# IS THE POLITICAL RIGHT MORE CREDULOUS?: EXPERIMENTAL EVIDENCE AGAINST ASYMMETRIC MOTIVATIONS TO BELIEVE FALSE POLITICAL INFORMATION

Short title: IS THE POLITICAL RIGHT MORE CREDULOUS?

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**Title**: Is the Political Right More Credulous?: Experimental Evidence Against Asymmetric Motivations to Believe False Political Information

Abstract: Recent political events have galvanized interest in the promulgation of misinformation—particularly false rumors about political opponents. An array of studies provide reasons to think that harboring false political beliefs is a disproportionately conservative phenomenon, since citizens with affinity for the political right endorse more false information than people with affinity for the left. However, as we discuss below, past research is limited in its ability to distinguish *supply-side* explanations for this result (false information is spread more effectively by elites on the right) from *demand-side* explanations (citizens who sympathize with the right are more likely to believe false information upon receipt). We conduct an experiment on a representative sample of Americans designed specifically to reveal asymmetries in citizens' proclivity to endorse false damaging information about political opponents. In a contrast with previous results, we find no evidence that citizens on the political right are especially likely to endorse false political information.

Running Header: Is the Political Right More Credulous?

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**Supplemental Materials Statement:** An appendix with supplementary materials and analysis is available online at [URL]

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In recent years, understanding how false political information spreads and influences political decisions has become an area of significant scholarly focus (Flynn, Nyhan, and Reifler 2017). It is easy to see why. As numerous researchers have noted, the stream of political information that citizens receive is far less curated than it used to be (Arceneaux & Johnson 2013). Cable news and talk radio have become key media actors, and commonly offer viewpoints that are unapologetically tendentious (Levendusky 2013). Moreover, substantial proportions of Americans receive news via social media, where quality checks on what gets shared can be sparse or nonexistent (e.g. Silverman 2016).

According to several analyses, problems related to political misinformation are particularly acute on the right side of the political spectrum. Right-leaning media sources seem more likely to spread misinformation (Allcott & Gentzkow 2017; Benkler et al. 2017; Vosoughi et al. 2018, Figure S3), and as we review, conservatives appear more likely to endorse unsubstantiated statements that favor their side. Even presuming these to be valid findings, however, the pattern is difficult to interpret, since it could arise for two distinct (but not mutually exclusive) reasons. On one hand, the prominence of false information on the right side of the political spectrum could be an issue of supply: right-leaning media organizations might be less scrupulous in what information they convey, or more motivated to spread innuendo that seems to benefit political allies. On the other hand, there might also be demand-side pressures, as in if right-leaning citizens are more willing to believe congenial (but false) information.

As we discuss below, past work is limited in its ability to estimate the importance of demand-side causes of misperception asymmetry (right-leaning citizens more readily accept information that makes their side look good) in a way that excludes possible supply-side causes. In particular, past research relies almost exclusively on measurement of *real* political rumors, which might be promulgated more energetically or effectively by one side of the political spectrum. Below, we report results from a test designed specifically to compare Democrats' and Republicans' propensity to endorse damaging rumors about the political opposition. Our test employs features designed to purge supply-side explanations for asymmetrical rumor endorsement. First, we measure endorsement of *fictional* rumors, meaning that greater endorsement from one side or the other cannot be explained by the greater familiarity of some rumors over others. Second, we use a within-subjects design to separate the effect of consistency pressures (does this information benefit the right or left?) from idiosyncrasies

of any particular rumor.

# Background: Asymmetric Credulity?

A wealth of research finds that people on the political left and right differ in their cognitive style (Hibbing et al. 2014). Some perspectives apply these differences to citizens' epistemic motivations. In particular, a family of theories posits conservatism to derive from motivated cognition, including dispositions toward social dominance, authoritarianism, and system justification (Jost et al. 2018). In this vein, some psychology studies find self-described conservatives to be less scientifically literate (Carl et al. 2016), cognitively reflective (Gonzalez et al. 2015), and deferential to scientific recommendations (Blank & Shaw 2015) than liberals. A plausible implication of this vein of research is that, compared to people on the left, people on the right would more readily endorse political innuendo that appears to benefit their political side.

Indeed, there is evidence that they do. In Supporting Information (SI) Table SI-1, we summarize research produced since 2014 that is positioned to assess how the propensity to believe false information about political opponents varies by political inclinations. The weight of evidence favors the idea that people on the right are more credulous than people on the left. However, three important caveats are in order. First, all of the studies were conducted before Donald Trump assumed the U.S. presidency. Thus, as several authors explicitly caution, the relationships concerning asymmetry could be a byproduct of a particular political context, such as if citizens who currently feel disempowered by the political system are more accepting of political innuendo (Miller et al. 2017). Second, the evidence draws heavily on convenience samples—in particular Amazon.com's MTurk crowdsourcing service. Third, in all but one instance, the studies conducted examined false information that was promulgated in popular discourse—a matter to which we turn next.

## Item-induced Asymmetry?

As we document in the Table SI-1, studies examining endorsement of false information typically focus on rumors and conspiracy theories that, although unsubstantiated, received attention in popular discourse. For instance, Miller et al. (2016) examine beliefs that Barack Obama was not born in the United States, and that the government intentionally breached levees during Hurricane Katrina to protect wealthy residents' homes. A risk in focusing on real rumors is that any asymmetry between the left and right could be attributed to real psychological differences—or alternatively, it could be attributed to inherent asymmetry in the plausibility of the

items themselves.

Recent research by Pennycook and collaborators vividly illustrates how item-induced asymmetry could arise. In an array of studies, Pennycook et al. (2018) expose research participants to social media news headlines spreading false political information, such as that Vice President Mike Pence had spoken about how gay conversion therapy saved his marriage. The researchers found that mere exposure to the false information increased perceptions of its accuracy: familiarity induces plausibility. If one supposes that conservative-favoring rumors are discussed more widely than liberal-favoring ones—the supply-side effects we allude to above—their potentially greater prominence and familiarity could explain part or perhaps all of the asymmetry uncovered in Table SI-1.

# Design

We conducted a study designed specifically to eliminate item characteristics as an explanation for asymmetry in citizens' endorsement of false political information. The study has two key innovations. First, we examine beliefs in rumors that we concocted expressly for the purposes of the study. Because the rumors were never part of public discourse, differing familiarity across rumors cannot explain differences between citizens' propensity to endorse them. Furthermore, we randomly assign which of two rumors favors a participant's preferred political party, and which favors the out-party, allowing us to disentangle own-side favoritism from characteristics of a particular survey item.<sup>1</sup>

Participants. Individuals living in the United States and over the age eighteen were invited to participate in the study online via the AmeriSpeak Panel, run by the National Opinion Research Center (NORC). The AmeriSpeak

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<sup>&</sup>lt;sup>1</sup> One choice we faced in designing these studies was whether to prioritize examining how credulity differs by *partisanship* or *ideology*. As Table SI-1 reviews, previous studies have implicated both Republicans and conservatives as being more credulous. We decided to prioritize partisanship because a higher proportion of survey respondents place themselves at a non-neutral point of the partisan than ideological scale and because we thought that instrumentation that mentioned politicians' ideology (rather than partisanship) would lack naturalism (see our instrumentation below). Nevertheless, we have instrumentation to examine asymmetry by respondent ideology to a certain extent. We report these results in the SI. There is no clear evidence of asymmetry by respondent ideology.

Panel is a high-quality probability-based sample designed to be representative of the U.S. population. We include an appendix with details on recruitment in the SI. Respondents were offered the cash equivalent of \$2.00 to complete the study. The instrument was fielded from March 28 to April 9, 2018. There were 2,060 completed interviews, and the weighted AAPOR RR3 recruitment rate was 33.7.

The study was funded by the Timesharing Experiments for the Social Sciences (TESS) short studies program, and we include our (anonymized) research proposal in the SI. This document functions as a *de facto* preregistration to establish that the objectives of this study were, *ex ante*, as we describe them herein (see Franco et al. 2015 on TESS proposals as pre-registration documents).

Measures. At the outset of the study, participants reported their partisanship, using NORC's standard branched party identification questions, which classifies participants as moderate or strong Democrats or Republicans, independents who lean toward one party, or independents with no leaning.<sup>2</sup> (We report question wording in the SI.)

The instrument introduced the main experiment with the text, "Next, we are going to ask you about some events that may or may not have happened. For each, please tell us how likely you think the event occurred." Three items followed, in a fully randomized order:

- Ohio item: Did [Party] legislators in Ohio accept laundered money from a group of Canadian Steel manufacturers, hoping to improve their business dealings in the state?
- Wisconsin item: Did Lucas Hofmann, a [Party] prosecutor in Wisconsin, plot with [same party] Party
   members to suppress evidence that Gerry Mason, a wealthy donor in the state, engaged in pedophilia?<sup>3</sup>
- Oil item: Was the price of crude oil higher on March 1, 2016 than on October 1, 2016?

  Each item had five response options ranging from "definitely did not occur" to "definitely occurred." In the analyses that follow, these items are scaled from 0 = definitely did not occur to 1 = definitely occurred.

<sup>&</sup>lt;sup>2</sup> We found it advisable to measure partisanship before the experiment—rather than after—given concerns about conditioning experimental analyses on variables measured post-treatment (Montgomery et al. 2018).

<sup>&</sup>lt;sup>3</sup> We made Ohio and Wisconsin the focus of our items because we thought respondents would find it plausible that the individuals mentioned in the rumors could be either Democratic or Republican.

For each respondent, one political party (Democratic or Republican) was randomly selected to be implicated in the Ohio item, and the opposite political party was implicated in the Wisconsin item. (But with order randomized, neither party systematically came first.) From this random assignment, we construct a Consistency variable that takes a value of 1 if the rumor is consistent with the respondent's party identification (e.g. Republican malfeasance assessed by a Democrat), and 0 if the item is inconsistent. The purpose of the Oil item was to assess acquiescence bias: individuals' propensity to agree with a survey item, even if not politically charged. When we regress endorsement of the Oil item on the measure of partisanship, the relationship is close to zero ( $\beta$ =-0.013; SE=0.015; 95% CI=[-0.043, 0.017]), suggesting that Democrats and Republicans are comparable in terms of their endorsement of a statement that is not politically charged.<sup>4</sup> Statistical weighting. A recent contribution clearly articulates the perils that arise in using survey weights to convert a Sample Average Treatment Effect (SATE) to a Population Average Treatment Effect (PATE) (Franco et al. 2017). Additionally, a recent analysis finds that for survey experiments conducted on broadly representative samples, unweighted analyses typically "[do] not appear to differ substantially from their weighted counterparts, and they avoided the substantial loss of statistical power" (Miratrix et al., forthcoming, 1). Because the analyses we report below are unweighted, they should be interpreted as a SATE. Readers interested in our best estimate of a PATE can find weighted analyses in the SI.5

#### Results

Our main analysis examines, via a straightforward OLS regression, how rumor endorsement depends on a respondent's partisanship (Democrats = 0; Republicans = 1), rumor consistency, and, key to assessing asymmetry, the interaction between the two: are Republicans more responsive to consistency pressures than Democrats? Table 1 presents the results. In the simplest analyses, we examine the Ohio rumor and the

<sup>&</sup>lt;sup>4</sup> In addition, we re-estimated the models reported in Table 1 below, but including the Oil item as a control. No substantive conclusions change.

<sup>&</sup>lt;sup>5</sup> Compared to the SATE analysis below, consistency pressures appear somewhat stronger for Democrats concerning the Ohio item, and somewhat stronger for Republicans concerning the Wisconsin item. In the pooled analysis, the interaction term remains near zero.

Wisconsin rumor separately. Although it is common practice to treat independents who say they lean toward one party or the other as genuine partisans, we report models that both include and exclude them, for thoroughness.

The results in Table 1 make clear that the party randomization induced partisan bias as intended—both rumors were rated as more likely to be true when they were party-consistent than otherwise (row 1). However, the interaction terms provide no evidence of asymmetry. Republicans are slightly less responsive to consistency pressures for the Ohio item and slightly more responsive to consistency pressures for the Wisconsin item—but all the relationships are easily attributable to chance (all p>.42). The clearest results emerge in column 5 and 6. Here, we pool both rumors together and estimate a joint model (including random effects for each respondent and a fixed effect for the Wisconsin item). In this analysis, partisan bias appears to be almost exactly identical for Democrats and Republicans.<sup>6</sup>

In the SI, we document a number of secondary results that might be of interest—on how pure independents behave in our experiment, and on the roles played by education and political trust. We also detail a pre-registered replication study (Study 2) conducted in July of 2019. In Study 2, if anything, it is *Democrats* who appear more susceptible to consistency pressures than Republicans, accumulating further evidence against exceptional credulity on the part of the political right. Finally, Study 2 includes an extension: we examine additional rumors (again controlling for partisanship with a within-subjects design) focused on specific themes: incompetence, hypocrisy, and violations of social norms. None of these efforts find the political right to be exceptionally credulous.

## Discussion and Conclusion

Citizens communicate, participate, and vote on the basis of beliefs they hold. As such, misperceptions are a serious liability in democratic politics—all the more so if misperceptions are more prominent on one side of the political spectrum than the other. Indeed, for reasons we discuss above, it might have been the case that

<sup>&</sup>lt;sup>6</sup> It is worth emphasizing that, aside from being close to zero, the interaction terms that provide the key results are estimated with reasonable precision. In the SI, we report results from a *post hoc* power analysis showing that our within-subject analysis would detect (two-tailed p<.05) an unstandardized interactive effect as small as 0.05 with a power of .82.

the political right is more accepting of congenial false information than the political left. This is the implication of numerous academic studies, and the idea has taken root in popular outlets as well.<sup>7</sup> We find scant evidence for this proposition. In a carefully controlled study designed to isolate and compare consistency pressures,

Democrats and Republicans endorsed false rumors about political opponents to an almost identical degree.

We close by highlighting two limitations of the research presented above, which also serves to mark directions for further research on how false information spreads. First, while right-leaning citizens do not look especially credulous in our demand-focused experiment, it would be hasty to conclude that all asymmetry is necessarily attributable to supply-side factors. For one thing, the rumors we devised are necessarily a limited sampling of all the kinds of rumors that might exist, and perhaps rumors of a different ilk would work differently (though see SI Section 6). Second, while our research examines what citizens say they believe, beliefs might not perfectly track what people are motivated to share. Perhaps some people spread information they suspect is false, such as for expressive reasons. Further work—ideally measuring sharing behavior in naturalistic settings—could elucidate whether other researchers (Vosoughi et al. 2018) find that false information spreads asymmetrically purely because of supply-side pressures, or whether psychological tendencies of people on the left and right play a role as well.

We close by emphasizing that our results do not imply that false beliefs are equally common on the political left and right. Assessing that possibility requires attention to false information that has actually been promulgated, which we intentionally avoid. Our purpose here was to conduct a credible test of whether political affinity, as it exists in the general public, is related to an underlying *psychological* proclivity to accept false information that benefits one's own political side. Those on the political right appear unexceptional in that respect.

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<sup>&</sup>lt;sup>7</sup> For one example, science journalist Chris Mooney argues that the "monumental state of conservative wrongness about the facts" (15) must be traced to "deeper psychological and cognitive factors" (11) (Mooney 2012).

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# **Biographical Statements**

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Table 1: Democrats and Republicans are Equally Subject to Consistency Pressures

	Ohio	Ohio	Wisconsin	Wisconsin	Pooled	Pooled
Party-consistent = 1	0.091**	0.098**	0.057**	0.052**	0.074**	0.075**
	(0.013)	(0.015)	(0.013)	(0.015)	(0.007)	(0.009)
Republican = 1	0.008	-0.002	-0.008	-0.003	0.000	-0.002
	(0.014)	(0.016)	(0.014)	(0.016)	(0.010)	(0.011)
Consistent × Republican	-0.015	-0.014	0.010	0.001	-0.003	-0.007
	(0.019)	(0.023)	(0.019)	(0.023)	(0.011)	(0.013)
Wisconsin = 1			_		0.002 (0.006)	0.010 (0.007)
Intercept	0.421**	0.419**	0.442**	0.449**	0.431**	0.429**
	(0.009)	(0.011)	(0.009)	(0.010)	(0.007)	(0.008)
Partisan Leaners	Included	Excluded	Included	Excluded	Included	Excluded
Observations (People)	1,722	1,270	1,718	1,266	3,440 (1,727)	2,536 (1,274)
R-squared	0.044	0.051	0.024	0.017	0.033	0.031

<sup>\*\*</sup> p<0.01, \* p<0.05, two-tailed tests

Standard errors in parentheses. The dependent measure is respondent's belief in a political rumor, scaled from 0 to 1. Party-consistency and Republican identification are both binary variables. Pure independents are excluded from this analysis. The pooled models include random effects for respondents and respondent clustered standard errors.