

Milestone 6

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1 Milestone 5 Components:

1.1 Overview of Paper

My replication paper will be looking at Michael Barber and Jeremy C. Pope's paper, "Does Party Trump Ideology? Disentangling Party and Ideology in America" which was published in the American Political Science Review in 2018. The paper tests whether citizens truly use their policy views to choose a partisan affiliation and if they see partisanship as more of a social identity. The paper asks: "how sincerely held are expressed political and policy opinions and are these opinions based on ideological convictions, or group loyalty?"¹ The authors use Trump's unusual presidency to answer these questions. Since President Trump is both the leader of the GOP as well as a president that endorses both liberal and conservative views, the authors test the effect of Trump's political stances on voters' political stances.

The authors' main hypothesis asserts that the influence of President Trump will demonstrate the existence of a large bloc of party loyalists in the electorate when his influence moves opinion in either a liberal or conservative direction based on his political cue. Those who are most likely to be party loyalists have a lack of knowledge about the party's traditional views and a lack of self-proclaimed "symbolic ideological commitment." Their null hypothesis is that Trump's cue has no effect on subgroups. They have four specific hypotheses that fall under their main hypothesis: 1. **Knowledge Hypothesis:** Only those with less knowledge should react to the cue and behave as party loyalists presumably because the knowledgeable gain little from the treatment (political cue). 2. **Partisan Hypothesis:** Strong party affiliates that share party with the cue-giver are more likely to be party loyalists. 3. **Approval Hypothesis:** Those who approve of the cue-giver should be more likely to be party loyalists. 4. **Symbolic Ideology Hypothesis:** Self-described conservatives should hold firm to their presumed beliefs and are less likely to be party loyalists because they stick with their self-described policy tenets.

These hypotheses are tested by running a variety of regressions on data collected from surveys. Subjects were split into two groups, control and treatment, and asked about 10 political issues with clear partisan positions. The authors chose questions that capture policy issues in which Trump has taken either a conservative stance or a liberal stance. The control group was asked if they agree with a policy. The treatment group was asked if they agree with a policy after being prompted that Trump endorses this policy. Using this data, the authors ran regressions that explained subjects' support of policies using their partisanship, approval of the president, political knowledge, and symbolic ideology. The authors conclude that all of their hypotheses hold true except the symbolic ideology hypothesis. They found that people who most strongly described themselves as conservative most strongly answered the Trump cues (both liberal and conservative).

All analysis for this paper is available at my Git hub profile and the original data is available on Data verse.²

Table 1: Interaction Models, Including Control Variables

	<i>Dependent variable:</i>			
	Support			
	Knowledge Party	Strength	Trump Approval	Ideology
	(1)	(2)	(3)	(4)
Liberal Treatment	0.130*** (0.028)	0.055 (0.038)	-0.038* (0.023)	-0.018 (0.033)
Knowledge	-0.029*** (0.003)	-0.049*** (0.003)	-0.028*** (0.002)	-0.028*** (0.002)
Conservative Treatment	-0.116*** (0.030)	0.125*** (0.042)	0.041* (0.022)	0.070** (0.032)
Trump Approval	-0.075*** (0.004)	-0.070*** (0.006)	-0.078*** (0.005)	-0.075*** (0.004)
Ideology	-0.087*** (0.005)	-0.111*** (0.009)	-0.087*** (0.005)	-0.088*** (0.006)
Republican	-0.128*** (0.015)	-0.090*** (0.029)	-0.132*** (0.015)	-0.129*** (0.015)
Party Strength	0.035*** (0.004)	0.050*** (0.012)	0.036*** (0.004)	0.035*** (0.004)
White	0.042*** (0.011)	0.026 (0.020)	0.044*** (0.011)	0.042*** (0.011)
Liberal treat * Knowledge	-0.011** (0.005)			
Conservative treat * Knowledge	0.019*** (0.006)			
Liberal treat * Party Strength		0.028** (0.014)		
Conservative treat * Party Strength		-0.066*** (0.015)		
Liberal treat * Trump Approval			0.041*** (0.007)	
Conservative treat * Trump Approval			-0.026*** (0.007)	
Liberal treat * Ideology				0.031*** (0.010)
Conservative treat * Ideology				-0.033*** (0.010)
Constant	1.183*** (0.026)	1.282*** (0.037)	1.183*** (0.026)	1.182*** (0.027)

Note:

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

1.2 Figure

TABLE 1. Interaction Models, Including Control Variables

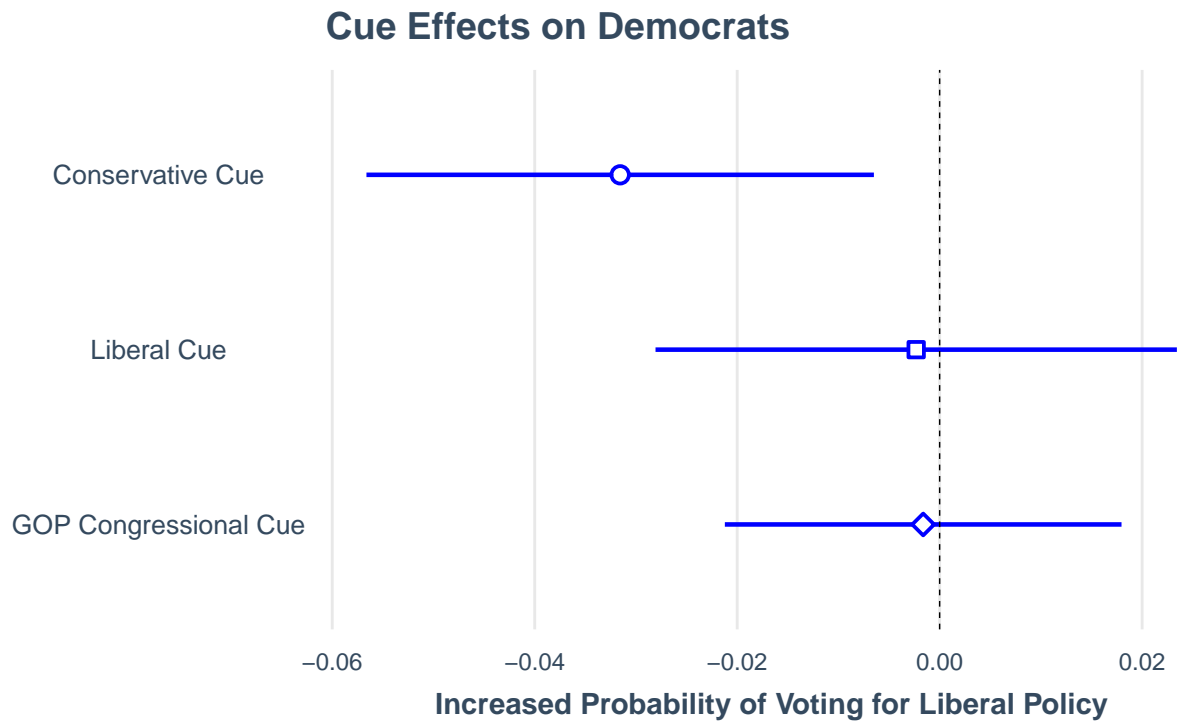
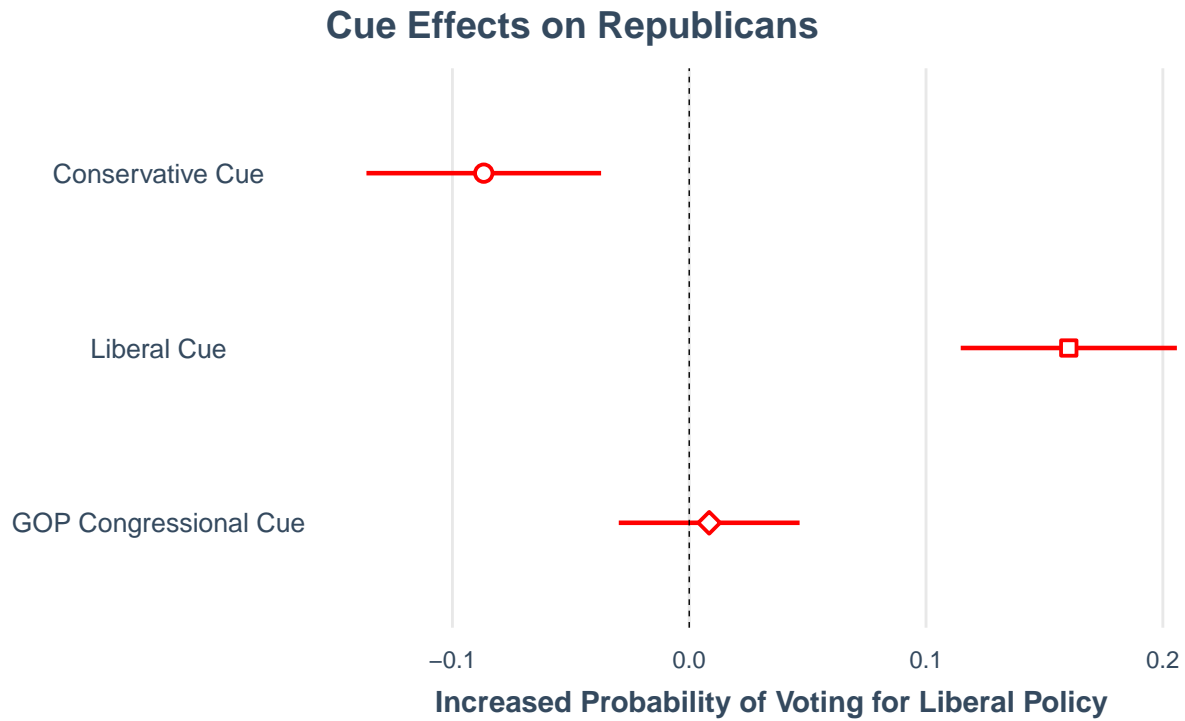
	Knowledge	Party strength	Trump approval	Ideology
Liberal treat × knowledge	−0.01* (0.005)			
Conservative treat × knowledge	0.02** (0.006)			
Liberal treat × party strength		0.03* (0.01)		
Conservative treat × party strength		−0.07** (0.02)		
Liberal treat × Trump approval			0.04** (0.01)	
Conservative treat × Trump approval			−0.03** (0.01)	
Liberal treat × ideology				0.03** (0.01)
Conservative treat × ideology				−0.03** (0.01)
Liberal treatment	0.13** (0.03)	0.05 (0.04)	−0.04 (0.02)	−0.02** (0.03)
Conservative treatment	−0.12** (0.03)	0.12** (0.04)	0.04 (0.02)	0.07** (0.03)
Knowledge	−0.03** (0.003)	−0.05** (0.003)	−0.03** (0.002)	−0.03** (0.002)
Trump Approval	−0.08** (0.004)	−0.07** (0.01)	−0.08** (0.005)	−0.07** (0.004)
Ideology	−0.09** (0.01)	−0.11** (0.01)	−0.09** (0.01)	−0.09** (0.01)
Republican	−0.13** (0.01)	−0.09** (0.03)	−0.13** (0.01)	−0.13** (0.01)
Party strength	0.04** (0.004)	0.05** (0.01)	0.04** (0.004)	0.04** (0.01)
White	0.04** (0.01)	0.03 (0.02)	0.04 (0.01)	0.04** (0.01)
N	7,173	3,867	7,173	7,173

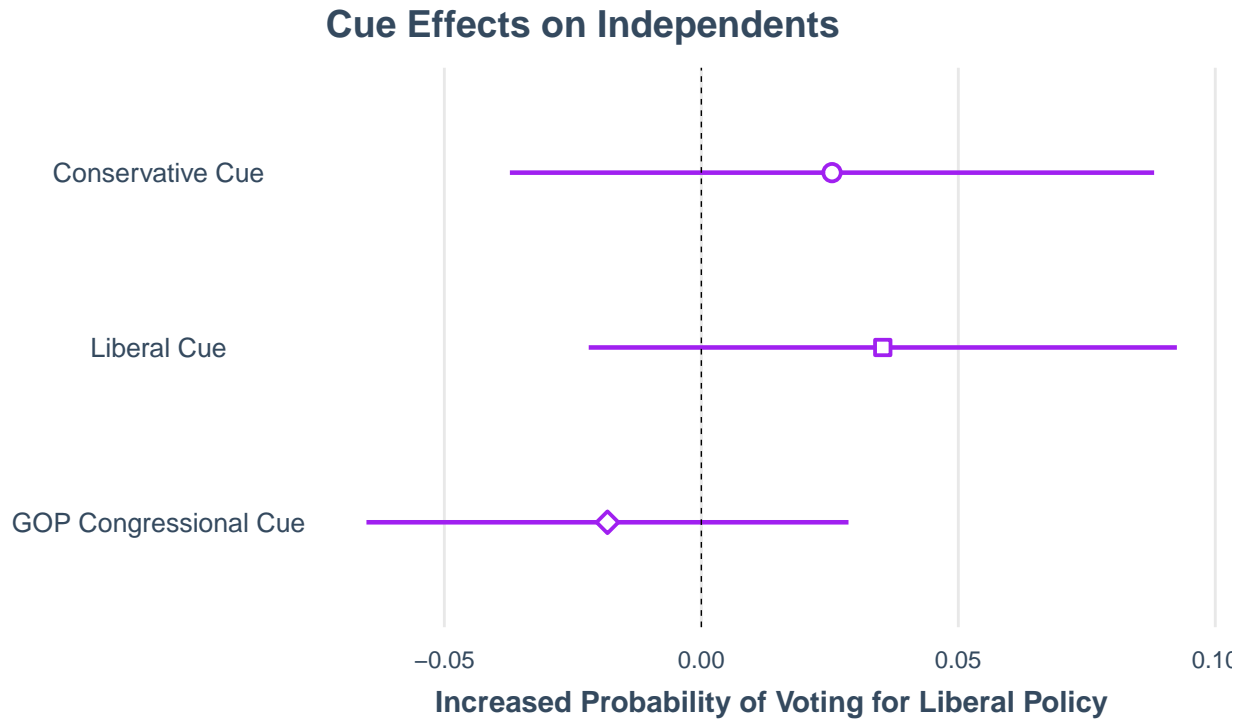
Coefficients reported from ordinary least squares regression model, with standard errors in parentheses. In each model the dependent variable is coded 1 if the respondent indicated supporting the liberal policy option and 0 if they supported the conservative policy option. In Model 2 we are testing the strength of Republican partisanship, so we exclude those who identify with the Democratic Party. Significance codes: * $p < 0.05$, ** $p < 0.01$, two-tailed tests.

¹1, Barber and Pope

²https://github.com/carine-h/milestone_5, <https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/38BFML>

1.3 Graphic





In these three plots, I demonstrate the effect of different political cues on different political groups in the study. In the paper, there is a graphic with this data however it combines nine models in one plot, making it quite difficult to decipher. I decided to split this plot up into three: one for each political group. Each graph looks at the increased probability of voting for liberal policies after receiving a conservative or liberal cue from President Trump as well as a conservative cue from GOP congressional leaders.

The first graph looks at the impact of these cues on Republicans' political tendencies. The plot shows that Republicans side more conservatively when they receive a conservative cue from Trump and side more liberally when they receive a liberal cue from Trump. There is a negligible effect from GOP congressional cues.

The second graph looks at the impact of the cues on Democrats' political tendencies. It shows that when presented with a conservative cue from Trump, Democrats are less likely to vote liberally. When presented with a liberal cue, Democrats' political tendencies do not change. The same is true with a GOP congressional cue.

The third graph looks at the impact of cues on Independents' political tendencies. In terms of magnitude change in probability of voting liberally, Independents show the least impact from all three cues. The conservative and liberal cues from Trump cause Independents to be more likely to vote liberally. The GOP congressional cue cause Independents to be slightly less likely to vote liberally.

2 Replications Appendix

As mentioned above, this paper has a main hypothesis and four sub-hypotheses. The main hypothesis states that the influence of President Trump will demonstrate the existence of a large bloc of party loyalists in the electorate when his influence moves opinion in either a liberal or conservative direction based on his political cue. Those who are most likely to be party loyalists have a lack of knowledge about the party's traditional views and a lack of self-proclaimed "symbolic ideological commitment." Their null hypothesis is that Trump's cue has no effect on subgroups. These are the four sub-hypotheses: 1. **Knowledge Hypothesis:** Only

the those with less knowledge should react to the cue and behave as party loyalists presumably because the knowledgeable gain little from the treatment (political cue). 2. **Partisan Hypothesis:** Strong paarty affiliates that share party with the cue-giver are more likely to be party loyalists. 3. **Approval Hypothesis:** Those who approve of the cue-giver should be more likely to be party loyalists. 4. **Symbolic Ideology Hypothesis:** Self-described conservatives should hold firm to their presumed beliefs and are less likely to be party loyalists because they stick with their self-described policy tenets.

For my replication, I will look at a table with regressions for each of these hypotheses as well as five figures that plot the outcomes of these hypotheses.

2.1 Table 1

Table 2: Interaction Models, Including Control Variables

	<i>Dependent variable:</i>			
	Support			
	Knowledge	Party Strength	Trump Approval	Ideology
	(1)	(2)	(3)	(4)
Liberal Treatment	0.130*** (0.028)	0.055 (0.038)	-0.038* (0.023)	-0.018 (0.033)
Knowledge	-0.029*** (0.003)	-0.049*** (0.003)	-0.028*** (0.002)	-0.028*** (0.002)
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Trump Approval	-0.075*** (0.004)	-0.070*** (0.006)	-0.078*** (0.005)	-0.075*** (0.004)
Ideology	-0.087*** (0.005)	-0.111*** (0.009)	-0.087*** (0.005)	-0.088*** (0.006)
Republican	-0.128*** (0.015)	-0.090*** (0.029)	-0.132*** (0.015)	-0.129*** (0.015)
Party Strength	0.035*** (0.004)	0.050*** (0.012)	0.036*** (0.004)	0.035*** (0.004)
White	0.042*** (0.011)	0.026 (0.020)	0.044*** (0.011)	0.042*** (0.011)
Liberal treat * Knowledge	-0.011** (0.005)			
Conservative treat * Knowledge	0.019*** (0.006)			
Liberal treat * Party Strength		0.028** (0.014)		
Conservative treat * Party Strength		-0.066*** (0.015)		
Liberal treat * Trump Approval			0.041*** (0.007)	
Conservative treat * Trump Approval			-0.026*** (0.007)	
Liberal treat * Ideology				0.031*** (0.010)
Conservative treat * Ideology				-0.033*** (0.010)
Constant	1.183*** (0.026)	1.282*** (0.037)	1.183*** (0.026)	1.182*** (0.027)

Note:

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

TABLE 1. Interaction Models, Including Control Variables

	Knowledge	Party strength	Trump approval	Ideology
Liberal treat × knowledge	−0.01* (0.005)			
Conservative treat × knowledge	0.02** (0.006)			
Liberal treat × party strength		0.03* (0.01)		
Conservative treat × party strength		−0.07** (0.02)		
Liberal treat × Trump approval			0.04** (0.01)	
Conservative treat × Trump approval			−0.03** (0.01)	
Liberal treat × ideology				0.03** (0.01)
Conservative treat × ideology				−0.03** (0.01)
Liberal treatment	0.13** (0.03)	0.05 (0.04)	−0.04 (0.02)	−0.02** (0.03)
Conservative treatment	−0.12** (0.03)	0.12** (0.04)	0.04 (0.02)	0.07** (0.03)
Knowledge	−0.03** (0.003)	−0.05** (0.003)	−0.03** (0.002)	−0.03** (0.002)
Trump Approval	−0.08** (0.004)	−0.07** (0.01)	−0.08** (0.005)	−0.07** (0.004)
Ideology	−0.09** (0.01)	−0.11** (0.01)	−0.09** (0.01)	−0.09** (0.01)
Republican	−0.13** (0.01)	−0.09** (0.03)	−0.13** (0.01)	−0.13** (0.01)
Party strength	0.04** (0.004)	0.05** (0.01)	0.04** (0.004)	0.04** (0.01)
White	0.04** (0.01)	0.03 (0.02)	0.04 (0.01)	0.04** (0.01)
N	7,173	3,867	7,173	7,173

Coefficients reported from ordinary least squares regression model, with standard errors in parentheses. In each model the dependent variable is coded 1 if the respondent indicated supporting the liberal policy option and 0 if they supported the conservative policy option. In Model 2 we are testing the strength of Republican partisanship, so we exclude those who identify with the Democratic Party. Significance codes: * $p < 0.05$, ** $p < 0.01$, two-tailed tests.

Figure 1: Table 1, Barber and Pope

2.2 Figure 1: Average Treatment Effect by Party Affiliation

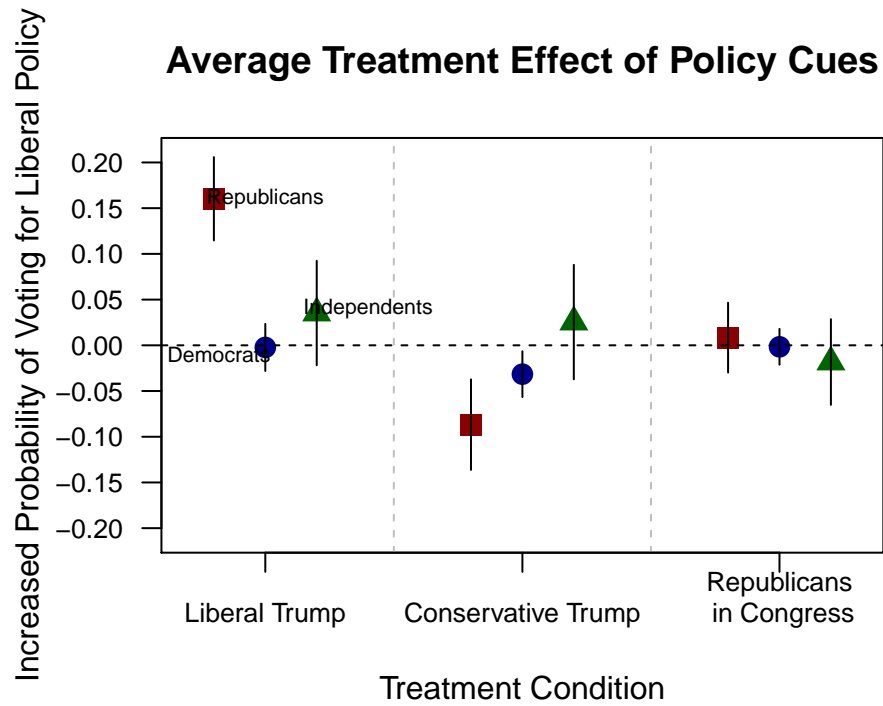
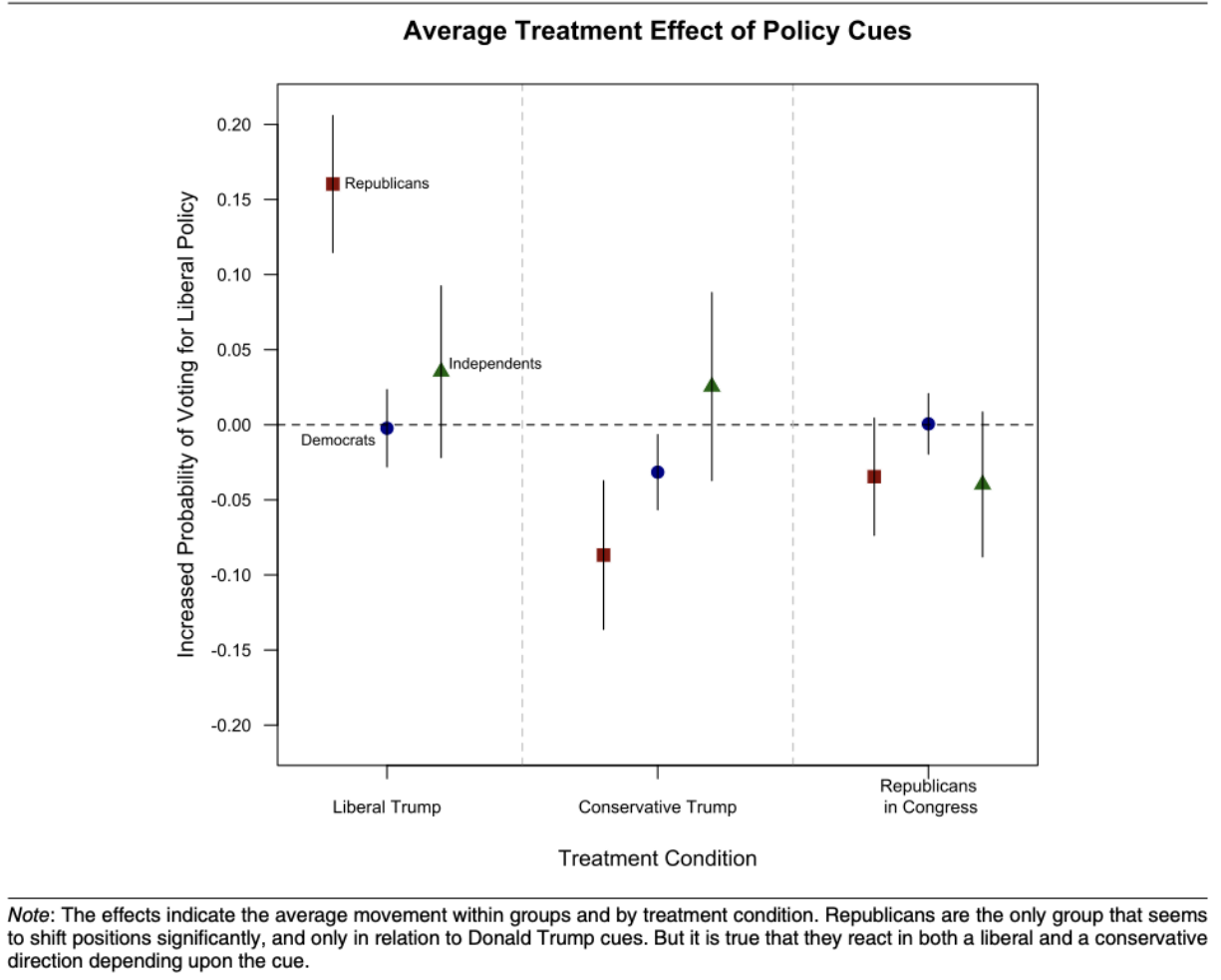


FIGURE 1. Average Treatment Effect Across Issues



It is important to note that what is being plotted is the coefficient of cues (contrump, libtrump, gopleader). I found one mistake - the coefficient for Republicans in Congress on the Republican subset is displayed as about -0.03 probability of voting for liberal policy while the regression tells us that it is actually about 0.008.

2.3 Figure 2: Average Treatment Effect by Knowledge

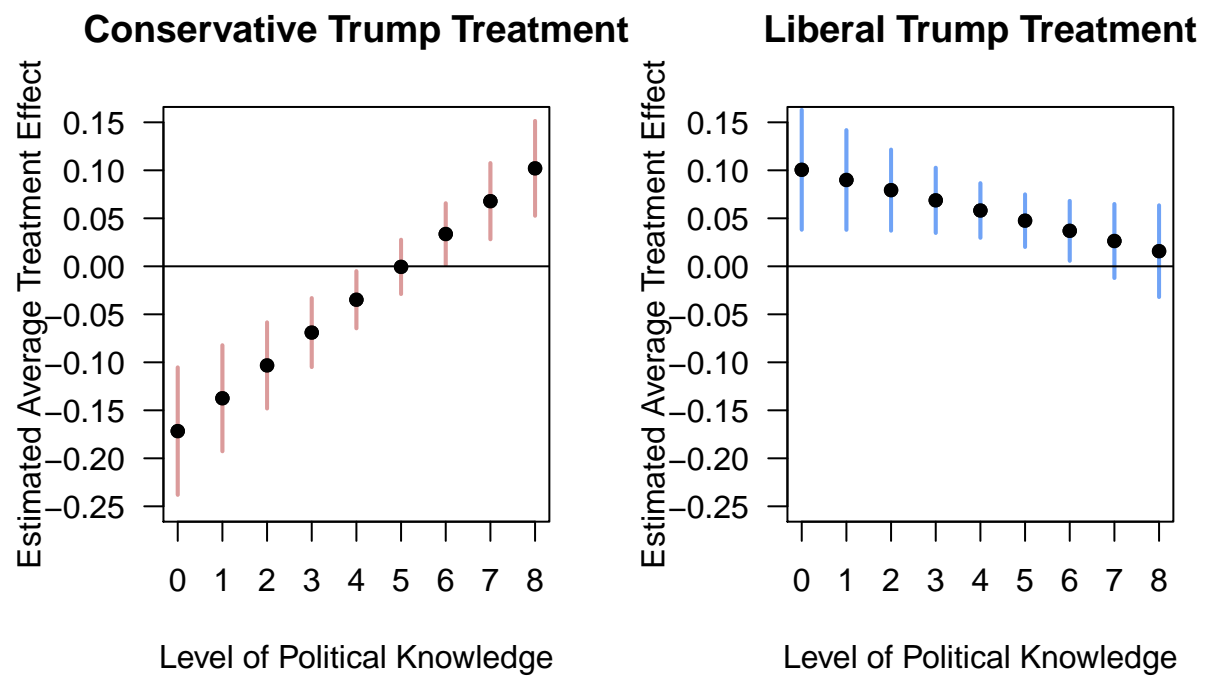
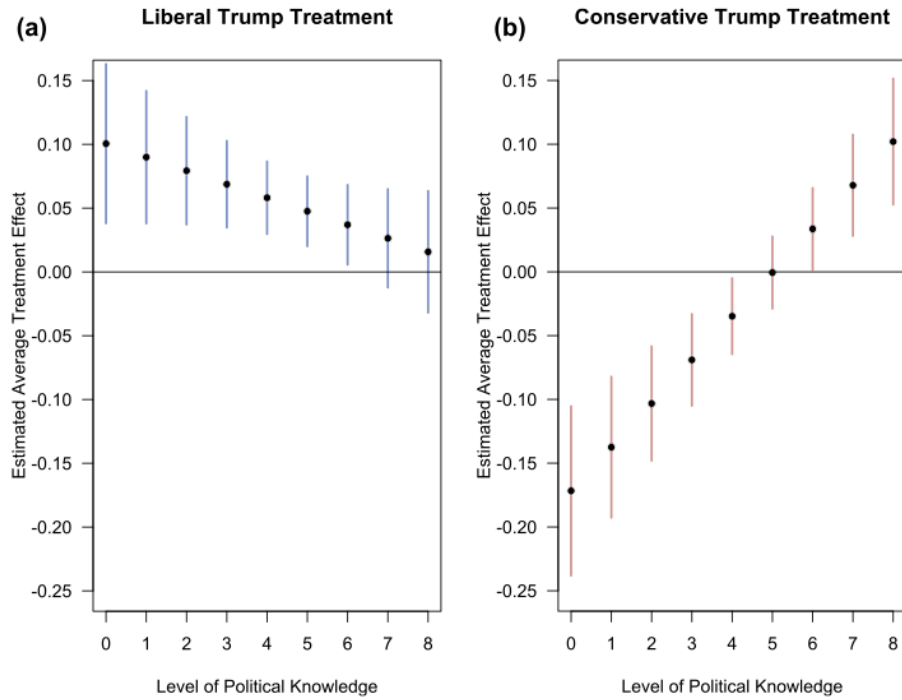


FIGURE 2. Average Treatment Effect by Political Knowledge



Note: This figure displays the estimated treatment effect by levels of political knowledge. The left panel shows the effects of the liberal Trump treatment across levels of political knowledge. Higher values indicate a movement in a more liberal direction. The right panel shows the effects of the conservative Trump treatment across levels of political knowledge. Lower values indicate movement in a more conservative direction. Knowledge is clearly correlated with the treatment effect—higher knowledge respondents are less likely to respond to the cue, in either direction.

2.4 Figure 3: Average Treatment Effect by Party strength

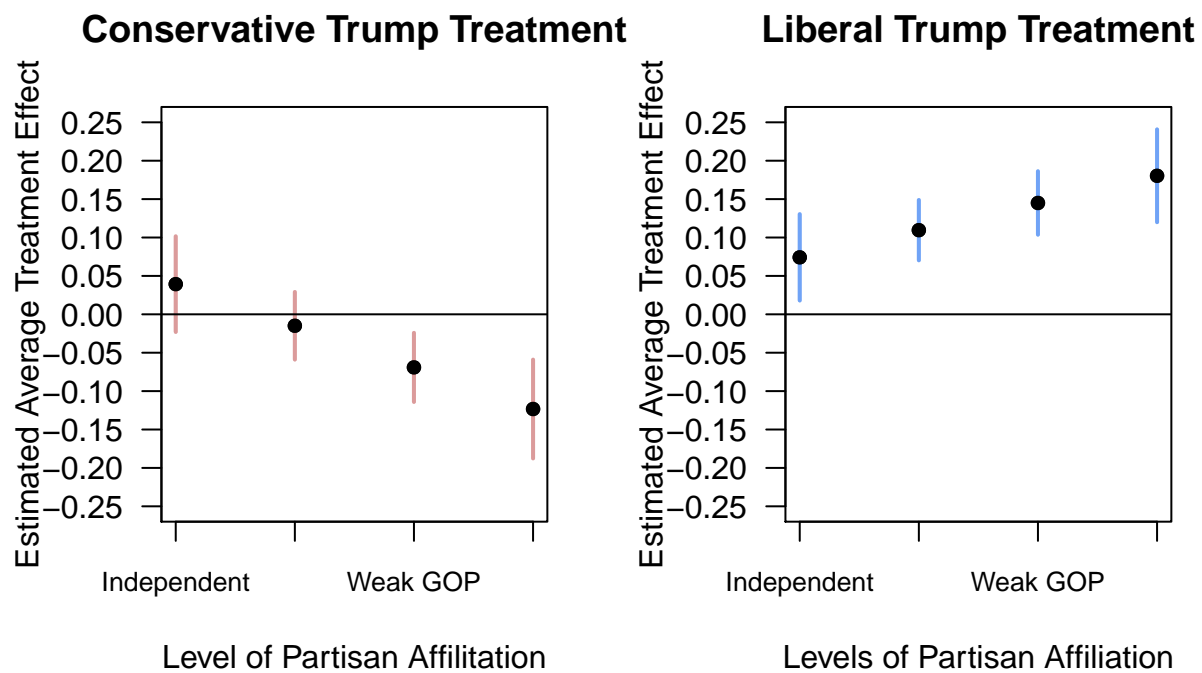
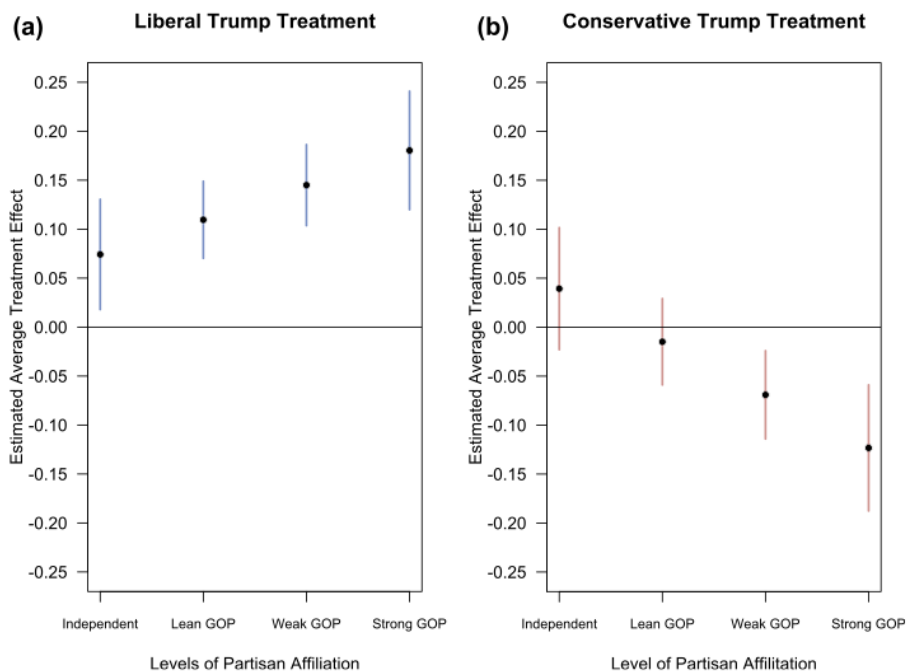


FIGURE 3. Average Treatment Effect by Republican Party Strength



Note: Those who identify strongly with the Republican Party exhibit stronger treatment effects in a liberal direction for the liberal Trump treatment, and in a conservative direction for the conservative Trump treatment.

2.5 Figure 4: Average Treatment Effect by Trump Approval

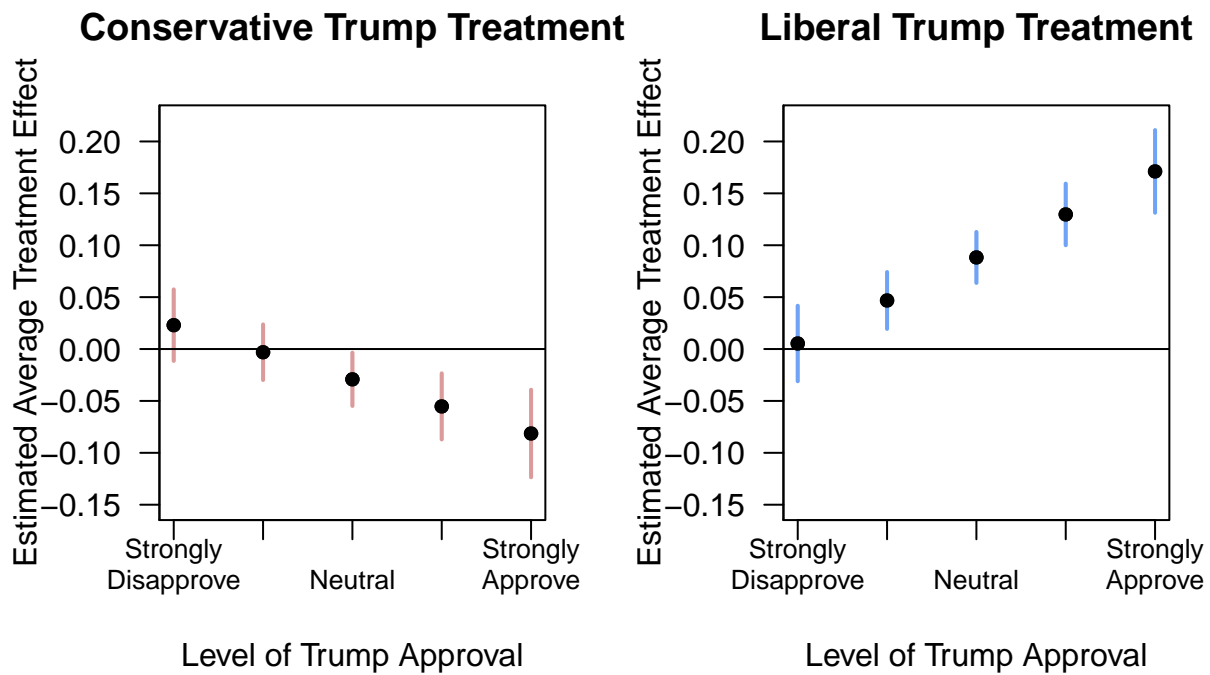
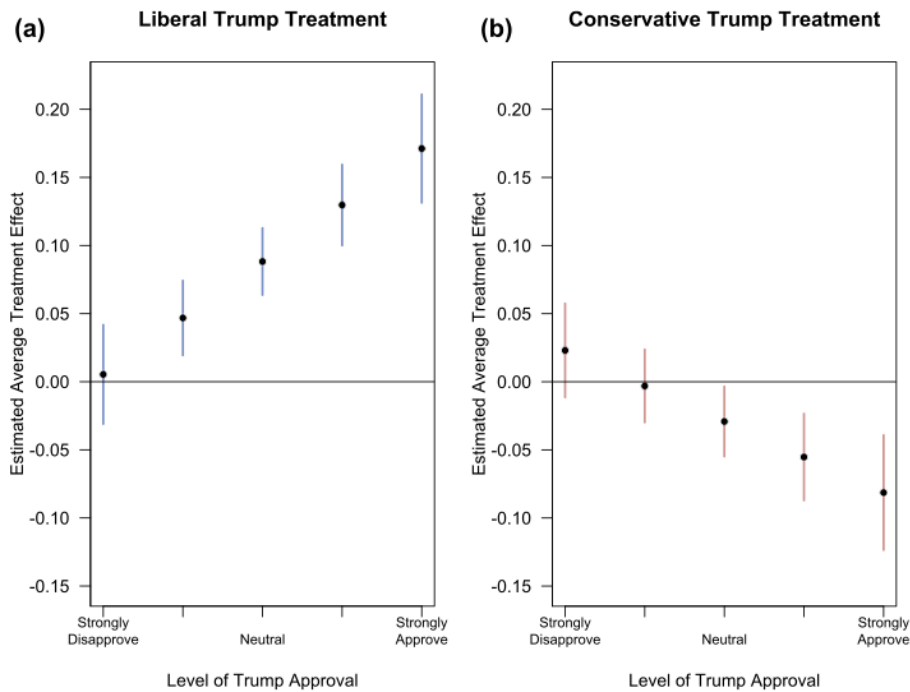


FIGURE 4. Average Treatment Effect by Approval of Trump



Note: Those who approve of Trump exhibit stronger treatment effects in a liberal direction for the liberal Trump treatment, and in a conservative direction for the conservative Trump treatment.

2.6 Figure 5: Average Treatment Effect by Self-Described Ideology

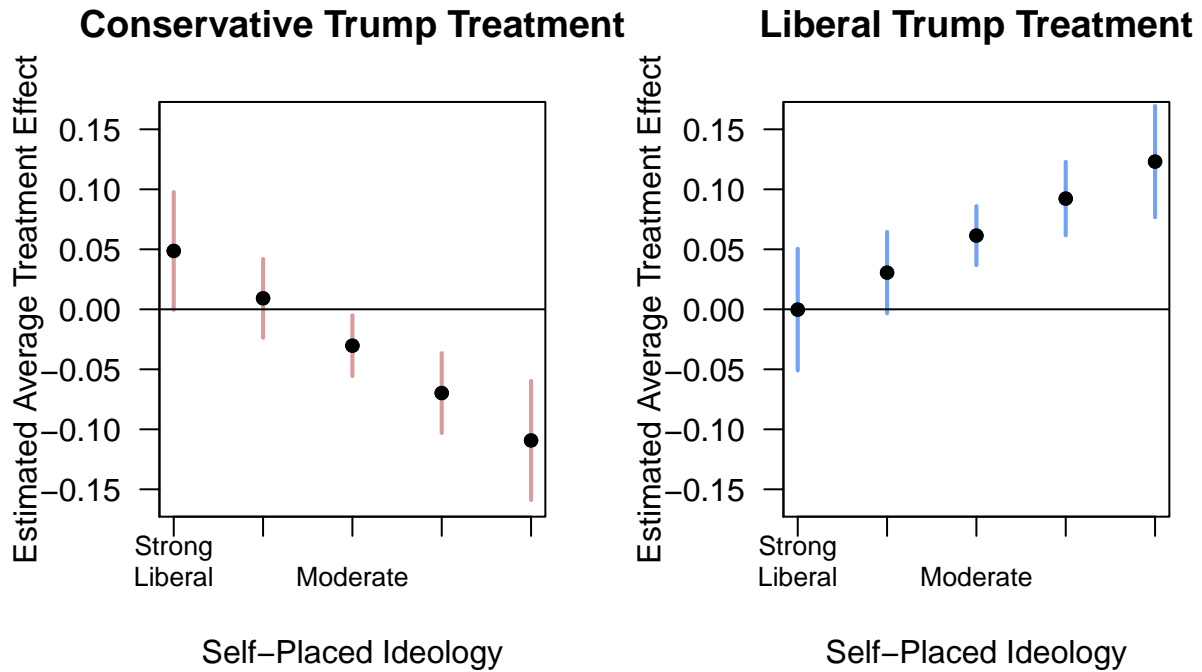
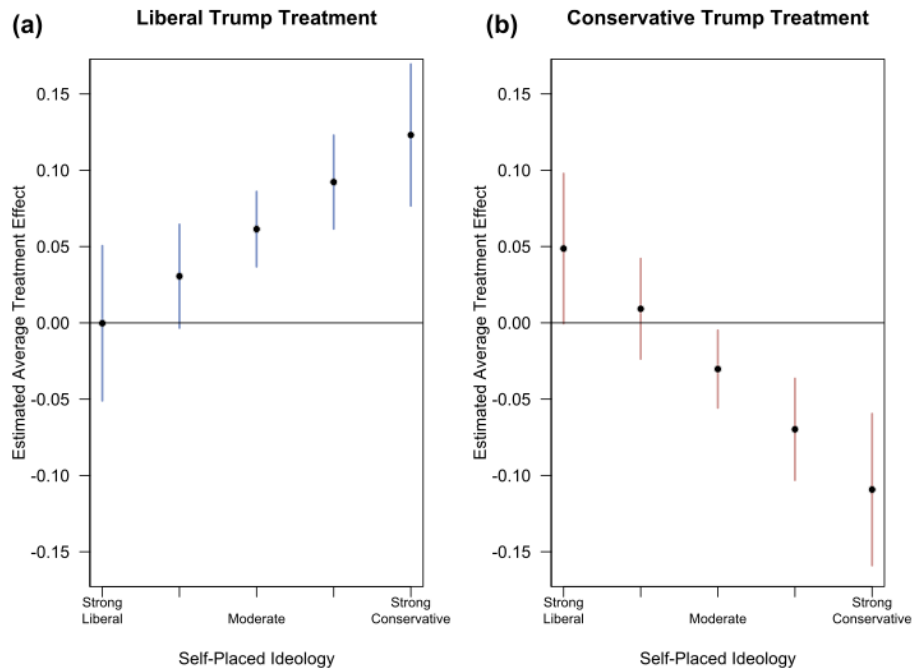


FIGURE 5. Average Treatment Effect by Self-Described Ideology



Note: Republicans at higher levels of conservatism exhibit stronger treatment effects for both the liberal Trump and the conservative Trump.

2.7 Replication: What I Achieved and What I Did Not

A clear statement about what aspects of the paper you were able to replicate and which parts, if any, you were not able to replicate.

I was able to replicate the Interactions Models table (Table 1) and Figures 1-5 which test each of the hypotheses in the paper. The only issue I ran into was in Figure 1: Average Treatment Effect of Policy Cues. This table claims that cues from GOP leaders on Republicans make Republicans about 3% less likely to vote liberal. This is not consistent with the outcome of the authors' regression which shows that Republicans were slightly more likely to vote liberally. I believe that this may be a small mistake on the part of the authors.

3 Proposed Extension

In the extension, I will be addressing a plotting issue in Figure 1, expanding the test of partisanship to Democrats as well as Republicans, and choosing one of the figures to experiment with a different regression model.

To begin, I will address the issue with Figure 1, which I describe above. I have actually already addressed it in the replication done above. Essentially, the regression result is not consistent with the outcome plotted in the graph. This could be an important addition to the findings in the paper - Republicans actually have a very slight aversion to cues from GOP leaders. This depends on the authors' findings that partisan identity may be more of a group identity rather than an ideological marker.

Next, I plan to expand on the findings in Figure 3: Average Treatment Effect by Republican Party Strength. This figure deals with the sub-hypothesis that states: Strong party affiliates that share party with the cue-giver are more likely to be party loyalists. The authors test this hypothesis by running a linear regression that predicts support of a cue with the interaction between partisanship strength and liberal/conservative cues. The figure, however, only takes into account partisanship values from 4-7 (Independent to very Republican) meaning that this model only tests the treatment effect of liberal or conservative cues on Republicans, not Democrats. This makes sense given that the authors are largely looking at the impact Trump has on Republican partisanship throughout the paper. However, they do claim that the phenomena found in their paper (especially about the disconnect between ideology and partisanship) can occur among Democrats.

In order to see if the relationship between political cues and partisanship is only exclusive to Republicans, I would like to run a similar model on partisanship levels among Democrats. This would mean repeating the steps done in Figure 3, but testing the cue's effects on partisanship levels from 1-4 (very Democrat to Independent). I predict that there will be a different effect given the fact that Democrats would be answering cues from Trump. Therefore, I expect there to be some sort of aversionary effect: even if Trump advocates a liberal policy, they will support it less than their Republican counterparts at the same level of partisanship just because the cue is from a Republican leader (especially one as polarizing as Trump).

Finally, I want to take one of the figures (either 2 or 4) and see if I can create a more robust model. These regression models are currently linear and use interactions to predict the outcome of a cue given something like partisanship, ideology, etc. The authors then use the predict function to predict support of a policy and to find the causal effect of receiving a cue by subtracting the response outcome for the treated from a fake data set of untreated individuals. I believe that by using a binomial regression and the posterior_linpred function, I could create a more robust model and prediction, thus achieving a more accurate causal effect. I would compare these two models with LOO as well as using standard errors and sigma.

4 Citations

The Github repo for this milestone is online.³ Here is an in text citation for the paper I am replicating as well as its Dataverse data: Michael Barber (2018a) and Michael Barber (2018b). Here is an in text citation for the stargazer package I use: Hlavac (2018). I used this paper for supplementary information: Gary King (2000). Finally, I use many techniques from our textbook: Andrew Gelma (2019).

Bibliography

Andrew Gelma, Aki Vehtai, Jennifer Hill. 2019. *Regression and Other Stories*.

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³https://github.com/carine-h/milestone_6