

Appendix for “How Moral Motives Link Party Stereotypes”

Table of Contents

Page 2.	Question Wording in Study 1
Page 3.	Cross-Pressure Rates in Study 1
Page 4.	Linking Issue and Trait Ownership in Study 1
Page 6.	Testing Differences Between Coefficients in Study 1
Page 7.	Issue-Trait Links Are Robust to Controls for Perceived Party Ideology
Page 9.	Testing for Moderating Effects of Political Knowledge in Study 1
Page 11.	Question Wording for Study 2
Page 13.	Details on Issue-Specific Ideology Measures
Page 14.	Linking Moral Concerns and Traits with Issue Ownership (Study 2)
Page 15.	Question Wording for Study 3
Page 16.	Details on Open-Ended Traits in Study 3
Page 17.	Testing the Issue-Trait Links with Open-Ended Responses (Study 3)
Page 19.	An Experimental Test of the Effects of Character on Issue Ownership (Auxiliary Study)

Question Wording in Study 1

Trait Ratings of Republicans

How well does each of the following words or phrases describe Republican politicians?

1. Compassionate
2. Fair-minded
3. Strong leaders
4. Patriotic
5. Wholesome
6. Intelligent
 - Not at all
 - Not too well
 - Somewhat well
 - Very well
 - Extremely well

Trait Ratings of Democrats

How well does each of the following words or phrases describe Democratic politicians?

7. Compassionate
8. Fair-minded
9. Strong leaders
10. Patriotic
11. Wholesome
12. Intelligent
 - Not at all
 - Not too well
 - Somewhat well
 - Very well
 - Extremely well

Party Issue Handling Perceptions

For each of the following issues, please tell us whether you think Democrats or Republicans would do a better job of dealing with that issue.

1. Poverty
2. Environment
3. National defense
4. Crime
 - Democrats
 - Republicans
 - Both about the same

Cross-Pressure Rates in Study 1

To confirm that the expected patterns of trait and issue ownership exist in this sample, I analyze how often partisans rate the opposing party as more able to handle an issue or as better exemplifying a trait. This approach overcomes problems with partisan imbalance in the sample (38% Democrats, 22% Republicans) and demonstrates that any patterns are not solely driven by independents. As expected, Republicans were more likely than Democrats to be cross-pressured on the Democrat-owned issues of poverty (R: 12%, D: 3%; $p < .001$) and the environment (R: 23%, D: 3%; $p < .001$). Similarly, Democrats were more likely than Republicans to be cross-pressured on the Republican-owned issues of crime (D: 11%, R: 1%; $p < .001$) and national defense (D: 14%, R: 3%; $p < .001$). Turning to traits, Republicans are more likely to be cross-pressured on compassion (R: 12%, D: 3%; $p < .001$), while Democrats are more likely to be cross-pressured on strength (D: 11%, R: 4%; $p < .001$) and patriotism (D: 11%, R: 1%; $p < .001$). There is no partisan difference in cross-pressuring on fairness, however (R: 4%, D: 4%; $p = .822$), consistent with the possibility that partisans may be interpreting the term in different ways. Notably, there are no differences in cross-pressure rates on intelligence, a trait that is not owned by either party (D: 3%, R: 4%; $p = .611$). Overall, the results largely fit with past findings on trait ownership, while adding data on two new trait dimensions. The dimension of fairness is not clearly owned. And patriotism, though ignored by past literature, is more clearly owned by Republicans than any other trait dimension.

Linking Issue and Trait Ownership in the 2016 CCES (Study 1)

	Environment	Poverty	Defense	Crime
Compassionate	0.461*** (0.090)	0.260** (0.094)	-0.169 (0.096)	-0.092 (0.094)
Fair-Minded	0.249* (0.113)	0.562*** (0.117)	0.121 (0.104)	0.118 (0.103)
Strong	-0.140 (0.102)	-0.079 (0.109)	0.320*** (0.087)	0.260** (0.088)
Patriotic	-0.069 (0.093)	0.048 (0.098)	0.504*** (0.092)	0.504*** (0.091)
Wholesome	0.170 (0.113)	0.193 (0.120)	0.200 (0.104)	0.276** (0.102)
Intelligent	0.304** (0.112)	0.200 (0.121)	0.218* (0.106)	0.026 (0.105)
Partisanship	0.092 (0.060)	0.246*** (0.063)	0.236*** (0.061)	0.209*** (0.061)
Ideology	0.382*** (0.110)	0.248* (0.113)	0.279** (0.101)	0.262** (0.099)
College	-0.329 (0.183)	-0.356 (0.188)	-0.074 (0.173)	-0.090 (0.171)
Male	0.015 (0.170)	0.194 (0.177)	0.474** (0.166)	0.340* (0.165)
African-American	0.724* (0.320)	-0.656 (0.401)	-0.285 (0.289)	-0.787** (0.286)
Hispanic	0.246 (0.346)	0.376 (0.358)	-0.474 (0.314)	-0.687* (0.308)
Asian	0.419 (0.428)	1.073** (0.413)	0.162 (0.406)	-0.871* (0.397)
Other Racial Identity	0.157 (0.405)	0.511 (0.422)	-1.149** (0.397)	-0.888* (0.390)
Cutpoint 1	1.483*** (0.372)	1.202** (0.379)	-0.055 (0.344)	-0.372 (0.349)
Cutpoint 2	3.557*** (0.397)	3.571*** (0.413)	2.699*** (0.368)	1.967*** (0.360)

R²

<i>N</i>	818	818	818	817
Standard errors in parentheses				
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$				

Testing Differences Between Coefficients in Study 1

In the main text, I tested the differences between coefficients in a set of simplified models. I report the full set of 32 tests derived from the full models reported in Table A1. The left-hand panel of the table below shows tests of differences between coefficients *within* a particular model. For example, the first row shows that the effect of compassionate is significantly larger than the effect of strong leader in the environment model. The right-hand panel tests for differences between coefficients *across* different models. For example, the first row shows that the effect of compassionate is significantly larger in the environment model than in the defense model. Significant coefficients are shown in bold. Of the 32 tests, 27 are statistically significant. Of the 5 tests that are not significant, 4 involve fairness, again suggesting that this trait is not clearly owned.

Comparing Traits Within a Model			Comparing a Trait Across Models		
Model	Coefficients	p-value	Coefficient	Models	p-value
Environment	Compassionate vs. Strong leader	0.0000	Compassionate	Environment vs. Defense	0.0000
Environment	Compassionate vs. Patriotic	0.0000	Compassionate	Environment vs. Crime	0.0000
Environment	Fair-minded vs. Strong leader	0.0186	Compassionate	Poverty vs. Defense	0.0058
Environment	Fair-minded vs. Patriotic	0.0471	Compassionate	Poverty vs. Crime	0.0015
Poverty	Compassionate vs. Strong leader	0.0204	Fair-minded	Environment vs. Defense	0.4133
Poverty	Compassionate vs. Patriotic	0.1151	Fair-minded	Environment vs. Crime	0.4306
Poverty	Fair-minded vs. Strong leader	0.0002	Fair-minded	Poverty vs. Defense	0.0056
Poverty	Fair-minded vs. Patriotic	0.0021	Fair-minded	Poverty vs. Crime	0.0083
Defense	Compassionate vs. Strong leader	0.0058	Strong leader	Environment vs. Defense	0.0022
Defense	Compassionate vs. Patriotic	0.0000	Strong leader	Environment vs. Crime	0.0003
Defense	Fair-minded vs. Strong leader	0.3179	Strong leader	Poverty vs. Defense	0.0212
Defense	Fair-minded vs. Patriotic	0.0087	Strong leader	Poverty vs. Crime	0.0061
Crime	Compassionate vs. Strong leader	0.0001	Patriotic	Environment vs. Defense	0.0000
Crime	Compassionate vs. Patriotic	0.0000	Patriotic	Environment vs. Crime	0.0000
Crime	Fair-minded vs. Strong leader	0.1624	Patriotic	Poverty vs. Defense	0.0016
Crime	Fair-minded vs. Patriotic	0.0103	Patriotic	Poverty vs. Crime	0.0034

Issue-Trait Links Are Robust to Controls for Perceived Party Ideology (Study 1)

	Environment	Poverty	Defense	Crime
Compassionate	0.416*** (0.094)	0.241* (0.097)	-0.112 (0.099)	-0.171 (0.101)
Fair-Minded	0.228 (0.116)	0.617*** (0.122)	0.240* (0.109)	0.185 (0.110)
Strong	-0.058 (0.109)	-0.091 (0.115)	0.232* (0.091)	0.336*** (0.091)
Patriotic	-0.007 (0.099)	0.005 (0.104)	0.380*** (0.095)	0.447*** (0.097)
Wholesome	0.212 (0.118)	0.199 (0.124)	0.301** (0.105)	0.198 (0.107)
Intelligent	0.237* (0.118)	0.172 (0.127)	0.057 (0.110)	0.218* (0.111)
Party Ideology	-0.177*** (0.043)	-0.027 (0.046)	0.161*** (0.043)	0.131** (0.042)
Partisanship	0.103 (0.065)	0.255*** (0.068)	0.147* (0.066)	0.176** (0.066)
Ideology	0.418*** (0.119)	0.238 (0.122)	0.329** (0.108)	0.359** (0.110)
College	-0.319 (0.193)	-0.289 (0.197)	-0.164 (0.180)	-0.073 (0.181)
Male	0.074 (0.183)	0.302 (0.188)	0.304 (0.176)	0.414* (0.177)
African-American	0.439 (0.363)	-0.693 (0.444)	-0.636* (0.311)	0.036 (0.312)
Hispanic	0.361 (0.383)	0.104 (0.400)	-0.608 (0.328)	-0.111 (0.333)
Asian	0.545 (0.459)	1.066* (0.440)	-0.822 (0.423)	0.387 (0.434)
Other Racial Identity	0.094 (0.433)	0.582 (0.454)	-0.769 (0.417)	-1.135** (0.424)
Cutpoint 1	1.318** (0.421)	1.259** (0.423)	-0.000 (0.391)	0.363 (0.390)

Cutpoint 2	3.327*** (0.443)	3.543*** (0.458)	2.270*** (0.406)	3.006*** (0.418)
R ²				
N	733	733	733	732

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Testing for Moderating Effects of Political Knowledge (Study 1)

	Democratic Issues	Republican Issues
Compassion & Fairness	0.253** (0.093)	-0.023 (0.096)
Strong & Patriotic	0.049 (0.095)	0.385*** (0.097)
Political Knowledge	0.012 (0.036)	0.078* (0.037)
Compassion & Fairness x Knowledge	0.039 (0.035)	0.027 (0.036)
Strong & Patriotic x Knowledge	-0.027 (0.036)	-0.028 (0.037)
Wholesome	0.057 (0.040)	0.095* (0.042)
Intelligent	0.066 (0.040)	0.010 (0.041)
Partisanship	0.115*** (0.025)	0.138*** (0.026)
Ideology	0.172*** (0.042)	0.194*** (0.043)
College	-0.139* (0.070)	-0.083 (0.072)
Male	0.089 (0.068)	0.178* (0.070)
African-American	0.010 (0.121)	-0.302* (0.124)
Hispanic	0.089 (0.132)	-0.258 (0.136)
Asian	0.195 (0.173)	-0.149 (0.178)
Other Racial Identity	0.115 (0.159)	-0.357* (0.164)
Constant	-1.409*** (0.154)	-0.933*** (0.158)
<i>R</i> ²	0.61	0.62
<i>N</i>	817	816

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Question Wording for Study 2

Issue Moral Relevance

When you think about the issue of [*poverty / health care / the environment / national defense / terrorism / crime*], to what extent are the following considerations relevant to your thinking?

1. Whether or not someone suffered emotionally
2. Whether or not the weak or vulnerable are cared for
3. Whether or not someone was cruel
4. Whether or not someone was denied his or her rights
5. Whether or not someone acted unfairly
6. Whether or not some people were treated differently than others
7. Whether or not someone's action showed love for America
8. Whether or not someone did something to betray America
9. Whether or not someone showed a lack of loyalty to America
10. Whether or not someone showed a lack of respect for authority
11. Whether or not someone conformed to the traditions of society
12. Whether or not an action caused chaos or disorder
 - Not at all relevant
 - Not too relevant
 - Slightly relevant
 - Somewhat relevant
 - Very relevant
 - Extremely relevant

Issue Trait Importance

When you think about the type of politician who would best handle the issue of [*poverty / health care / the environment / national defense / terrorism / crime*], how important is it for that politician to have each of the following traits?

1. Compassionate
2. Fair-minded
3. Tough
4. Patriotic
5. Intelligent
 - Not important at all
 - Not too important
 - Somewhat important
 - Very important
 - Extremely important

Democratic Issue Handling

How well do you think **Democrats** would do handling each of the following issues?

1. The environment
2. Poverty
3. Health care
4. National security
5. Terrorism
6. Crime
 - Terrible
 - Poor
 - Average
 - Good
 - Great

Republican Issue Handling

How well do you think **Republicans** would do handling each of the following issues?

1. The environment
2. Poverty
3. Health care
4. National security
5. Terrorism
6. Crime
 - Terrible
 - Poor
 - Average
 - Good
 - Great

Issue-Specific Ideology

How liberal or conservative are your own views on each of the following issues?

1. The environment
2. Poverty
3. Health care
4. National security
5. Terrorism
6. Crime
 - Very liberal
 - Somewhat liberal
 - Moderate
 - Somewhat conservative

- Very conservative

Details on Issue-Specific Ideology Measures

Respondents reported being significantly more conservative on Republican-owned issues ($M = 3.0$) than Democrat-owned issues ($M = 2.4$; $p < .001$). Both scales were significantly related to general ideological identification (Republican-owned issue: $r = .71$, $p < .001$; Democrat-owned: $r = .70$, $p < .001$) and to each other ($r = .66$, $p < .001$).

Linking Moral Concerns and Traits with Issue Ownership (Study 2)

	Comparative Ratings of Issue Ownership			
<i>Moral Foundations Relevance Ratings</i>				
Care & Fairness Foundations	-0.13 (.09)	-0.10 (.08)	-	-
Authority & Loyalty Foundations	0.37 *** (.07)	0.26 *** (.07)	-	-
<i>Moral Character Importance Ratings</i>				
Care & Fairness Traits	-	-	-0.37 *** (.09)	-0.22 * (.09)
Authority & Loyalty Traits	-	-	0.35 *** (.08)	0.26 *** (.07)
Intelligence	-	-	-0.01 (.12)	0.02 (.11)
Issue-Level Ideology		0.57 *** (.09)		0.54 *** (.09)
Constant	-1.34 ** (.40)	-2.53 *** (.43)	-0.20 (.66)	-2.00 *** (.65)
Respondents	434	434	434	434
Observations	868	868	868	868
R-squared	0.19	0.46	0.25	0.49
Issue Fixed Effects	Yes	Yes	Yes	Yes
Respondent Fixed Effects	Yes	Yes	Yes	Yes

Question Wording for Study 3

Issue Trait Importance

When you think about the type of politician who would best handle the issue of [*poverty / health care / the environment / national defense / terrorism / crime*], what character traits are most important for that politician to have? Please list the first three that come to mind.

Democratic Issue Handling

How well do you think **Democrats** would do handling each of the following issues?

7. The environment
8. Poverty
9. Health care
10. National security
11. Terrorism
12. Crime
 - Terrible
 - Poor
 - Average
 - Good
 - Great

Republican Issue Handling

How well do you think **Republicans** would do handling each of the following issues?

7. The environment
8. Poverty
9. Health care
10. National security
11. Terrorism
12. Crime
 - Terrible
 - Poor
 - Average
 - Good
 - Great

Details on Open-Ended Traits in Study 3

The most common traits classified under the Care foundation were compassion (14%), caring (12%), compassionate (10%), empathy (10%), understanding (6%), and empathetic (5%). The most common traits classified under Fairness were honesty (19%), honest (18%), fair (9%), fairness (5%), and integrity (5%). The most common traits classified under Loyalty were loyal (19%), patriotic (13%), loyalty (12%), patriotism (10%), and patriot (6%). The most common traits classified under Authority were strong (18%), tough (7%), and strength (5%).

Consistent with past work, conservatives were less likely than liberals to mention Care ($r = -.17, p < .001$) traits, but more likely to mention Authority ($r = .10, p = .004$), and Loyalty traits ($r = .15, p < .001$). Conservatives were also a bit more likely to mention Fairness ($r = .08, p = .029$) and less likely to mention competence ($r = -.09, p = .011$).

Testing the Issue-Trait Links with Open-Ended Responses (Study 3)

	Full Sample	Full Sample	Low Knowledge Respondents	Interaction with Knowledge
Compassion	-0.613** (0.191)			
Fairness	-0.006 (0.241)			
Loyalty	0.326 (0.512)			
Authority	0.632** (0.207)			
Compassion & Fairness		-0.857* (0.342)	-0.557 (0.753)	-0.568 (0.768)
Loyalty & Authority		1.151** (0.398)	0.894 (0.826)	0.790 (0.921)
Competence	0.281 (0.181)	0.249 (0.183)	0.038 (0.475)	-0.040 (0.156)
Political Knowledge				-0.196 (0.297)
Compassion & Fairness x Knowledge				-0.889 (0.948)
Loyalty & Authority x Knowledge				0.887 (1.098)

Constant	-1.427 ^{***} (0.116)	-1.413 ^{***} (0.116)	-1.233 ^{***} (0.240)	-1.163 ^{***} (0.243)
Respondent Fixed Effects	Yes	Yes	Yes	No
Respondent Random Effects	No	No	No	Yes
Issue Fixed Effects	Yes	Yes	Yes	Yes
<i>N</i>	1583	1583	384	1565

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

An Experimental Test of the Effects of Character on Issue Ownership

The three studies reported in the main text provide consistent evidence for a link between issue and trait ownership, but cannot determine the direction of causation. In this auxiliary study, I provide evidence that traits can cause perceptions of issue handling.¹ To do so, I embedded an experiment in a survey conducted on a sample of 1,187 students drawn from required introductory political science courses at a large public university in the south.

Due to the difficulty of manipulating perceptions of the parties, I chose instead to utilize a fictitious candidate (e.g., Funk 1997). Respondents were told that researchers were interested in what they thought of an individual, Brad Johnson, who was considering running for political office. The survey included a short description of Johnson (84-86 words).

Two features of the candidate were manipulated in a 2 (character: leadership vs. compassion) x 2 (partisanship: Democrat vs. Republican) factorial design. In the compassion condition, Johnson's previous coworkers described him as "a compassionate leader who is always willing to listen to others' perspectives and needs." In the leadership condition, his coworkers described him as "a strong leader who is always willing to make tough decisions that will benefit the team." Thus, both conditions portray him positively, but one emphasizes a Democrat-owned trait, while the other emphasizes a Republican-owned trait.

For the primary outcomes, respondents were asked to rate how well Johnson would do handling several issues. Three issues are Democrat-owned (environment, poverty, health care) and were averaged to create a Democratic issue ownership index ($\alpha = .75$). Three issues are Republican-owned (national security, crime, terrorism) and were also averaged to create a Republican issue

¹ While I expect a bi-directional relationship, I focus on the effect of traits on issue competence given that previous literature has focused primarily on the effect of issues on traits.

ownership index ($\alpha = .78$). As a manipulation check, respondents rated Johnson's character on three indicators of compassion (compassionate, empathetic, caring) and three indicators of leadership (tough, assertive, commands respect). I averaged each set of traits to create measures of compassion ($\alpha = .83$) and leadership ($\alpha = .73$) that range from 1 (not at all) to 5 (extremely well).

Results

Trait ratings of Brad Johnson show that the manipulation was successful. As expected, Johnson was rated as more compassionate in the compassion condition than in the leadership condition (difference = .16, $p < .001$). And he was rated as a weaker leader in the compassion condition than in the leadership condition (difference = -.34, $p < .001$). Thus, the manipulation worked as expected, though notably the effects were rather small in magnitude and the manipulation had a stronger effect on leadership than on compassion.

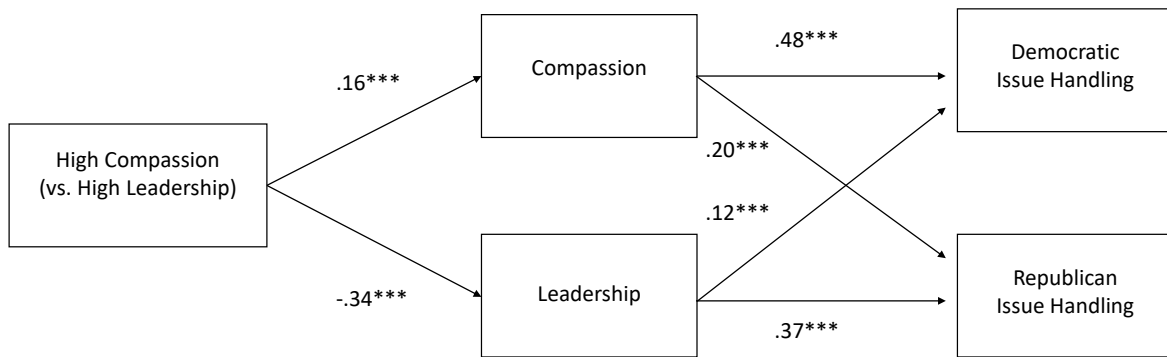
As the most direct test, I subtracted competence on Republican issues from competence on Democratic issues to create a relative competence score. In the leadership condition, Johnson score about even on the two issues ($M = 0.04$), but in the compassion condition, Johnson scored relatively better on Democrat-owned issues than Republican-owned issues ($M = 0.19$; $t(1,184) = 3.24$, $p = .001$). As expected, candidate partisanship significantly affected relative issue-handling ($t(1,184) = 6.77$, $p < .001$), but there was no significant interaction between the character condition and candidate partisanship ($p = .309$).

Of course, because leadership and compassion were not manipulated independently, it is unclear whether the effects are driven by a single trait. To unpack the effects of the treatment, I estimated a system of linear regression equations with multiple mediators between the treatment and the two outcomes (Preacher and Hayes 2008).² Specifically, perceived compassion and perceived

² As an alternative approach, I estimated a pair of multiple mediation models using the mediation package in R (Tingley et al. 2014). The results are substantively unchanged, but the structural model is more flexible, so I present it here.

leadership are both treated as mediators of the treatment on each of the two issue competence variables. Each stage of the model also controls for candidate partisanship, respondent partisanship, and the interaction between the two.³ The effects of interest are displayed in Figure A1. As expected, perceptions of compassion are strong predictors of competence on Democrat-owned issues ($b = .48, p < .001$) and a significantly weaker predictor of competence on Republican-owned issues ($b = .20, p < .001$). Perceptions of leadership, on the other hand, are a strong predictor of competence on Republican-owned issues ($b = .37, p < .001$), but a significantly weaker predictor of competence on Democrat-owned issues ($b = .12, p < .001$).⁴

Figure A1. The Effects of Character on Issue Handling



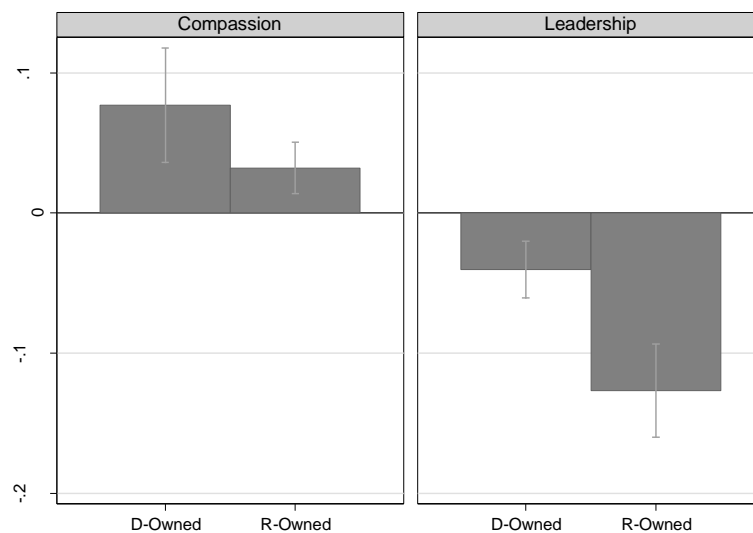
Using the system of equations, I can estimate how each trait dimension mediates the effects of the treatment on perceptions of issue handling (Preacher and Hayes 2008). The estimated mediating effects are shown in Figure 5. As expected, compassion mediated the effects of the treatment on Democrat-owned issues ($b = .08, p < .001$), but had a weaker mediating effect on Republican-owned issues ($b = .03, p < .001$). Leadership, on the other hand, had a large mediating

³ I also estimated an identical structural model that includes controls for respondent ideology, gender, and race in each stage of the model. The results are substantively unchanged and are available upon request.

⁴ The differences between each pair of coefficients were tested using a Wald test (both $ps < .001$).

effect for Republican-owned issues ($b = -.13, p < .001$), but a smaller effect for Democrat-owned issues ($b = -.04, p < .001$).⁵ Notably, the last stage of each model shows that after controlling for trait perceptions, the treatment exhibits no discernible effect on either dimension of issue competence (Democrat-owned: $b = -.01, p = .811$; Republican-owned: $b = -.02, p = .669$), suggesting that trait perceptions nearly fully account for the effect of the manipulation.

Figure A2. Mediating Effects of Compassion and Leadership on Issue Competence



Once again, an alternative interpretation is that character traits are simple ideological cues and that it is perceptions of the candidate’s ideology that are actually affecting issue handling. To test this claim, I reproduced the last stages of the model above by predicting each aspect of issue handling as a function of trait perceptions, experimental conditions, respondent partisanship, and the interaction between candidate and respondent partisanship. Then, in a second set of models, I included perceptions of the candidate’s ideology. Perceived candidate ideology significantly predicts issue handling in both models (in opposing directions), but inclusion of this variable does not

⁵ The mediating effects of leadership are negative due to the coding of the treatment variable (1 = high compassion, 0 = high leadership).

change any of the substantive conclusions described above. Thus, while perceptions of candidate ideology do appear to influence issue handling, ideology cannot explain away the effects of character.

Overall, the results demonstrate that trait perceptions have a causal influence on perceptions of issue handling. The trait profile of Brad Johnson influenced perceptions of his issue handling and these effects were mediated by trait perceptions. Moreover, compassion and leadership were uniquely linked to Democrat-owned and Republican-owned issue competence, consistent with the results reported in the main text. And once again, ideology cannot explain away these effects.