Online Appendix

Disputed Ownership: Parties, Issues, and Traits in the Minds of Voters*

Stephen N. Goggin
San Diego State University
stephen.goggin@sdsu.edu

Alexander G. Theodoridis
UC Merced
atheodoridis@ucmerced.edu

*Please address correspondence to stephen.goggin@sdsu.edu or atheodoridis@ucmerced.edu. Replication data available on the Harvard Dataverse at `http://dx.doi.org/10.7910/DVN/TYD3EC`.

Question Wording for Party Reputation Trait Ownership

Respondents were shown the following instructions, followed by the traits presented in the results, with results recorded on a 7-point Likert scale.

> Below is a list of words and phrases people may use to describe political figures. Please tell us how well you think each word or phrase describes a typical Republican candidate by choosing a number between 0 and 6 from the range below. Choosing 0 indicates that the description does not fit the candidate well at all; Choosing 6 indicates that the description fits the candidate extremely well.

Question Wording for Party Reputation Issue Ownership

Respondents were shown the following instructions, followed by the issue domains presented in the results, with results recorded on a 7-point Likert scale.

> There are a number of important issues that we expect elected officials from both political parties to handle. We're interested in how well you think a typical [Democratic OR Republican] candidate handles issues in the following areas. For the following issues, please indicate how well you think a typical [Democratic OR Republican] candidate handles that specific issue.

Candidate Vignettes for Trait Ownership Experiment

Depending on the randomized candidate type, the vignette that described the candidate took two forms, with an identical preamble:

> Please read the following website description of a **[insert party]** candidate for Congress, whose name we have removed. After you read it, we will ask for your initial impressions of the candidate. It is important that you read it carefully.

For a more stereotypically Democratic candidate:

> This candidate had a decorated career in the United States Navy. They have served on the board of a number of nonprofit organizations and charities. The candidate was most recently the CEO of one of the state's largest companies, overseeing a workforce of several thousand and a period of rapid growth for the company. The candidate travels frequently with members of their community to serve underprivileged and needy communities. The candidate **[insert party]** has previously served on the City Council, and currently serves in the State Legislature.

For a more stereotypically Republican candidate:

> This candidate had a decorated career in the United States Navy, rising to the rank of Captain. They have served on the board of a number of nonprofit organizations. The candidate was most recently the CEO of one of the state's largest companies, leading a workforce of several thousand and a period of rapid growth for the company.

The candidate is active in their church, and leads mission trips with members of their community. The candidate **[insert party]** has previously served on the City Council, and currently serves in the State Legislature.

Followed by the trait battery:

Below is a list of words and phrases people may use to describe political figures. Please tell us how well you think each word or phrase describes the candidate about whom you just read by choosing a number between 0 and 6 from the range below. Choosing 0 indicates that the description does not fit the candidate well at all; Choosing 6 indicates that the description fits the candidate extremely well.

Candidate Vignettes for Issue Ownership Experiment

A preamble on the first page of the study:

On the next page, you will be presented with some information about a candidate for Congress. This information is pulled from a description of the candidate on their own website.

The main vignette text:

The candidate is **[party-text]** running for a seat in Congress. He has served several years in the State Legislature. While in the legislature, he has worked hard on a number of policy areas, as well as efforts intended to grow the state's economy. In committees, he has focused his time on policy related to **[issue-text]**. Before he entered the legislature, he **[pers-text]**. He is a proud father of his son and daughter. The candidate has argued that his experience on a variety of issues, as well as his personal background, make him ideally suited to represent his district in Congress.

The question (issues were presented in a grid, with respondents responding on a 1-7 scale from "Not well at all" to "Extremely well"):

Members of Congress routinely have to work on a variety of policies. How well do you think the candidate described above would handle the following issues?

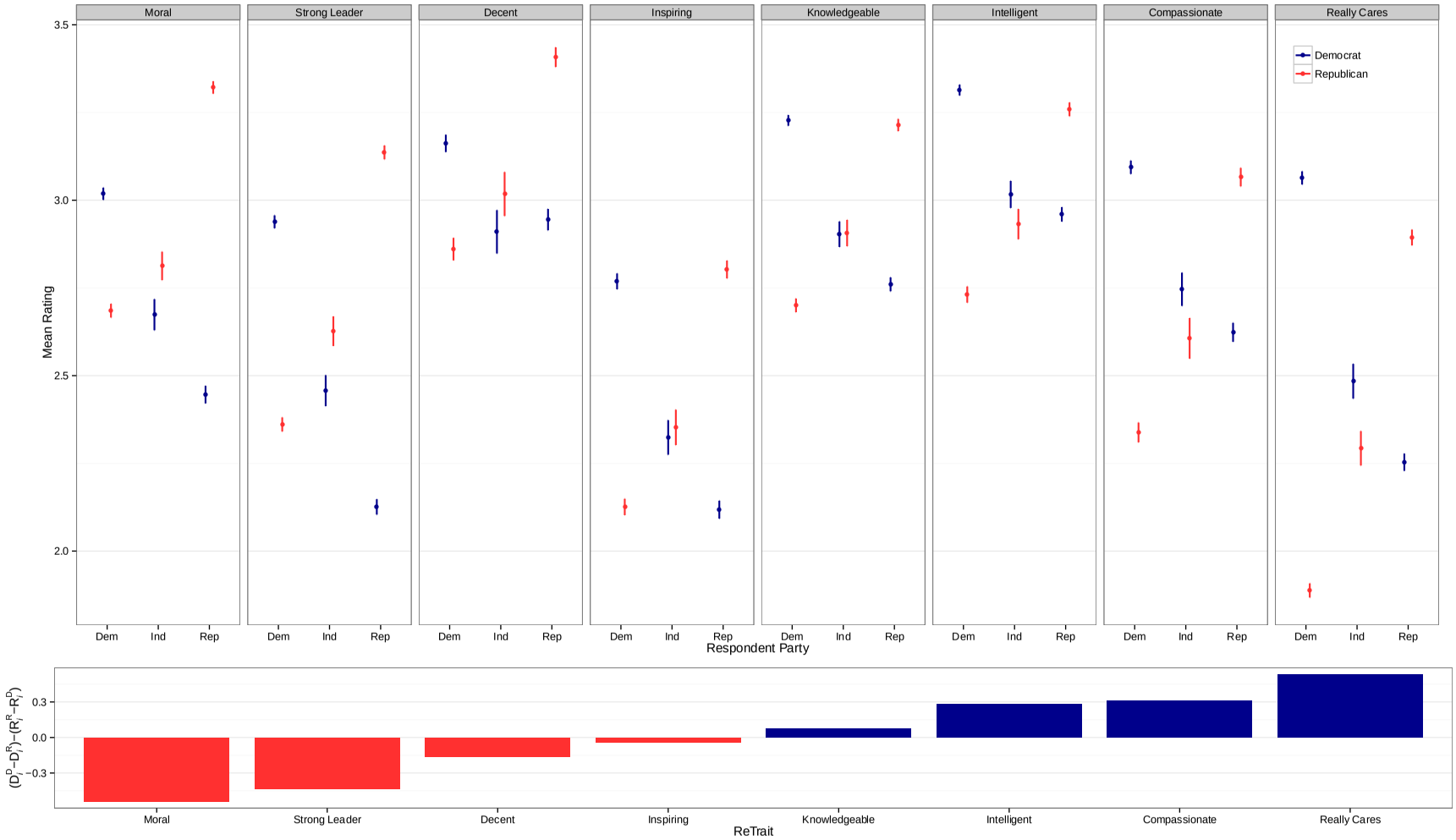
Where the three experimentally manipulated text boxes contained:
[party-text] = "a Republican", "a Democrat", or NO TEXT
[issue-text] = "national defense, tax policy, and immigration" or "the environment, poverty, and education"
[pers-text] = "served in the United States Army. After his time in the Army, he opened a small business chain." or "served on a local school board. He also volunteers multiple times a week at a local soup kitchen and shelter."

Ownership Metric Applied to Descriptive Trait Differences at the Presidential Level

Trait	**Ownership**	**95% CI**	$(D_i^D - D_i^R)$	$(R_i^R - R_i^D)$
Really Cares	0.485	.452 to .516	1.176	0.640
Compassionate	0.411	.367 to .456	0.745	0.283
Intelligent	0.233	.201 to .264	0.583	0.299
Knowledgeable	0.023	-.007 to .051	0.527	0.454
Inspiring	-0.006	-.047 to .035	0.629	0.584
Decent	-0.070	-.121 to -.016	0.301	0.320
Strong Leader	-0.483	-.515 to -.453	0.578	1.010
Moral	-0.593	-.626 to -.560	0.333	0.875

Table 1: Descriptive Evidence of Trait Ownership

Traits are ranked from most Democratic to most Republican owned. Variables are coded 1-4, with 4 indicating it describes the candidate "extremely well," while 1 indicates that it describes the candidate "not well at all." The 95% confidence interval was obtained by bootstrapping the ownership estimate 10000 times.



NOTE: The error bar plot shows point estimates and 95-percent confidence intervals for mean trait rating in of Democratic and Republican candidates by respondent party ID. The bar plot illustrates the difference-in-difference central to our measure of ownership for each trait. Traits are ordered by relative "ownership."

Figure 1: Trait ratings by candidate party label and respondent party ID for descriptive differences

Candidate Stereotyping Trait Ownership - Raw Overall Experimental Results

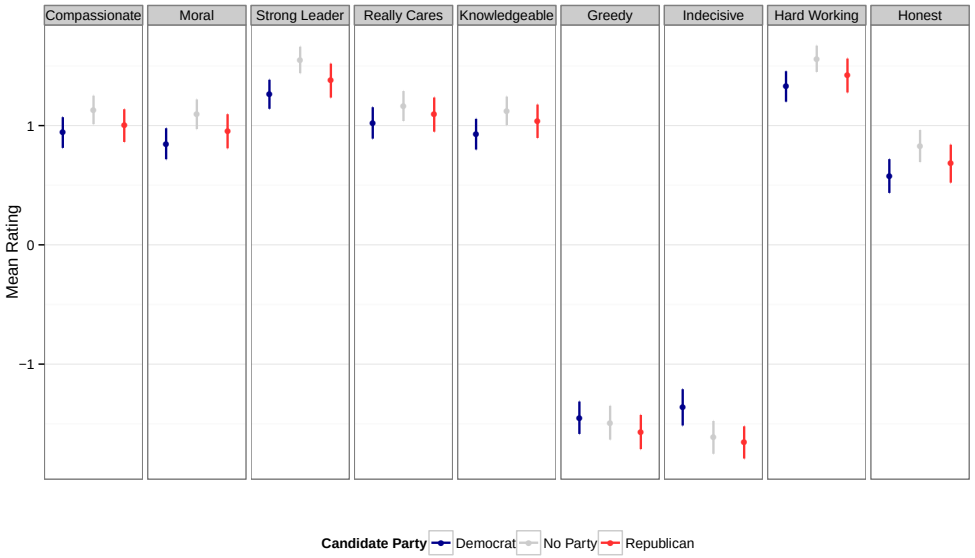


Figure 2: Overall trait ratings by candidate party label

Candidate Stereotyping Trait Ownership - Variation by Vignette Type on Trait Ratings

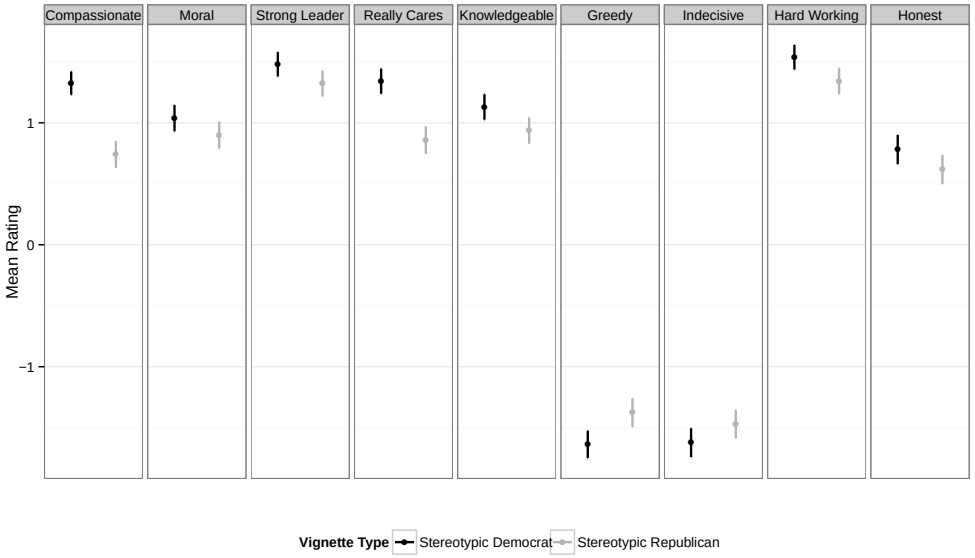


Figure 3: Overall trait ratings by vignette type

Candidate Stereotyping Trait Ownership - Trait Ratings by Both Experimental Manipulations

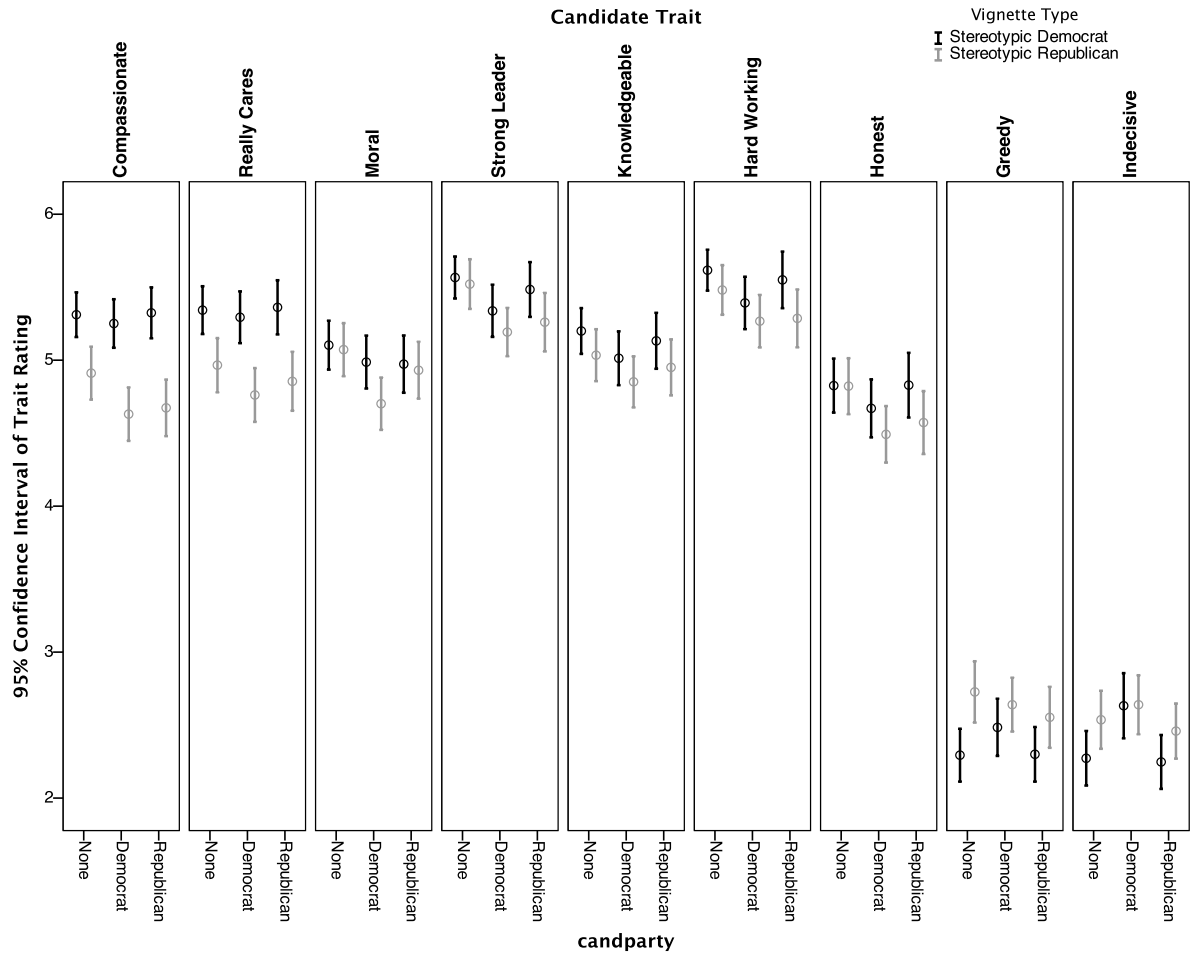


Figure 4: Trait Ratings by Vignette Type and Candidate Party Label in Candidate Stereotyping Experiment

Candidate Stereotyping Issue Ownership - Issue Competency Ratings by Both Experimental Manipulations

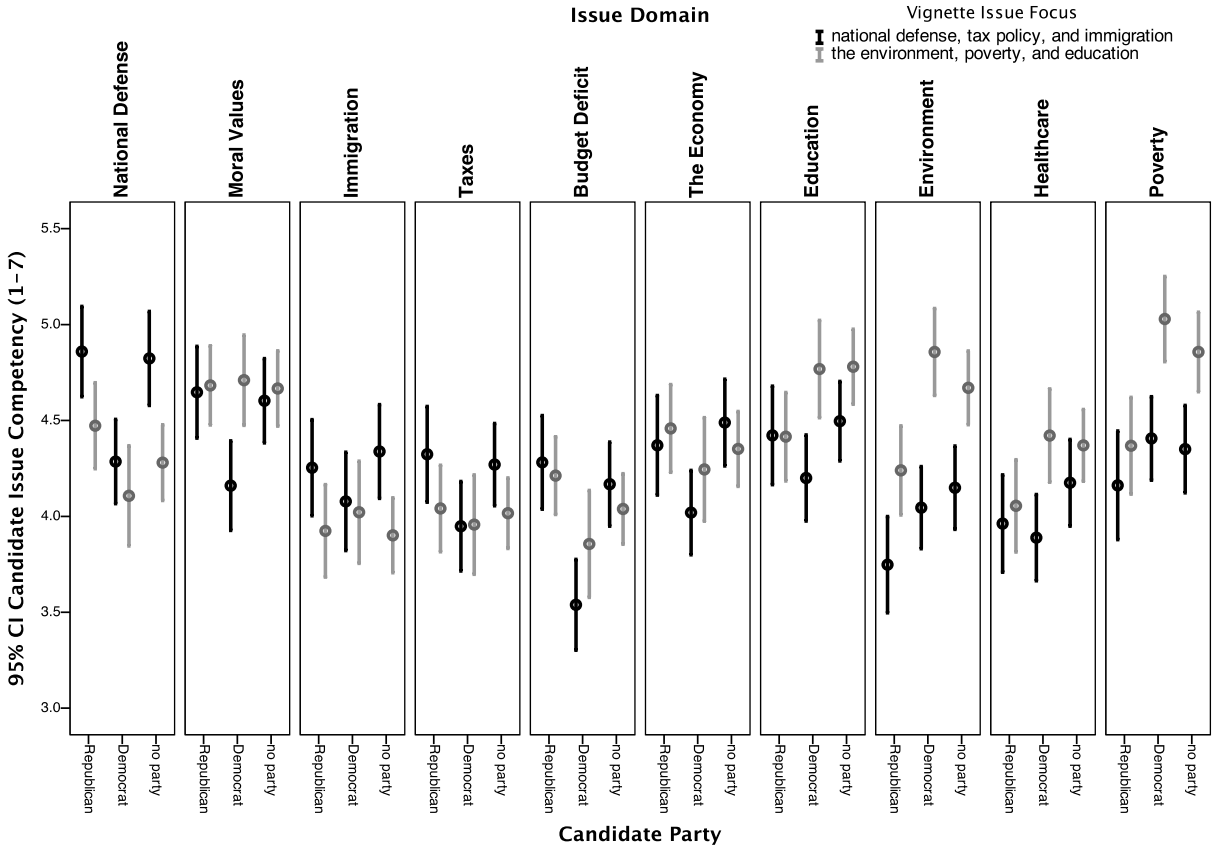


Figure 5: Issue Competency Ratings by Vignette Type and Candidate Party Label in Candidate Stereotyping Experiment

Simulation Results: Estimate Sensitivity to Trait/Issue Scale Choices and Mean-Deviation

To address the concern that our results are sensitive to the particular issues and traits included in our scales, we conducted a sensitivity analysis in which issues and traits were dropped at random from the scales. By doing so, we can see how sensitive our estimates are to the mean-deviation part of our measure.

Importantly, the 95% Confidence Intervals are for the uncertainty generated by the random inclusion/exclusion of particular traits/issues. They do not capture the inherent variability in the measures, which are captured in the confidence intervals in the Tables in the main text. For computational tractability, these results simulate the uncertainty caused by issue/trait selection only.

Because the number of issues/traits varied in each survey and each experiment, the number we dropped varied slightly. In all cases, we dropped roughly one-third of the issues/traits, as well as a second simulation in which roughly two-thirds of the issues/traits were dropped. The exact number dropped are noted. In all cases, the 95% Confidence Intervals are generated by bootstrapping the estimates 10,000 times.

As can be seen in Table 2, dropping issues/traits from the scales does not change the pattern of results significantly. Nearly all of the hypothesized owned traits/issues are still significant, while a few items with small magnitudes of ownership do, in fact, lose their significance. Most importantly, however, it is clear that the general pattern of results does not change, even as we drop roughly two-thirds of the items from the issue or trait battery.

Party Reputation Trait	Ownership	Raw Diff	Drop 2 95% CI Lower	Drop 2 95% CI Upper	Drop 5 95% CI Lower	Drop 5 95% CI Upper
Strong Leader	-0.899	-0.969	-1.180	-0.505	-1.662	-0.240
Moral	-0.790	-0.860	-1.072	-0.397	-1.554	-0.132
Hard-Working	-0.481	-0.551	-0.762	-0.087	-1.244	0.178
Knowledgeable	-0.286	-0.356	-0.568	0.107	-1.050	0.372
Honest	-0.073	-0.143	-0.354	0.321	-0.836	0.586
Inspiring	0.166	0.096	-0.115	0.560	-0.597	0.825
Really Cares	1.042	0.972	0.760	1.435	0.278	1.700
Compassionate	1.321	1.251	1.039	1.715	0.557	1.979

Candidate Stereotyping Trait	Ownership	Raw Diff	Drop 2 95% CI Lower	Drop 2 95% CI Upper	Drop 4 95% CI Lower	Drop 4 95% CI Upper
Knowledgeable	-0.127	-0.054	-0.172	-0.091	-0.210	-0.035
Compassionate	-0.098	-0.025	-0.143	-0.062	-0.181	-0.007
Really Cares	-0.050	0.024	-0.095	-0.014	-0.133	0.042
Hard-Working	0.027	0.101	-0.018	0.063	-0.055	0.119
Moral	0.068	0.142	0.023	0.104	-0.015	0.160
Honest	0.071	0.144	0.026	0.107	-0.012	0.163
Strong Leader	0.109	0.182	0.064	0.145	0.026	0.201

Party Reputation Issue	Ownership	Raw Diff	Drop 5 95% CI Lower	Drop 5 95% CI Upper	Drop 10 95% CI Lower	Drop 10 95% CI Upper
National Defense	-1.968	-2.490	-2.368	-1.571	-2.767	-1.156
Terrorism	-1.713	-2.234	-2.112	-1.316	-2.512	-0.901
Foreign Affairs	-0.952	-1.474	-1.352	-0.555	-1.751	-0.140
Crime	-0.820	-1.342	-1.220	-0.423	-1.619	-0.008
Budget Deficit	-0.696	-1.217	-1.095	-0.299	-1.495	0.116
The Economy	-0.283	-0.804	-0.682	0.114	-1.081	0.530
Taxes	-0.277	-0.799	-0.677	0.120	-1.076	0.535
Immigration	-0.099	-0.620	-0.498	0.298	-0.898	0.714
Jobs	-0.043	-0.565	-0.443	0.353	-0.842	0.769
Energy	0.454	-0.068	0.054	0.851	-0.345	1.266
Healthcare	0.875	0.353	0.475	1.271	0.076	1.687
Education	0.982	0.460	0.582	1.379	0.183	1.794
Social Security	1.111	0.590	0.711	1.508	0.312	1.923
Environment	1.705	1.183	1.305	2.102	0.906	2.517
Poverty	1.724	1.202	1.324	2.121	0.925	2.536

Candidate Stereotyping Issue	Ownership	Raw Diff	Drop 3 95% CI Lower	Drop 3 95% CI Upper	Drop 6 95% CI Lower	Drop 6 95% CI Upper
Budget Deficit	-0.932	-1.096	-1.197	-0.650	-1.487	-0.409
The Economy	-0.690	-0.854	-0.955	-0.408	-1.246	-0.168
National Defense	-0.636	-0.801	-0.901	-0.355	-1.192	-0.114
Taxes	-0.288	-0.453	-0.553	-0.007	-0.844	0.234
Moral Values	-0.232	-0.397	-0.497	0.049	-0.788	0.290
Immigration	-0.093	-0.257	-0.357	0.189	-0.648	0.430
Education	0.252	0.087	-0.013	0.533	-0.304	0.774
Healthcare	0.416	0.251	0.151	0.697	-0.140	0.938
Poverty	0.958	0.794	0.693	1.240	0.402	1.480
Environment	1.246	1.082	0.981	1.528	0.690	1.768

NOTE: Ownership is our mean-deviated ownership estimate. "Raw Diff" represents our ownership estimate without mean-deviation. The confidence intervals represent our mean-deviated ownership estimate when a particular number of traits/issues are dropped from the battery in the mean-deviation. Note that these confidence intervals do not include the additional uncertainty in the measure itself, merely the additional variance introduced by the random inclusion/exclusion of particular traits/issues.

Table 2: Simulation Results: Estimate Sensitivity to Trait/Issue Choices and Mean-Deviation

Trait	**Ownership**	**95% CI**	$D_i^D - D_i^R$	$R_i^R - R_i^D$
Compassionate	1.334	1.137 to 1.459	2.571	1.320
Really Cares	1.055	.965 to 1.268	2.856	1.884
(Not) Greedy	0.737	.452 to .936	2.058	1.404
Inspiring	0.179	.030 to .315	2.357	2.260
Honest	-0.060	-.131 to .148	2.015	2.158
Knowledgeable	-0.273	-.465 to -.160	1.695	2.051
Hard-Working	-0.468	-.564 to -.248	1.528	2.079
(Not) Indecisive	-0.840	-1.245 to -.689	0.258	1.182
Moral	-0.777	-.880 to -.587	1.680	2.541
Strong Leader	-0.886	-1.026 to -.703	1.418	2.386

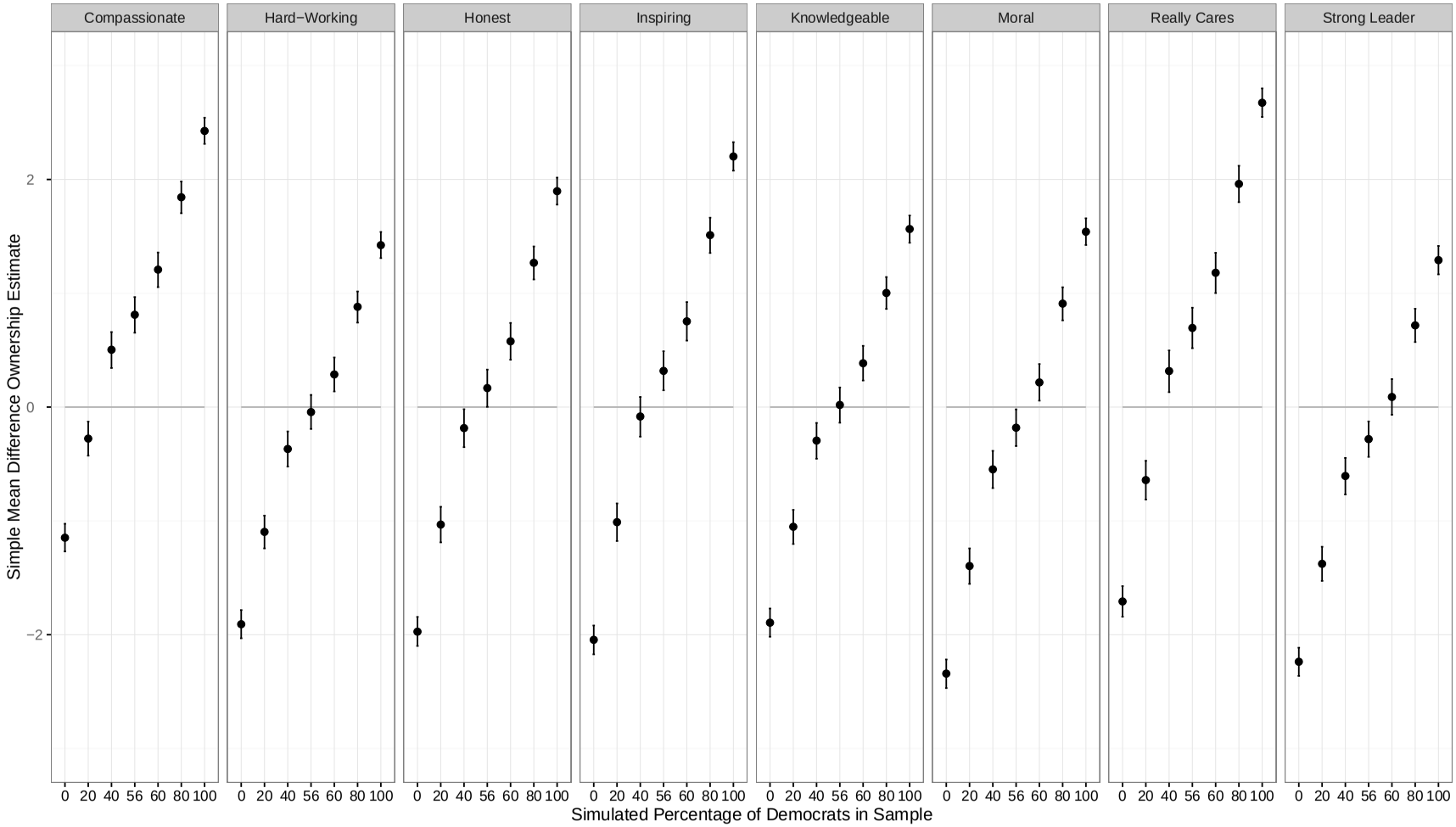
Table 3: Party Reputation of Traits: Negative Traits Included

$* = p < .05$ against the null hypothesis of no ownership. Traits are ranked from most Democratic to most Republican owned, as positive numbers indicate Democratic ownership and negative numbers indicate Republican ownership. Variables are coded -3 to 3, with 3 indicating that it describes the candidate "extremely well," while a -3 indicates that it describes the candidate "not well at all", with the two negative traits reverse-scored The 95% confidence interval was obtained by bootstrapping the ownership estimate 10000 times.

Trait	**Ownership**	**95% CI**	$D_i^D - D_i^R$	$R_i^R - R_i^D$
(Not) Greedy	0.117	-.226 to .457	0.478	0.726
Really Cares	0.083	-.134 to .302	0.792	1.075
Compassionate	0.074	-.156 to .303	0.728	1.019
Moral	0.038	-.188 to .265	0.746	1.073
Hard-Working	0.007	-.216 to .223	0.702	1.061
Knowledgeable	0.003	-.215 to .225	0.785	1.147
Honest	-0.004	-.263 to .252	0.966	1.336
Strong Leader	-0.031	-.230 to .168	0.778	1.174
(Not) Indecisive	-0.287	-.684 to .105	0.164	0.817

Table 4: Candidate Stereotyping of Traits: Negative Traits Included

$* = p < .05$ against the null hypothesis of no ownership. Traits are ranked from most Democratic to most Republican owned, as positive numbers indicate Democratic ownership and negative numbers indicate Republican ownership. Variables are coded -3 to 3, with 3 indicating that it describes the candidate "extremely well," while a -3 indicates that it describes the candidate "not well at all", with the two negative traits reverse-scored The 95% confidence interval was obtained by bootstrapping the ownership estimate 10000 times.



NOTE: Ownership measure created by simply subtracting the mean trait rating for the typical Democratic candidate from the typical Republican candidate, with all trait ratings scaled -3 to 3. In our unweighted YouGov sample, 56% of partisan respondents were Democratic (hence the 56% in the figure), while 47% of all respondents were Democratic. 16% of the sample was independent. Simulated samples were obtained by holding constant the 16% portion of independents and resampling the share of Democrats at 0%, 20%, 40%, 60%, 80%, and 100% of the partisan sample, with Republicans filling the remaining percent. Confidence intervals were obtained by bootstrapping this estimate 10,000 times.

Figure 6: Party Trait Reputations: Simple Mean Difference Measure with Simulated Sample Composition Variation