Party Identification and Memory Effects: Are Negative Outcomes for the Opposite Party
Processed as Positive Stimuli?
Jacqueline Colao
Pre-Analysis Plan

Research Question

One central aspect to the study of political psychology is how individuals process the

information they receive about candidates. How much information do individuals retain? What

type of information is retained? What is the relationship between information readily available in

one's mind and candidate evaluations? In this study, I will examine how the positivity of

information affects one's memory of that information.

Lodge, McGraw, and Stroh (1989), Mills et al. (2016), and Goggin (2019) have all

investigated this relationship in slightly different ways. Lodge, McGraw, and Stroh (1989) find

that policy statements that respondent's evaluate positively are more likely to be remembered

than policy statements that respondent's evaluate negatively. Mills et al. (2016) find that

conservatives are more likely to remember non-political negative stimuli than liberals are.

Goggin (2019) finds that information about policies that have positive effects is more likely to be

remembered than information about policies that have negative effects.

My research expands on these studies by examining whether the candidate's party affects

what type of information an individual remembers about the candidate. My main research

question is: Do individuals remember information about policies, associated with a candidate of

their own party, that have positive(negative) effects in a similar way to policies, associated with

a candidate not of their own party, that have negative(positive) effects? Lodge, McGraw, and

Stroh (1989) and Goggin (2019) both find that positive information is more likely to be

remembered. However, they operationalize "positive information" differently. Lodge, McGraw,

and Stroh (1989) operationalize "positive information" as policies that an individual evaluates

favorably. Goggin (2019) operationalizes "positive information" as a policy associated with one's own party that has beneficial effects. Additionally, Mills et al. (2016) operationalize "positive stimuli" as ". . . baby humans, baby animals, and landscapes" and "negative stimuli" as snakes, spiders, human rights violations, and animal mistreatment (5). The purpose of my study is to refine our understanding of what falls into the category of "positive information" and what falls into the category of "negative information."

Specifically, should positive policy information associated with a different party than one's own fall into the "negative information" category, and should negative information associated with a different party than one's own fall into the "positive information" category? I call the former type of information "different party positive" information and the latter type of information "different party negative" information. I compare these types of information to positive policy information associated with one's own party ("same party positive" information) and negative policy information associate with one's own party ("same party negative" information).

Hypotheses

H1: Same party positive information will be remembered to a similar extent as different party negative information. Same party negative information will be remembered to a similar extent as different party positive information.

This hypothesis arises from the assumption that individuals will want policies associated with their party to do well and policies associated with the opposite party not to do well. Thus, individuals will experience positive emotions when exposed to both same party positive information and different party negative information, and will experience negative emotions

when exposed to same party negative information and different party positive information.[1] One hypothesis as to why there are differences in memory of positive and negative information is that the different emotions these different types of information elicit affect memory in different ways (LeBlanc, McConnell, and Monteiro 2014). Thus, if individuals experience similar emotions from same party positive(negative) information and different party negative(positive) information, then one would expect memory of this information to be similar.

H2: *The effects will be stronger for strong partisans.*

This hypothesis arises from the assumptions that strong partisans will have more of a desire for policies associated with their party to do well and policies associated with the opposite party not to do well. This stronger desire should translate into stronger emotional reactions to the policy effects, and thus more pronounced memory effects.

H3: *Individuals will remember same party positive information and different party negative information more than same party negative information and different party positive information.*

This hypothesis arises from Lodge, McGraw, and Stroh's (1989) and Goggin's (2019) findings that individuals remember positive information more than negative information. Thus, if same party positive information and different party negative information both fall into the "positive information" category and same party negative information and different party positive information both fall into the "negative information" category, then one should remember same party positive information and different party negative information more than same party negative information and different party positive information.

H4: *Republicans will remember same party negative information and different party positive information more than Democrats will.*

---

[1] My plan is to explicitly test this mechanism in a future study.

This hypothesis arises from Mills et al.'s (2016) finding that conservative remember negative stimuli more than liberals do.

H5: *Men may appear to remember more information than women will.*

This hypothesis arises from a study of differences between the amount of political knowledge that men and women have. Mondak and Anderson (2004) found that a large part of the difference can be accounted for by the fact that men are more likely to guess an answer than choose "I don't know." Since the memory questions I am going to have respondents answer have an "I don't remember" choice, the same dynamic may appear in my study. It may appear that men are more likely to remember information than women are, since men may be more likely to guess an answer than to choose "I don't remember." I am unsure as to whether I will end up investigating this hypothesis, since the underlying mechanism (propensity to guess) is different from the mechanism I am mainly concerned with in this study (the positivity of the information).

Method

To test these hypotheses, I will run a survey experiment on MTurk. I will present respondents with a biography of a hypothetical candidate. Respondents will be asked to evaluate how helpful this biography would be if included in a voter guide. The biography will include neutral background information on the candidate, the party of the candidate, and information about the effects of a bill the candidate sponsored when in office. Each respondent will only see one biography. The biography respondents see will have the same background information. However, respondents will be randomly assigned to see a biography of either a Democratic candidate or a Republican candidate. The policy realm the bill the candidate sponsored will also be randomly assigned. There are four policy realms: healthcare, infrastructure, education, and the economy. Lastly, the effect of the bill will also be randomly assigned. Respondents will either

see a biography that includes a line about a non-partisan research center finding that the bill had negative effects, positive effects, or that the effects of the bill were unable to be determined.

First, respondents will be asked some background questions, including party identification. Then, respondents will be shown the biography. Respondents will be asked to evaluate how helpful this biography would be in a voter guide and will be asked some questions about voter guides in general. Lastly, respondents will be asked about what they remember from the biography. There will be questions about the neutral background information included in the biography, as well as the policy information. I am mainly interested in the respondents' memory of the policy information. However, if there are differences between the groups in terms of memory of the background information, this will be interested as well, though I do not have any predictions regarding how individuals will remember the neutral background information.

Analysis

Once the data collection is complete, I will have 24 different groups. There will be six conditions: same party positive, same party negative, different party positive, different party negative, same party control, different party control. Each of these conditions will have four realizations: healthcare, infrastructure, education, and the economy. I will discard individuals who did not consent to participate in the survey, and I will discard respondents on questions they did not answer. I will analyze the data broken down by party and realization, just by realization, just by party, and then combining the two parties and all of the realizations into the general six conditions.

For every memory question except for the question that asks respondents what the effects of the bill were (I call this the "policy content question"), I will code the correct answer as 1 and any wrong answer as 0. Regarding the policy content question, every biography mentions two

effects of the bill. Thus, in order to get the policy content question completely correct, one must choose both effects of the bill. Given this, if a respondent does not choose either of the correct effects of the bill, the respondent's answer is coded 0. If a respondent chooses one correct effect, the respondent's answer is coded as 1. If a respondent chooses both correct effects, the respondent's answer is coded as 2. I will then calculate the false positive rate for this question as well.

Once all of the variables are coded, I will calculate the proportion of correct answers for each of the six conditions. For example, when analyzing the data by party and condition, I will calculate the proportion correct for Democrats under the healthcare realization for each of the six conditions, Republicans under the healthcare realization for each of the six conditions, Democrats under the infrastructure realization, Republicans under the infrastructure realization, etc. The sample sizes for each condition will be small (under 30). Even so, it may be beneficial to see what patterns arise when the data is broken down in this way. However, one should not read too much into these patterns. When analyzing by party I will calculate the proportion of correct answers for Democrats for each of the six conditions and for Republicans for each of the six conditions. When analyzing by realization I will calculate the proportion correct for healthcare, infrastructure, education, and the economy for each condition. Then I will calculate the overall proportion of correct answers for each of the six conditions, combining the parties and the realizations.

Additionally, at each of these stages, I will index the answers to the background questions (which I call "personal information"), and I will index the answers to the policy questions. Thus, the proportions that are being compared are the proportion of correct answers to the personal questions and the proportion of correct answers to the policy questions, respectively.

Here is an example of what the graph of the data may look like, using ideal fake data, when party and realization are all combined:

Memory of Policy Information
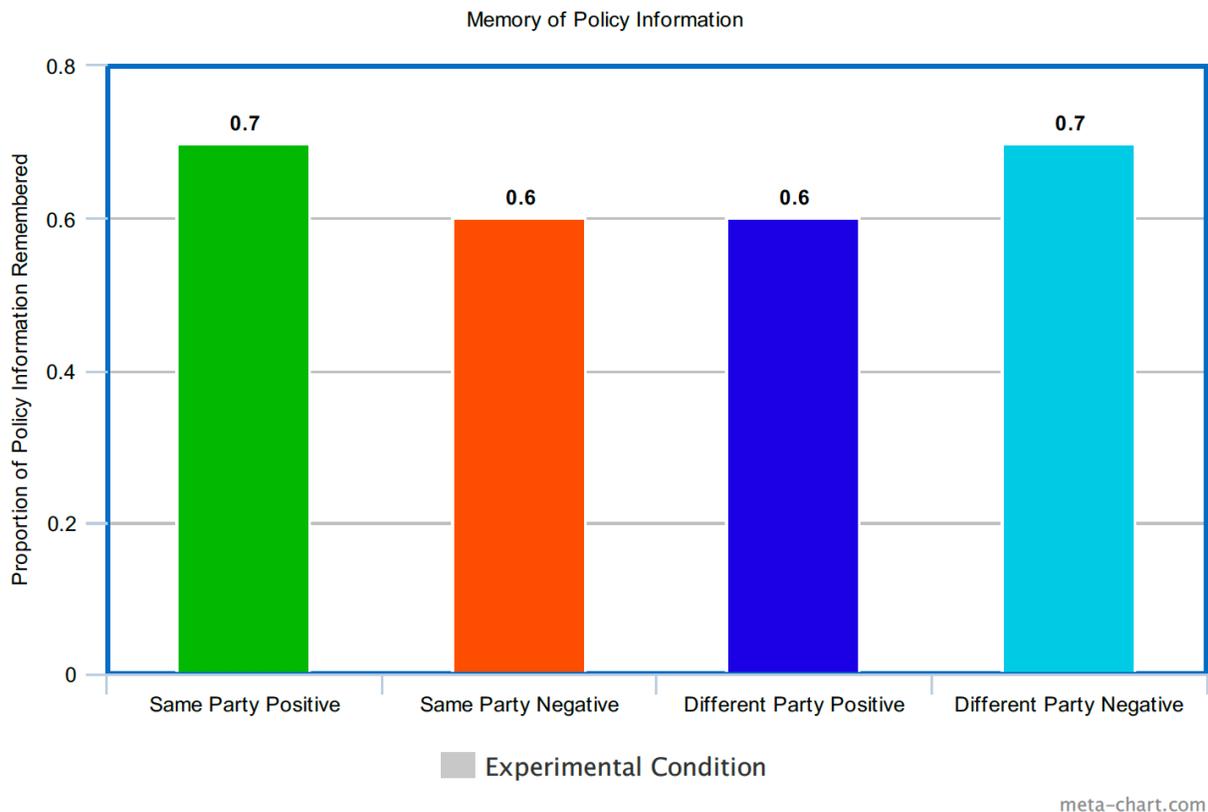
There a few options that I am considering to use to test the statistical significance of the differences of the proportion of correct answers between the conditions. The first option is to compare same party positive to different party negative and compare same party negative to different party positive. However, since my hypothesis is that there will not be a difference between these groups, and hypothesis testing is biased in favor of the null, this may be a weak test. To increase its strength, I could set a much higher p-value required to reject the null, say .3. If I were to go this route, I would need to have a discussion about whether the p-value I get seems appropriately high enough to accept the null. Even so, this results would need to be qualified by the fact that hypothesis testing is biased in favor of the null.

The next option would be to compare same party positive to same party negative and to compare different party positive to different party negative. If *H1* is correct, then there should be an inverse relationship between these two comparisons. The relationship between same party positive and same party negative should be the opposite of the relationship between different party positive and different party negative. In other words, if as *H3* predicts, individuals remember positive information more than negative information, then individuals should remember same party positive information more than same party negative information and should remember different party positive information less than different party negative information.

Lastly, I could compare each treatment condition to its respective control. I could compare same party positive and same party negative to the same party control and different party positive and different party negative to the different party control. Then, I could compare how each treatment condition moves relative to the control and see how my hypotheses match up to these relationships. The downside to this analysis is that it could be the case that both negative and positive information move in the same direction relative to the control. I could still compare differences in how much they move, but this would be a less crisp analysis than if they move in opposite directions relative to the control.

I will likely run the analysis all of these ways and discuss the similarities and differences between the results. I will do the comparisons through a difference of means test and get p-values for each comparison.

Additionally, I will run the following regression: $y = b_0 + B_1C + B_2N$, where C=1 for same party positive and different party negative, C=0 for same party control and different party control, and C=-1 for same party negative and different party positive and N=1 for same party

positive and different party positive, N=0 for same party control and different party control, and N=-1 for same party negative and different party negative. This will test whether the data is more consistent with my hypothesis that same party positive(negative) and different party negative(positive) will have similar results, or an alternative hypothesis that same(different) party positive and same(different) party negative will have similar results.

Conclusion

In conclusion, my study examines whether party influences whether information is processed as positive information or negative information. Do individuals process same party positive(negative) information in the same way they process different party negative(positive) information? I use memory of the information as my dependent variable to measure how information is being processed and test my hypotheses through a survey experiment.

References:

Goggin, Stephen N. 2019. "How Quickly We Selectively Forget: Experimental Tests of Information Order on Memory and Candidate Evaluation." *Political Psychology* 40(1): 125-145.

Leblanc, Vicki R., Meghan M. McConnell, and Sandra D. Monteiro. 2014. "Predictable Chaos: A Review of the Effects of Emotions on Attention, Memory and Decision Making." *Advances in Health Sciences Education* 20: 265-282.

Lodge, Milton, Kathleen M. McGraw, and Patrick Stroth. 1989. "An Impression-Driven Model of Candidate Evaluation." *American Political Science Review* 83(2): 399-419.

Mills, Mark S., Frank J. Gonzalez, Karl Giuseffi, Benjamin Sievert, and Kevin B. Smith. 2016. "Political Conservatism Predicts Asymmetries in Emotional Scene Memory." *Behavioural Brain Research* 306: 84-90.

Mondak, Jeffrey J. and Mary R. Anderson. 2004. "The Knowledge Gap: A Reexamination of Gender-Based Difference in Political Knowledge." *The Journal of Politics* 66(2): 492 512.