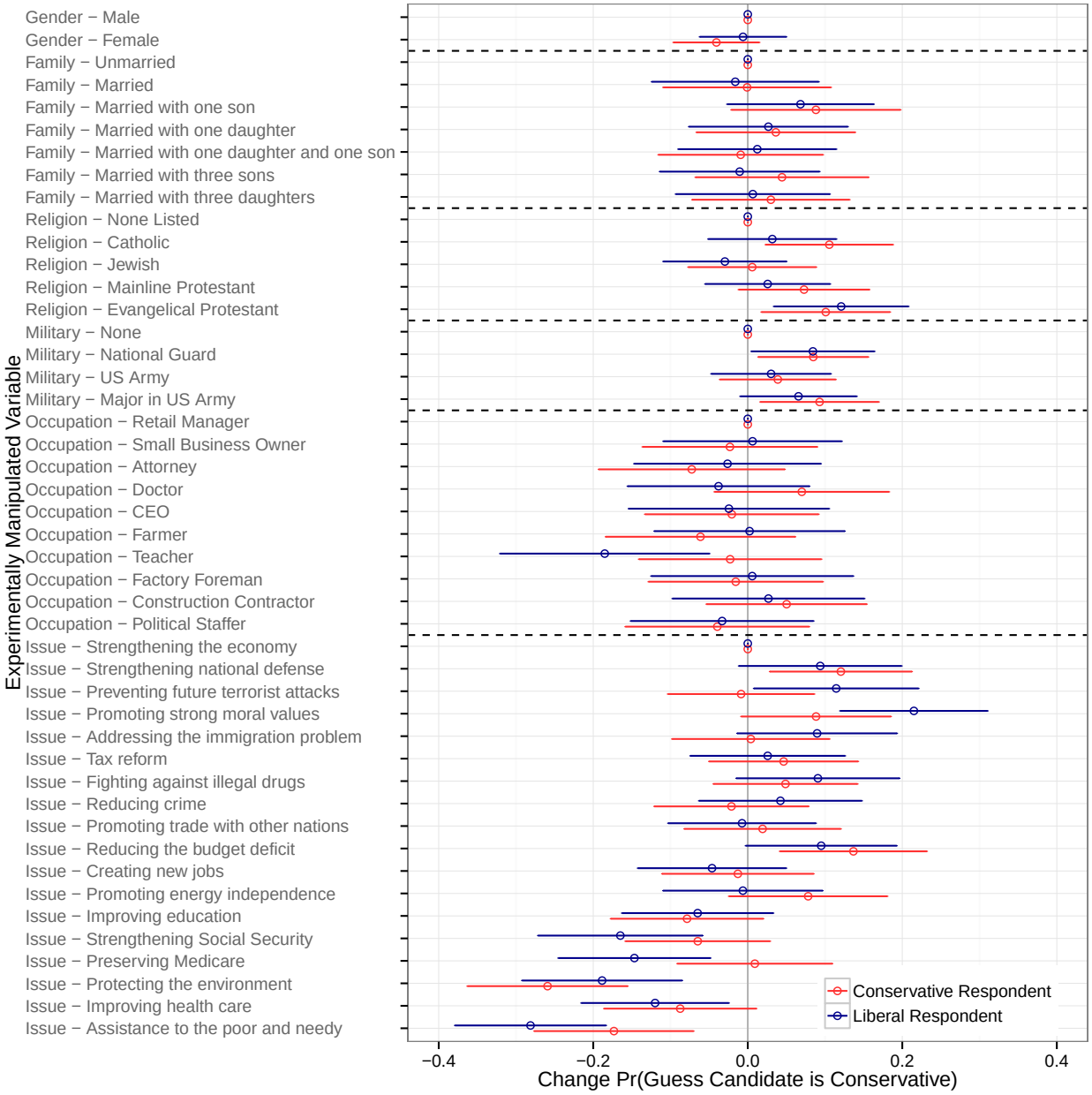

Figure III: **Guessing Candidate's Ideology by Respondent Ideology**: Estimates are OLS regressing ideology guesses on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are the excluded levels of each 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.

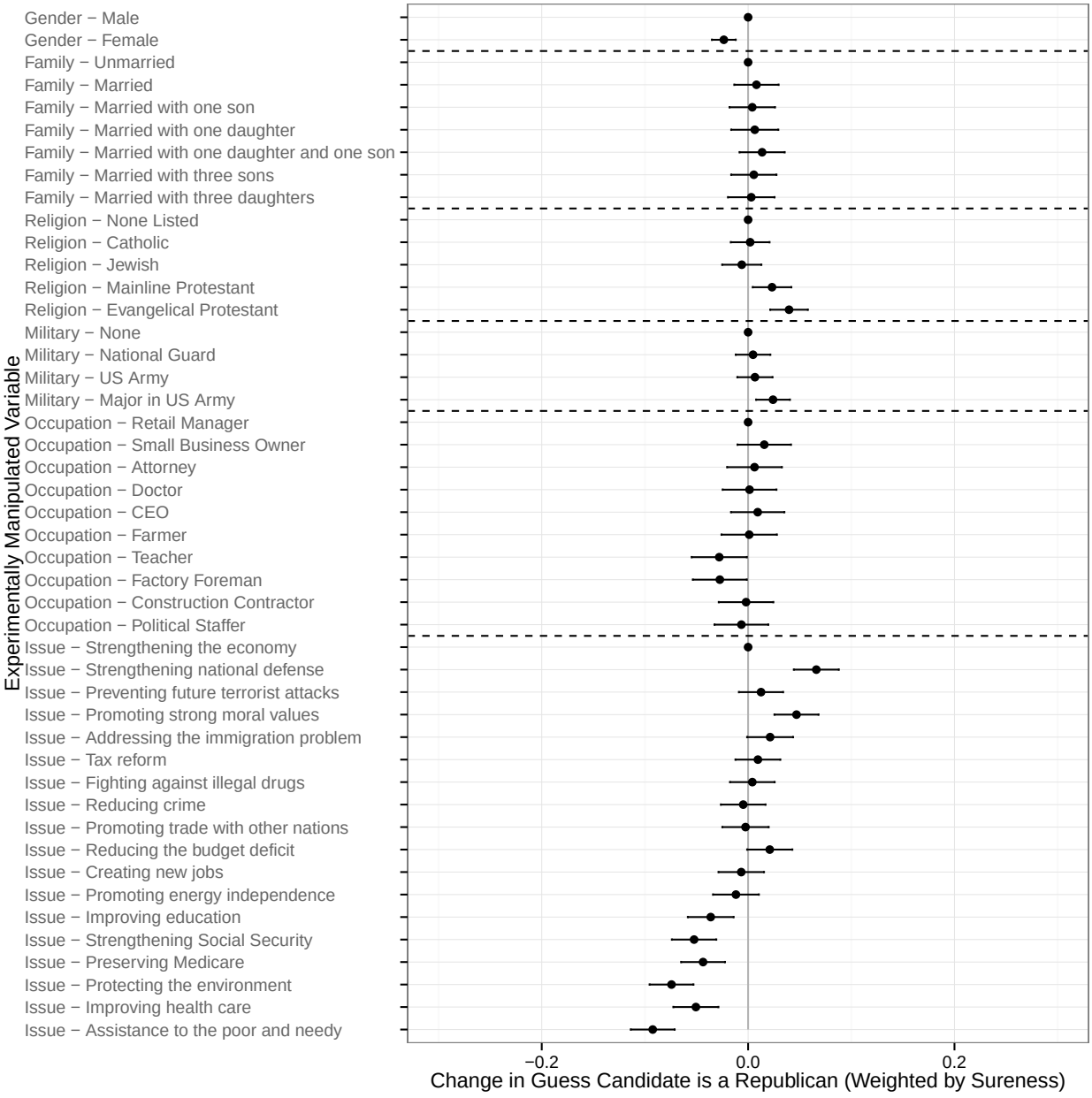

Figure IV: **Guessing Candidate's Party (with Sureness)**: Estimates are OLS regressing party guesses, incorporating sureness, on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are the excluded levels 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.

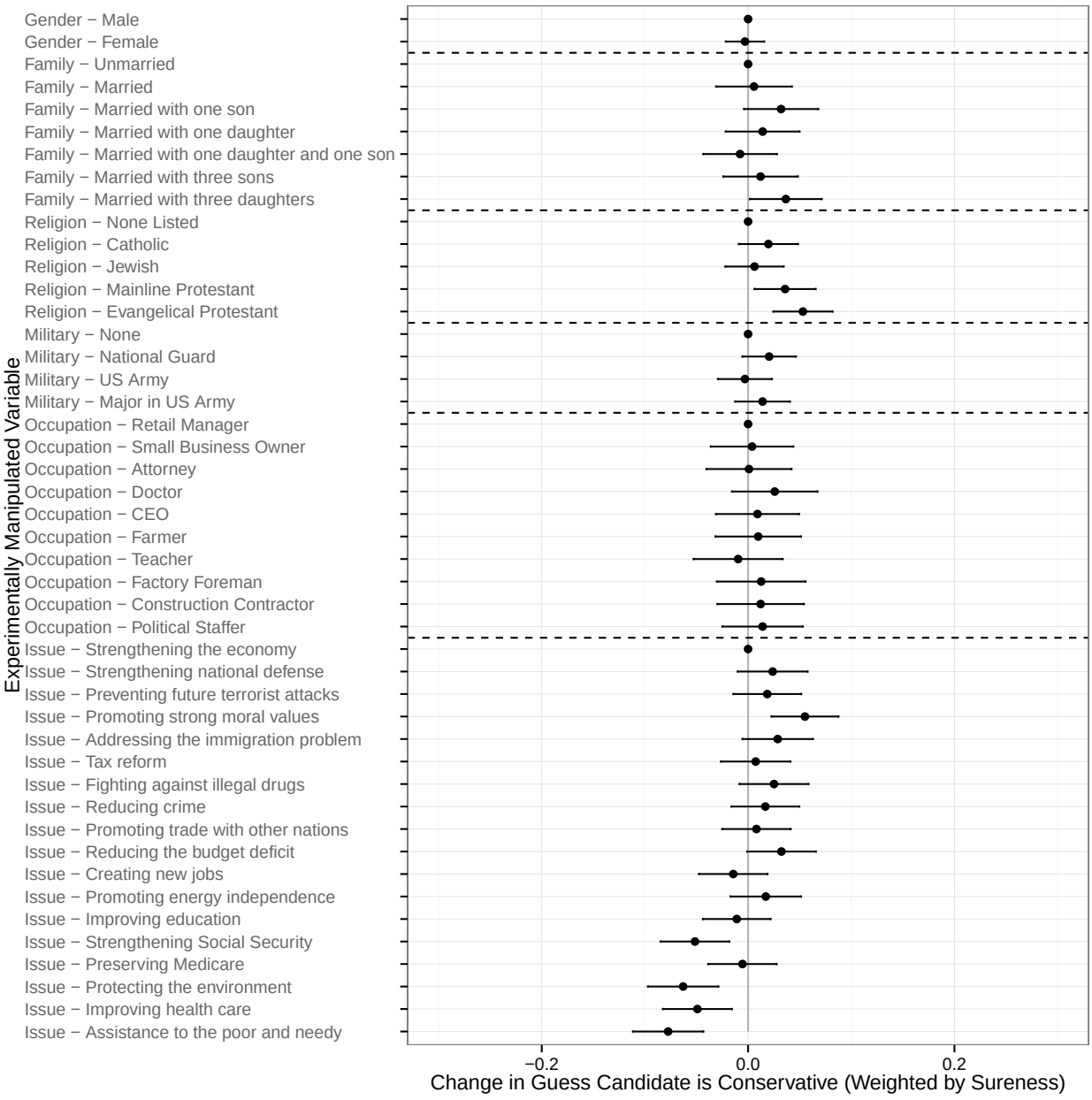

Figure V: **Guessing Candidate's Ideology (with Sureness)**: Estimates are OLS regressing ideology guesses, incorporating sureness, on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are the excluded 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.

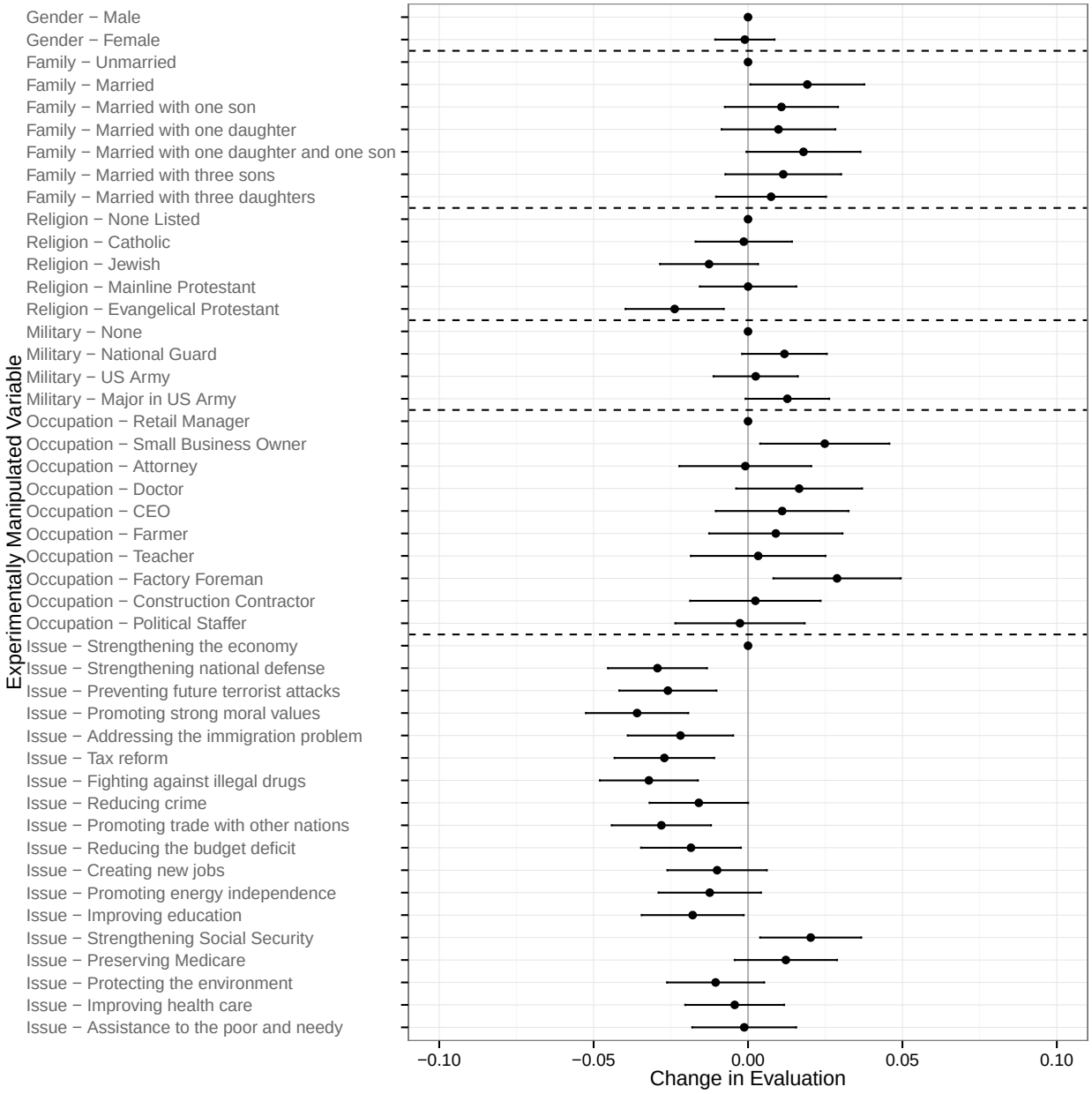

Figure VI: **Overall Candidate Evaluations**: Estimates are OLS regressing candidate evaluations on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are the excluded levels of each experimental factor. 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.

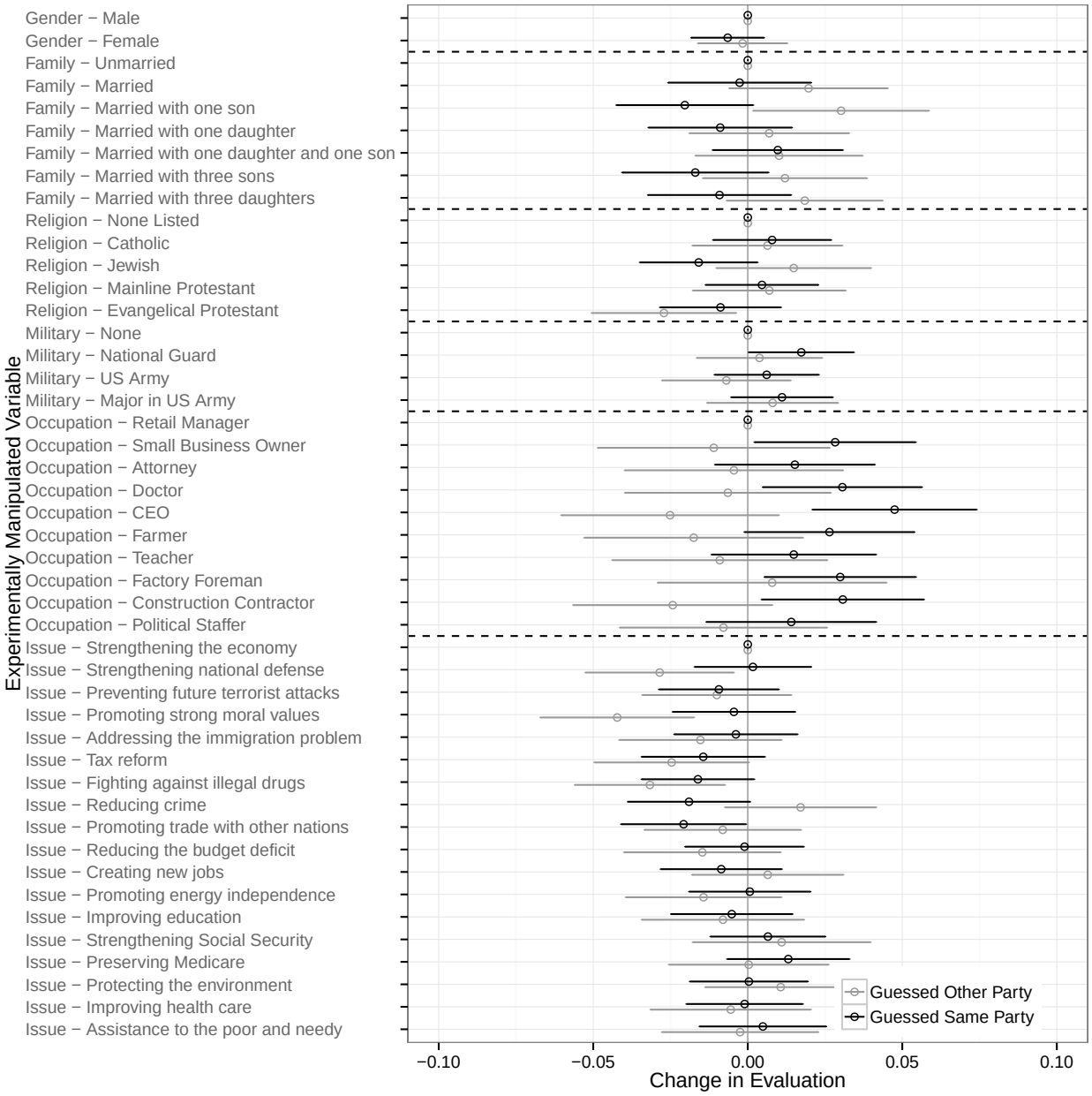

Figure VII: **Candidate Evaluations by Respondent Party Guess**: Estimates are OLS regressing candidate evaluations on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are the excluded levels of each 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.

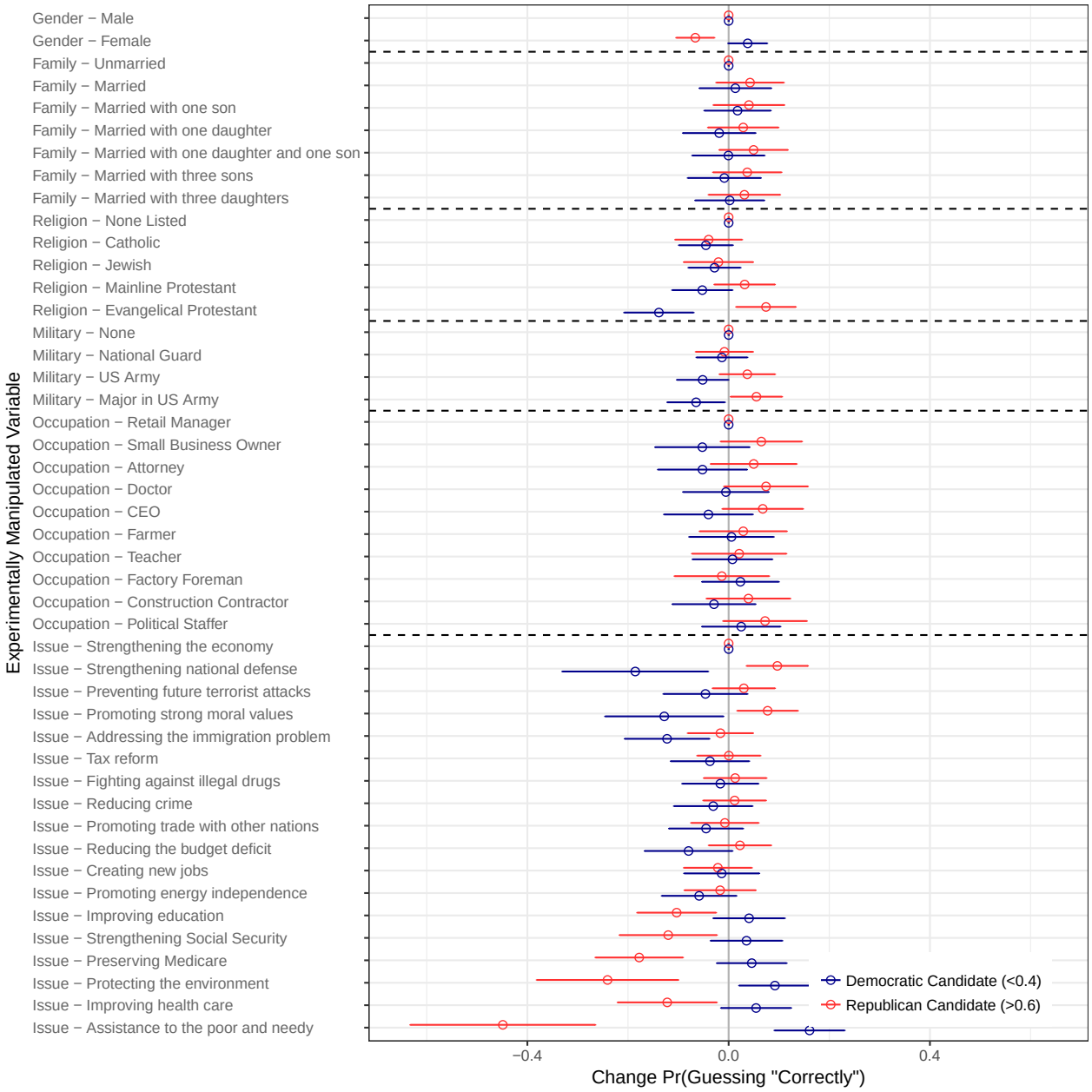

Figure VIII: **Party Guess "Correctness"**: Estimates are OLS regressing whether a respondent had the "correct" party guess on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are the excluded levels of each experimental factor. Issues are coded as present if they were in either the first, second, or third issue priority for the candidate. "Correctness" was calculated using predicted partisanship of candidate profile from split-sample.

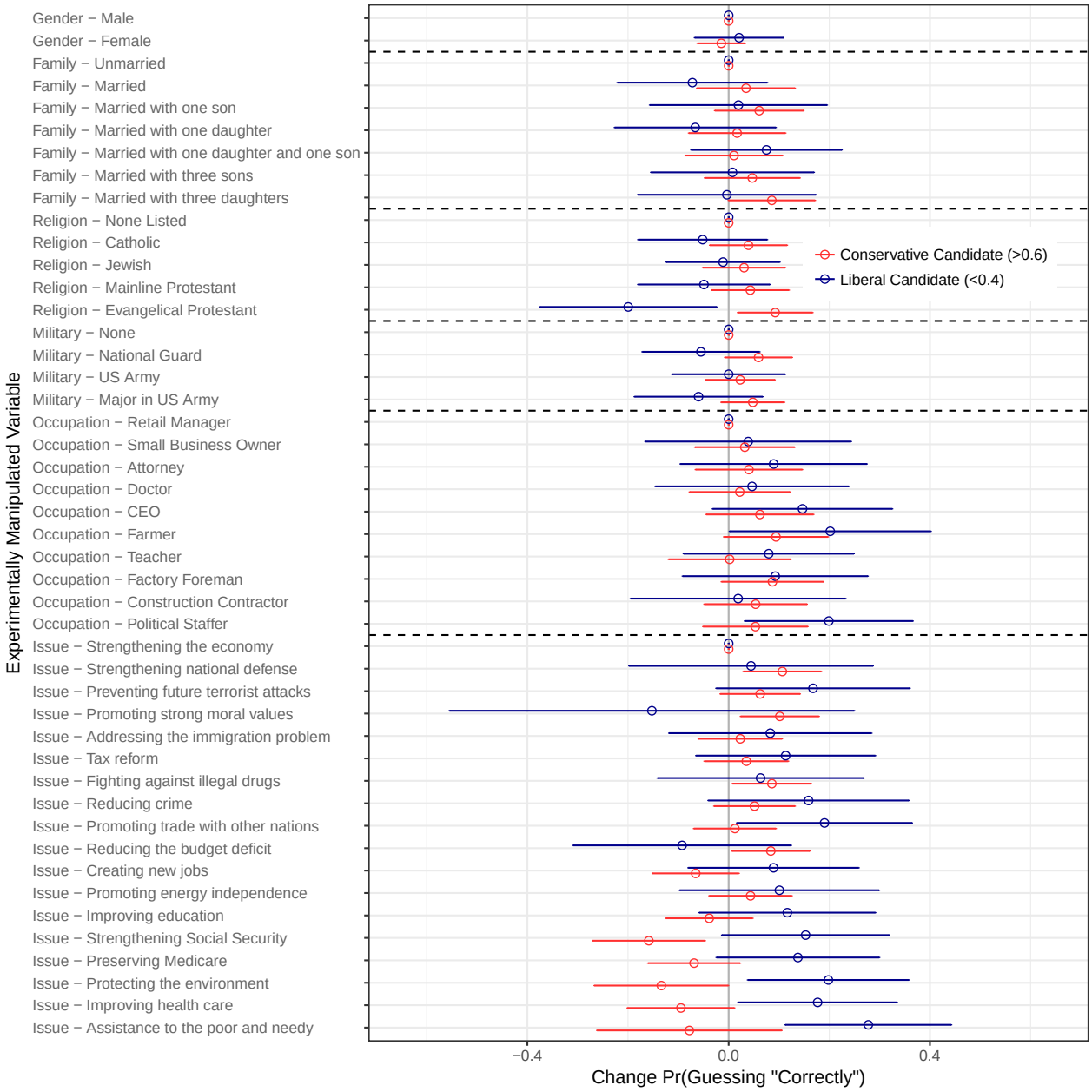

Figure IX: **Ideology Guess "Correctness"**: Estimates are OLS regressing whether a respondent had the "correct" ideological guess on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are the excluded 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. "Correctness" was calculated using predicted ideology of candidate profile from split-sample.

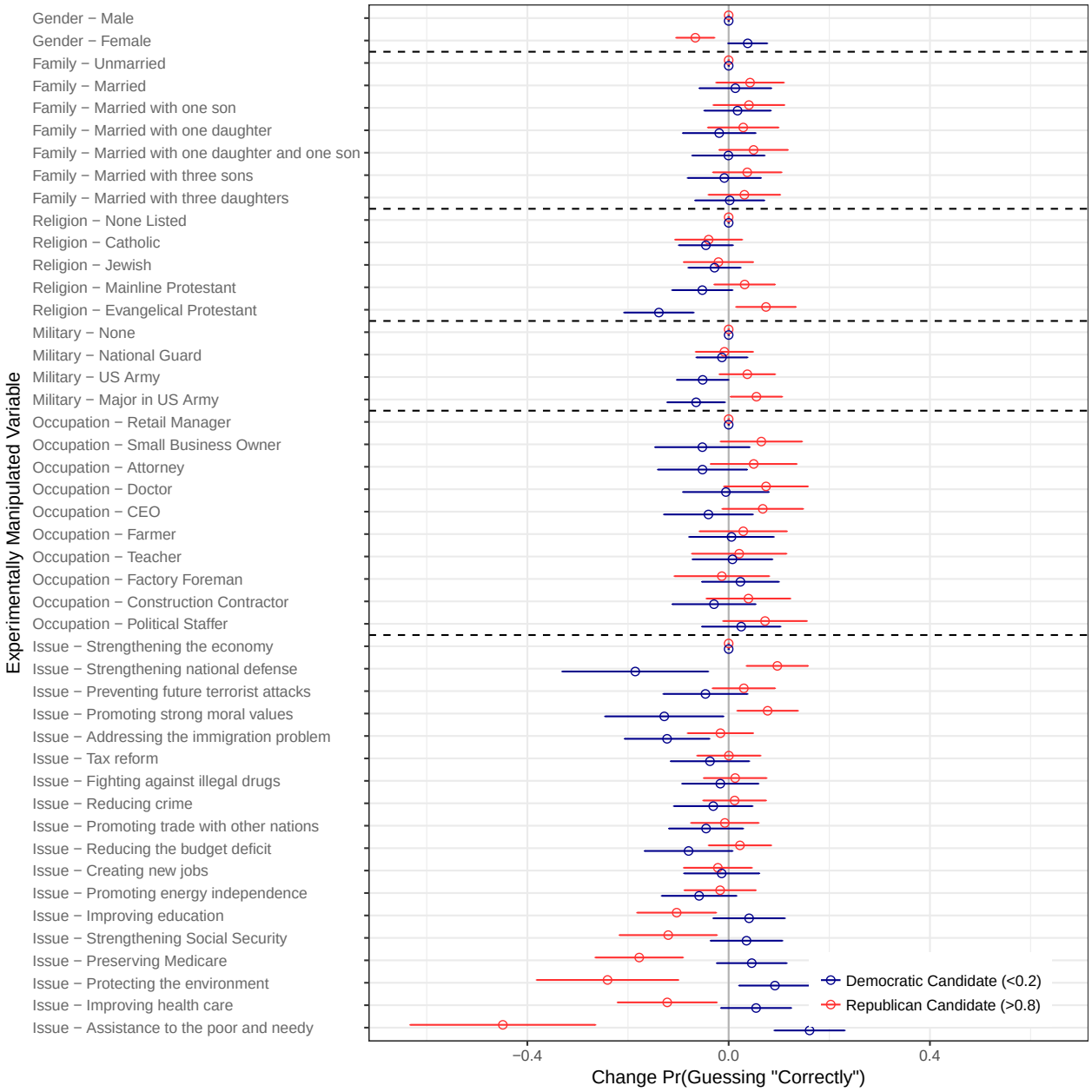

Figure X: **Party Guess "Correctness", Clearer Partisans Only**: Estimates are OLS regressing whether a respondent had the "correct" party guess on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are 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. "Correctness" was calculated using predicted partisanship of candidate profile from split-sample.

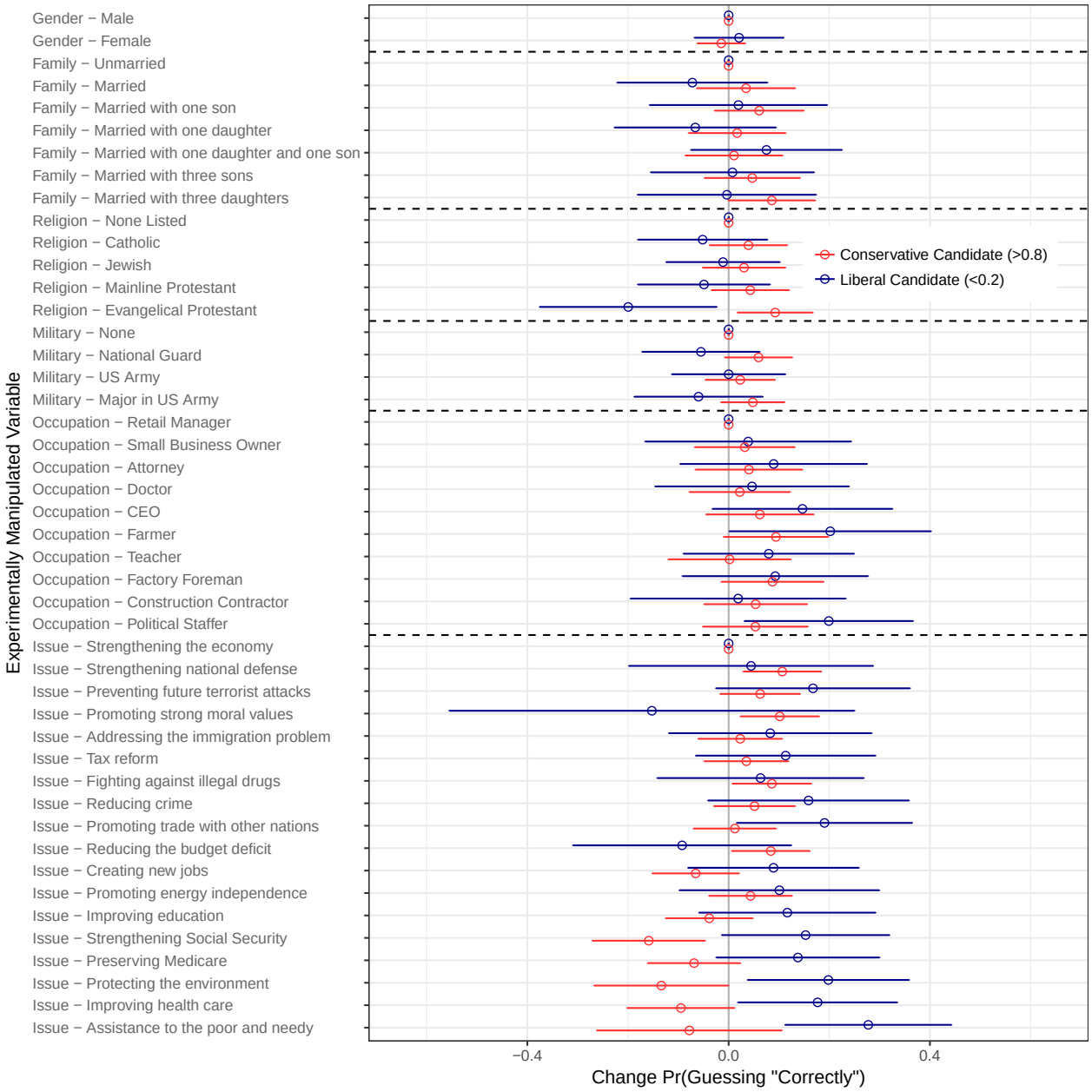

Figure XI: **Ideology Guess "Correctness", Clearer Ideologues Only**: Estimates are OLS regressing whether a respondent had the "correct" ideological guess on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error 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. "Correctness" was calculated using predicted ideology of candidate profile from split-sample.

Table II: **Proportion of "Correct" Guesses**

		Democrat	Republican	Liberal	Conservative
	Overall	0.699	0.706	0.651	0.698
Gender	Male	0.694	0.725	0.637	0.699
Gender	Female	0.702	0.680	0.663	0.697
Family	Unmarried	0.700	0.670	0.632	0.689
Family	Married	0.704	0.726	0.571	0.693
Family	Married with one son	0.727	0.723	0.667	0.711
Family	Married with one daughter	0.661	0.712	0.622	0.657
Family	Married with one daughter and one son	0.701	0.711	0.753	0.677
Family	Married with three sons	0.688	0.701	0.647	0.723
Family	Married with three daughters	0.709	0.698	0.667	0.723
Religion	Catholic	0.670	0.659	0.639	0.685
Religion	Jewish	0.697	0.698	0.688	0.696
Religion	Mainline Protestant	0.720	0.704	0.622	0.688
Religion	Evangelical Protestant	0.642	0.736	0.556	0.714
Religion	None Listed	0.739	0.702	0.671	0.703
Military	None	0.708	0.701	0.619	0.697
Military	National Guard	0.712	0.687	0.664	0.707
Military	US Army	0.692	0.713	0.682	0.681
Military	Major in US Army	0.676	0.719	0.641	0.704
Occupation	Small Business Owner	0.657	0.693	0.574	0.710
Occupation	Attorney	0.642	0.696	0.623	0.710
Occupation	Doctor	0.741	0.729	0.564	0.671
Occupation	CEO	0.665	0.740	0.710	0.688
Occupation	Farmer	0.714	0.680	0.766	0.734
Occupation	Teacher	0.713	0.705	0.651	0.670
Occupation	Factory Foreman	0.710	0.698	0.649	0.726
Occupation	Construction Contractor	0.703	0.694	0.625	0.703
Occupation	Political Staffer	0.712	0.744	0.773	0.721
Occupation	Retail Manager	0.705	0.675	0.568	0.642
Issue1	Strengthening national defense	0.400	0.764	0.462	0.714
Issue1	Preventing future terrorist attacks	0.609	0.698	0.692	0.748
Issue1	Promoting strong moral values	0.640	0.763	0.400	0.709
Issue1	Addressing the immigration problem	0.571	0.706	0.462	0.658
Issue1	Tax reform	0.635	0.741	0.778	0.657
Issue1	Fighting against illegal drugs	0.709	0.699	0.773	0.756
Issue1	Reducing crime	0.626	0.746	0.600	0.660
Issue1	Promoting trade with other nations	0.626	0.677	0.609	0.732
Issue1	Reducing the budget deficit	0.561	0.707	0.733	0.820
Issue1	Creating new jobs	0.706	0.664	0.615	0.675
Issue1	Strengthening the economy	0.811	0.669	0.536	0.684
Issue1	Promoting energy independence	0.583	0.724	0.563	0.706
Issue1	Improving education	0.745	0.539	0.500	0.679
Issue1	Strengthening Social Security	0.676	0.571	0.702	0.541
Issue1	Preserving Medicare	0.681	0.580	0.605	0.672
Issue1	Protecting the environment	0.751	0.688	0.648	0.409
Issue1	Improving health care	0.697	0.692	0.750	0.606
Issue1	Assistance to the poor and needy	0.810	0.125	0.708	0.556

NOTE: "Correctness" is assessed by splitting the sample, estimating the model in Figure 2 on each half of the sample, using this to predict the party or ideology of the other half (0-1), and then excluding profiles in the 0.4-0.6, as those are non-obvious Democrats/Republicans/Liberals/Conservatives. If no profiles are excluded, results are similar, but overall correctness decreases slightly.

Table III: **Proportion of Republican Guesses**

		Proportion of Republican Guesses
	Overall	0.499
Gender	Male	0.523
Gender	Female	0.475
Family	Unmarried	0.492
Family	Married	0.512
Family	Married with one son	0.491
Family	Married with one daughter	0.509
Family	Married with one daughter and one son	0.508
Family	Married with three sons	0.498
Family	Married with three daughters	0.486
Religion	Catholic	0.476
Religion	Jewish	0.457
Religion	Mainline Protestant	0.526
Religion	Evangelical Protestant	0.576
Religion	None Listed	0.462
Military	None	0.480
Military	National Guard	0.484
Military	US Army	0.497
Military	Major in US Army	0.537
Occupation	Small Business Owner	0.546
Occupation	Attorney	0.508
Occupation	Doctor	0.519
Occupation	CEO	0.536
Occupation	Farmer	0.506
Occupation	Teacher	0.456
Occupation	Factory Foreman	0.442
Occupation	Construction Contractor	0.503
Occupation	Political Staffer	0.484
Occupation	Retail Manager	0.490
Issue1	Strengthening national defense	0.709
Issue1	Preventing future terrorist attacks	0.592
Issue1	Promoting strong moral values	0.674
Issue1	Addressing the immigration problem	0.577
Issue1	Tax reform	0.562
Issue1	Fighting against illegal drugs	0.524
Issue1	Reducing crime	0.542
Issue1	Promoting trade with other nations	0.500
Issue1	Reducing the budget deficit	0.608
Issue1	Creating new jobs	0.507
Issue1	Strengthening the economy	0.472
Issue1	Promoting energy independence	0.517
Issue1	Improving education	0.394
Issue1	Strengthening Social Security	0.394
Issue1	Preserving Medicare	0.429
Issue1	Protecting the environment	0.320
Issue1	Improving health care	0.407
Issue1	Assistance to the poor and needy	0.229

NOTE: Table is purely descriptive, displaying the proportion of respondents guessing a profile is Republican when a given factor level is present.

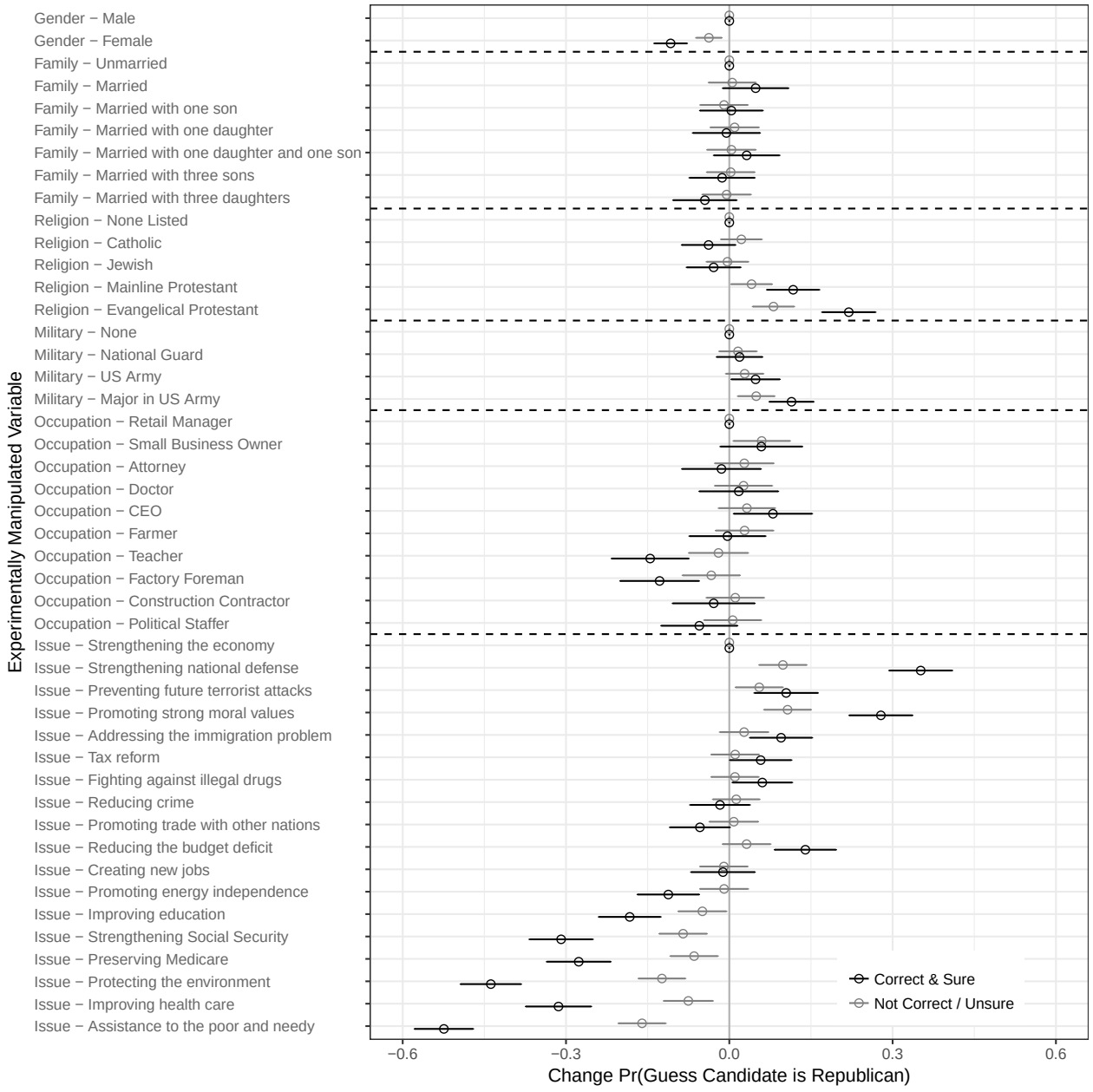

Figure XII: **Party Guess by "Correctness" and Sureness of Respondents**: Estimates are OLS regressing whether a respondent had the "correct" party guess on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error 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. "Correctness" was calculated using predicted partisanship of candidate profile from split-sampl, and profiles in the 0.4-0.6 range are excluded. Respondents who are "Sure" either expressed they were "very sure" or "somewhat sure" of their guess.

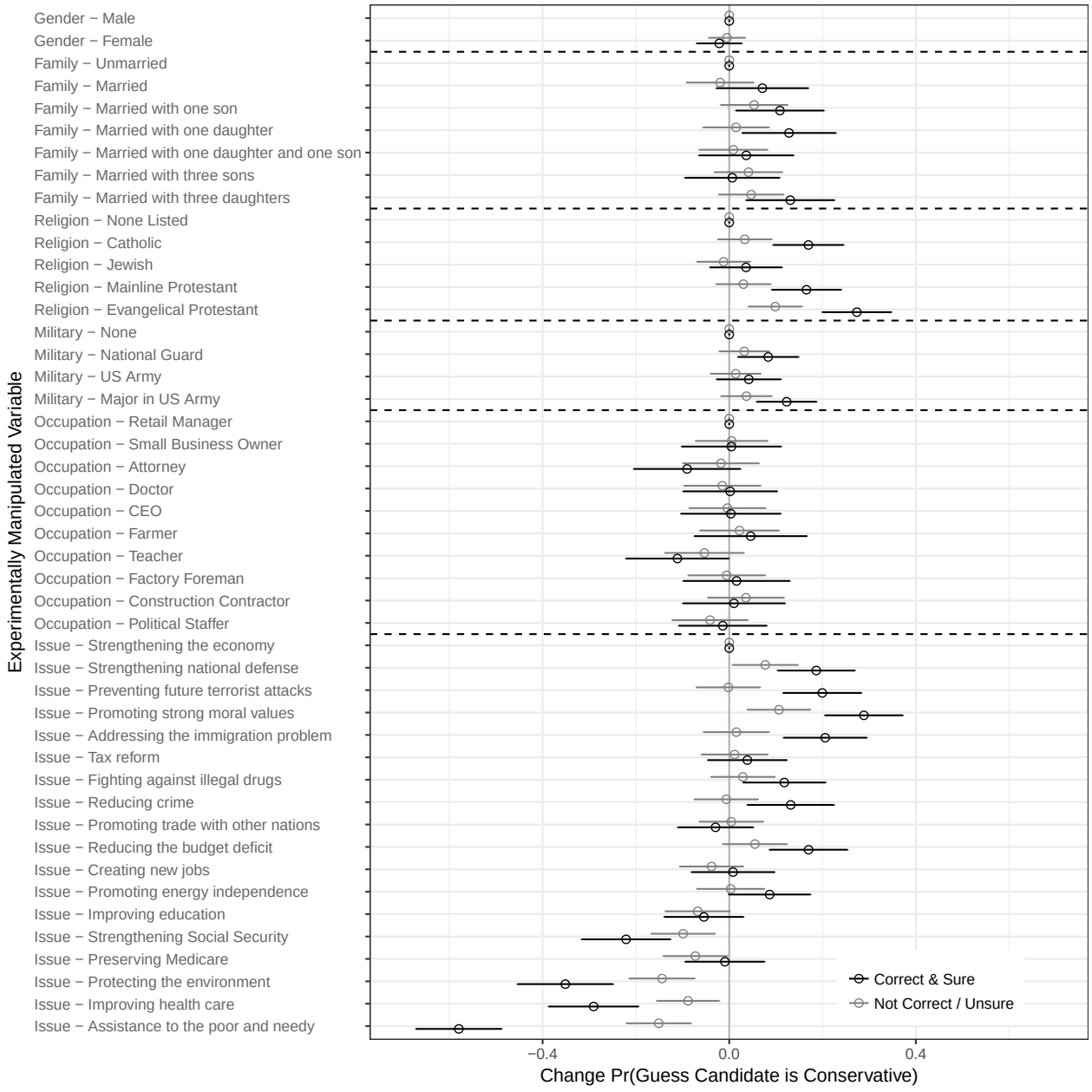

Figure XIII: **Ideology Guess by "Correctness" and Sureness of Respondents**: Estimates are OLS regressing whether a respondent had the "correct" ideology guess on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no 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. "Correctness" was calculated using predicted ideology of candidate profile from split-sample, and profiles in the 0.4-0.6 range are excluded. Respondents who are "Sure" either expressed they were "very sure" or "somewhat sure" of their guess.

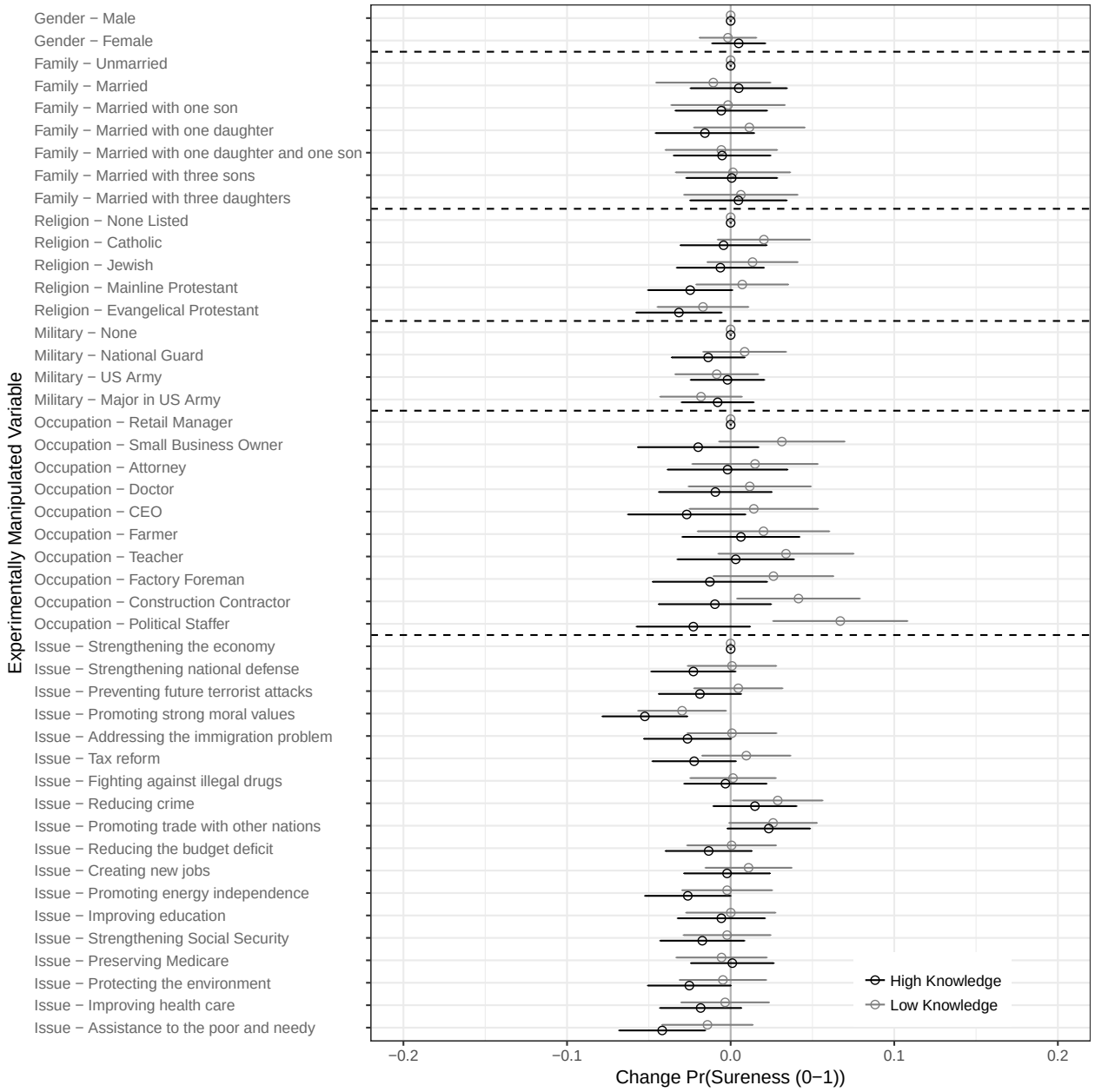

Figure XIV: **Sureness of Respondents**: Estimates are OLS regressing a categorical measure of sureness of party guessing on all factor levels. Standard errors are clustered on the respondent, with error bars displaying 95% confidence intervals. Estimates with no error bars are the excluded levels of each experimental factor. Issues are coded as present if they were in either the first, second, or third issue priority for the candidate. Respondents who are "Sure" either expressed they were "very sure" or "somewhat sure" of their guess.

Table IV: **Regressing Republican Guesses on Issues and Interaction with Republican Respondents**

	Coefficient	SE
Assistance to the poor and needy	-0.325	0.038
Assistance to the poor and needy x Rep Respondent	-0.057	0.066
Creating new jobs	-0.033	0.043
Creating new jobs x Rep Respondent	-0.056	0.072
Fighting against illegal drugs	-0.040	0.042
Fighting against illegal drugs x Rep Respondent	0.015	0.066
Improving education	-0.165	0.044
Improving education x Rep Respondent	-0.069	0.070
Improving health care	-0.154	0.043
Improving health care x Rep Respondent	-0.041	0.070
Preserving Medicare	-0.143	0.041
Preserving Medicare x Rep Respondent	0.029	0.070
Preventing future terrorist attacks	0.030	0.044
Preventing future terrorist attacks x Rep Respondent	-0.021	0.067
Promoting energy independence	-0.065	0.042
Promoting energy independence x Rep Respondent	-0.001	0.068
Promoting strong moral values	0.155	0.042
Promoting strong moral values x Rep Respondent	-0.140	0.067
Promoting trade with other nations	-0.036	0.043
Promoting trade with other nations x Rep Respondent	-0.111	0.069
Protecting the environment	-0.206	0.042
Protecting the environment x Rep Respondent	-0.132	0.068
Reducing crime	0.018	0.041
Reducing crime x Rep Respondent	-0.082	0.069
Reducing the budget deficit	0.072	0.042
Reducing the budget deficit x Rep Respondent	-0.094	0.068
Strengthening national defense	0.144	0.041
Strengthening national defense x Rep Respondent	-0.012	0.063
Strengthening Social Security	-0.218	0.040
Strengthening Social Security x Rep Respondent	0.082	0.068
Strengthening the economy	-0.108	0.042
Strengthening the economy x Rep Respondent	0.028	0.070
Tax reform	0.022	0.044
Tax reform x Rep Respondent	-0.082	0.069
Rep Respondent	0.194	0.047
Constant	0.504	0.030

NOTE: The results in this Table match the model in Figure 3(a), except with included interactions for respondents' own partisanship.

Table V: **Regressing Republican Guesses on Issues and Interaction with High-Knowledge Respondents**

	Coefficient	SE
Assistance to the poor and needy	-0.290	0.044
Assistance to the poor and needy x High-Knowledge	-0.120	0.061
Creating new jobs	-0.101	0.050
Creating new jobs x High-Knowledge	0.067	0.069
Fighting against illegal drugs	-0.111	0.045
Fighting against illegal drugs x High-Knowledge	0.121	0.065
Improving education	-0.148	0.047
Improving education x High-Knowledge	-0.065	0.068
Improving health care	-0.147	0.048
Improving health care x High-Knowledge	-0.046	0.068
Preserving Medicare	-0.087	0.045
Preserving Medicare x High-Knowledge	-0.130	0.066
Preventing future terrorist attacks	-0.004	0.047
Preventing future terrorist attacks x High-Knowledge	0.044	0.067
Promoting energy independence	-0.034	0.047
Promoting energy independence x High-Knowledge	-0.061	0.066
Promoting strong moral values	0.064	0.047
Promoting strong moral values x High-Knowledge	0.061	0.065
Promoting trade with other nations	-0.043	0.047
Promoting trade with other nations x High-Knowledge	-0.066	0.067
Protecting the environment	-0.205	0.047
Protecting the environment x High-Knowledge	-0.115	0.066
Reducing crime	-0.052	0.046
Reducing crime x High-Knowledge	0.030	0.066
Reducing the budget deficit	-0.031	0.047
Reducing the budget deficit x High-Knowledge	0.137	0.066
Strengthening national defense	0.074	0.046
Strengthening national defense x High-Knowledge	0.115	0.063
Strengthening Social Security	-0.144	0.046
Strengthening Social Security x High-Knowledge	-0.076	0.065
Strengthening the economy	-0.083	0.047
Strengthening the economy x High-Knowledge	-0.041	0.068
Tax reform	-0.036	0.048
Tax reform x High-Knowledge	0.047	0.068
High-Knowledge	0.048	0.047
Constant	0.554	0.033

NOTE: The results in this Table match the model in Figure 3(b), except with included interactions for respondents' political knowledge.

References

ABC News/Washington Post. 2010. "August Monthly Poll – Political Parties/Elections/Muslim Religious Center in New York City/Terrorism." Accessed at the Roper Center.