Electoral Consequences of Political Rumors: Motivated Reasoning, Candidate Rumors, and Vote Choice during the 2008 U.S. Presidential Election

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Abstract
Using national telephone survey data collected immediately after the 2008 U.S. presidential election ($N = 600$), this study examines real-world consequences of inaccurate political rumors. First, individuals more willingly believe negative rumors about a candidate from the opposing party than from their party. However, rumor rebuttals are uniformly effective and do not produce backfire effects. Second, the probability of voting for a candidate decreases when rumors about that candidate are believed, and believing rumors about an opposed candidate reinforces a vote for the preferred candidate. This belief-vote link is not a result of the spurious influence of party affiliation, as rumor belief uniquely contributes to vote choice. The evidence suggests political rumoring is not innocuous chatter but rather can have important electoral consequences.

When citizens base political decisions on inaccurate beliefs, democracy suffers. Effective deliberation is premised on a factually informed citizenry (Delli Carpini & Keeter, 1996; Luskin, Fishkin, & Jowell, 2002), and misinformed citizens often exhibit different political preferences than those holding more accurate information (Gilens, 2001; Kuklinski, Quirk, Jerit, Schwieder, & Rich, 2000). Political rumors, characterized as unsubstantiated claims about candidates and issues that are often false, are a potentially important source of misperception that may threaten democratic outcomes. Although political rumors are not new, their prevalence during the 2008 U.S. presidential campaign raises concerns about their influence on citizens’ beliefs, and, more importantly, their potential impact on voting behavior. In 2008, news
organizations devoted considerable coverage to political rumors, especially those about Barack Obama (Weeks & Southwell, 2010), and rumors circulated widely online (Garrett, 2011). An overwhelming majority of the public was exposed to these claims (Hargrove & Stempel, 2008), but despite widespread awareness it remains an open question whether false rumors about the candidates relate to citizens’ voting behavior during the 2008 election. Perhaps this rumoring, though extensive, was just idle chatter—inaccurate but essentially harmless.

This article advances our understanding of political rumors and their association to citizens’ votes by making two complementary contributions. First, it examines whether partisan motivated information processing strategies that have been demonstrated in laboratory settings, including both motivated reasoning (Kunda, 1990; Taber & Lodge, 2006) and the backfire effect (Nyhan & Reifler, 2010), are also evident in citizens’ responses to political rumors in the real world. Second, it extends survey research establishing a link between misperceptions and public opinion to a uniquely important form of political behavior: Vote choice. We argue, and our data affirm, that rumorizing is not harmless talk but instead is a form of political expression that is associated with real negative consequences on citizens’ voting behavior.

**Political Rumors**

Rumors are unverified stories or information statements people share with one another (DiFonzo & Bordia, 2007). They often consist of plausible explanations or provocative observations about important phenomena and are offered without an explicit claim of truthfulness or a secure standard of evidence. Rumors may be positive or negative and may ultimately be proven true or false, but their defining feature is that they circulate without confirmation (DiFonzo, Robinson, Suls, & Rini, 2012).

Rumors typically arise around topics of public importance and are fueled by feelings of uncertainty and anxiety (Allport & Postman, 1947; Rosnow, 1988). Therefore, it is no surprise that rumors flourish during political campaigns, as competing groups seek an electoral advantage by disseminating unverified claims that feed off of public ambiguity surrounding candidates (Jamieson, 1992). The spread of disparaging rumors as a tactic to undermine American presidential candidates’ credibility and public support dates back to the election of Thomas Jefferson (Shibutani, 1966) and has continued through to recent elections (Garrett, 2011). However, changes in the media landscape, including widespread adoption of social media and email, appear to be facilitating their flow and raising concerns about their potentially harmful consequences. Scholars have argued that the abundance of political information sources online (of varying credibility) makes it more difficult for news
consumers to distinguish between what is fact and what is not (Katz, 1998). Empirical support for this claim is limited, and there is some evidence that consumers of online news are no more credulous than those who rely more heavily on other sources, but there is little question that the online environment plays a role in the spread of unsubstantiated claims (Garrett, 2011).

Mass media are another important source of political rumors. In 2008, negative (and ultimately false) rumors about both Obama and his opponent John McCain received abundant media attention throughout the campaign (Project for Excellence in Journalism, 2008). Although news coverage is generally intended to dispel these rumors and can be effective, the presence of the story and the repetition of the false claim can inadvertently enhance rumors’ credibility (Hollander, 2010; Schwarz, Sanna, Skurnik, & Yoon, 2007). At the very least, news coverage of political rumors in 2008 frequently led individuals to seek rumor information online (Weeks & Southwell, 2010).

It appears these changes in the political environment have contributed to the public’s exposure to political rumors. Exposure, however, is only the first step on the way to belief; individuals must next decide whether or not to accept the claims they encounter.

Partisan Motivated Reasoning and Rumor Belief

The theory of partisan motivated reasoning suggests that individuals’ prior attitudes will affect how they assess political rumors. Motivated reasoning posits that humans evaluate new information in ways that are in line with their prior beliefs (Kunda, 1990; Lodge & Taber, 2000). In political situations, individuals are often driven to defend their prior position through biased evaluations of new information. Thus, people are willing to accept attitude-consistent political information on little evidence while rejecting well-supported attitude-discrepant content (Taber & Lodge, 2006).

Partisan motivated reasoning would therefore suggest that biased processing makes disparaging rumors about an opposed candidate more plausible than those about a preferred candidate. Experimental work conducted before the 2004 U.S. presidential election demonstrated that supporters of George W. Bush were more likely to believe a negative rumor about John Kerry, the competing candidate, than were Kerry’s supporters (Einwiller & Kamins, 2008). Similarly, experiments conducted prior to the 2008 U.S. presidential election demonstrated that participants maintained implicit associations between an opposed candidate and false political smears (Kosloff, Greenberg, Schmader, Dechesne, & Weise, 2010). Comparable findings were reported in another experiment demonstrating the link between implicit associations and misperceptions about Obama’s religion (Hartman & Newmark, 2012). We expect that
Americans’ beliefs about the candidates during the 2008 election will be shaped by the psychological mechanisms evidenced by these laboratory-based studies:

\( H_1 \): Democrats (Republicans) exposed to false negative rumors about the Obama ticket (McCain ticket) will be less likely to believe the rumors than will non-Democrats (non-Republicans).

Motivated reasoning should also impact the effectiveness of rumor rebuttals. Rebuttals are corrections to false rumors that provide accurate factual information about a claim. A rebuttal about an opposed candidate is attitude-discrepant; that is, if an individual is inclined to believe a rumor based on prior attitudes, he or she is also likely to discount the rebuttal because it challenges attitudes that the individual is motivated to preserve (Kunda, 1990). Corrections to political misperceptions often fail to change people’s assessment of the facts (Kuklinski et al., 2000), and there is some evidence that responses to rebuttals are dependent on political ideology (Nyhan & Reifler, 2010). This evidence leads to the following prediction:

\( H_2 \): Exposure to rebuttals to false negative rumors about the Obama ticket (McCain ticket) will be more strongly associated with reduced rumor belief for Democrats (Republicans) than for non-Democrats (non-Republicans).

**Backfire Effect**

It is unsurprising that individuals often fail to update their beliefs following corrections to false information given the evidence for motivated reasoning. However, a greater concern is that corrections may actually reinforce the original (incorrect) belief. Expressions of this phenomenon have been variously termed a “boomerang” (Byrne & Hart, 2009) or (in the context of political misperceptions) “backfire” (Nyhan & Reifler, 2010) effect. Theoretically, the backfire effect is thought to occur for one of two reasons (Byrne & Hart, 2009). First, people may receive the message and process it as intended but ultimately reject it due in part to psychological reactance. Reactance occurs when people believe their freedoms have been constrained, leading them to want to affirm their independence (Brehm & Brehm, 1981). In the context of political misperceptions, corrections may trigger reactance because the messages imply that recipients must reject inaccurate beliefs, which will motivate some people to try to reestablish their freedom of choice. They may do this by adopting a view opposing the corrective message, or by strongly resisting the correction through source derogation or counter-arguing the message (Lodge & Taber, 2000; Tormala & Petty, 2004). A second mechanism that might drive the backfire effect concerns message interpretation. People may fail to grasp the full purpose of the message, attending only to aspects of the message that reinforce their original belief (Byrne & Hart, 2009). Regardless of
the precise mechanism, though, evidence for the backfire effect has been found in research examining how people form political preferences, suggesting that exposure to negative information about a preferred candidate can increase positive views about that candidate (Meffert, Chung, Joiner, Waks, & Garst, 2006; Redlawsk, 2002). Further, research on political advertising indicates that exposure to “ad-watches” that investigated dubious or misleading claims by candidates can actually increase electoral support for the candidate whose advertisement is scrutinized (Ansolabehere & Iyengar, 1996).

Despite the possibility for backfire effects, the evidence that corrective information increases rumor belief is mixed. In an experimental study, Nyhan and Reifler (2010) find evidence for a backfire effect by demonstrating that strong conservatives who received a correction to the claim that there were weapons of mass destruction in Iraq were more likely to believe that weapons of mass destruction existed compared with a control condition. This backfire effect was most apparent among individuals at the ideological extremes, such as conservatives who rated Iraq to be the most important issue. The authors failed to find the effect when examining an issue in which liberals were likely to be misinformed, although they did find that liberals were more resistant to the correction on this issue. Several subsequent studies, however, have failed to find a backfire effect when presenting corrective information to false claims (e.g. Ecker, Lewandowsky, Fenton, & Martin, 2014; Garrett, Nisbet, & Lynch, 2013). Although these studies are not able to pinpoint precisely why a backfire effect did not reveal itself, they suggest two potential reasons that are relevant here. First, it is possible that corrective information is simply more compelling than the original false claim, which would make it difficult for even the most stringent partisans to demonstrate an increase in rumor belief following exposure to a rebuttal. Second, even strong partisan motivated reasoners can reach a “tipping” point in which repeated exposure to information can lead them to abandon attitude-consistent beliefs (Redlawsk, Civettini, & Emmerson, 2010). Therefore, it is possible that exposure to either strong or repeated rumor rebuttals can temper the likelihood that a backfire effect will occur. Based on these mixed results regarding the backfire effect, we offer a research question:

\[ RQ: \text{Is exposure to rebuttals to false negative rumors about the Obama ticket (McCain ticket) associated with increased rumor belief for the most extreme conservatives (liberals)?} \]

Rumor Belief and Vote Choice

Concerns about political rumors stem from the idea that democracies require an accurately informed public to make decisions (Luskin et al., 2002). Public
opinion can be strongly shaped by misperceptions, regardless of whether these are the result of rumors or misinformation—misinformed individuals have demonstrated different preferences on a variety of issues compared with those who held more accurate information (e.g. Gilens, 2001; Kuklinski et al., 2000; Kull, Ramsey & Lewis, 2003). Did misperceptions have similar effects during the 2008 U.S. presidential election? Is belief in false rumors related to citizens’ vote choice?

There are several reasons to expect a relationship between rumor belief and vote choice. During a campaign, voters navigate a complex information environment, searching for cues that help guide their vote (Redlawsk, 2004). The more negative information individuals “know” about a candidate, the less favorable they feel toward the candidate and the less likely they will vote for the candidate. Voters also place greater emphasis on negative campaign information than they do on positive information, attend to negative information more closely (Meffert et al., 2006), and place more weight on negative candidate attributes than on positive ones when forming evaluations (Lau, 1982), all of which is consistent with models of attitude formation indicating negative information moves candidate assessment downward (Zaller, 1992). This suggests voters’ belief in negative candidate rumors will be related to their vote choice.

\[ H_3: \] As the number of false negative rumors believed about the Obama ticket (McCain ticket) increases, the likelihood of voting for Obama will decrease (increase).

One concern arising from the prior hypothesis is that the predicted relationship may be spurious; perhaps, the correlation between rumor belief and vote choice is an artifact of the influence party affiliation has on each. However, that is not the argument here; instead, we suggest rumors will demonstrate a unique influence on vote choice—we expect partisanship to influence rumor beliefs, which will, in turn, shape individuals’ vote.

\[ H_4: \] Rumor belief will mediate the relationship between party affiliation and vote choice. Republicans (Democrats) will be more likely to believe false negative rumors about the Obama ticket (McCain ticket) than non-Republicans (non-Democrats), which will subsequently decrease (increase) the likelihood of voting for Obama.

Method

This study uses data collected via a random-digit-dial telephone survey of individuals living in the continental United States \((N = 600)\). The survey was administered between November 6 and 20, 2008, the two weeks immediately following the U.S. presidential election, and was conducted by Abt SRBI, Inc. Using American Association for Public Opinion Research (AAPOR) (2008) method 2 (RR2), the survey achieved a response rate of 26.2%, which is nearly identical to the overall response rate of large national
election telephone surveys such as the National Annenberg Election Survey (NAES) (Winne, Kenski, & Adasiewicz, 2006).

To begin, a series of 10 rumors about the Republican and Democratic U.S. presidential and vice-presidential candidates that circulated in the media and online during the 2008 election was created from lists provided by two fact-checking organizations, Factcheck.org and Snopes.com. Eight of the statements were deemed false and two were true (see Appendix for wording). The true items were included to dissuade respondents from concluding that all statements were false but were excluded from analyses as the focus is on inaccurate information, rather than simply negative information. Five rumors each were about the Democratic and Republican Presidential tickets. The four false rumors targeting Democrats were about Obama, whereas John McCain and Sarah Palin were the targets of two false rumors each for the Republican ticket.

The particular rumors used in the study were selected for several reasons. First, each rumor reflected poorly on the respective candidates, which allows us to examine the influence of false negative information. Second, these rumors were prevalent during the campaign and each was determined to be false by respected nonpartisan fact-checking organizations. Third, none of the rumors were explicitly endorsed by the presidential candidates, and thus they circulated independently of the official campaigns. Although the rumors selected are not a representative sample of those disseminated during the 2008 campaign, there is little theoretical reason to suspect that the dynamics witnessed here would operate differently if other rumors had been selected.

Using simple counts, separate indexes were formed to assess rumor and rebuttal exposure and rumor belief (ranging from 1 to 8 for all rumors and 1–4 for each candidate’s ticket). Overall, respondents reported hearing less than three of the eight false rumors ($M = 2.82, SD = 1.47$). If respondents indicated exposure to a particular rumor, they were next asked whether they also encountered information suggesting the claim was false. Exposure to rebuttals was limited, as respondents heard challenges to only about half of the false rumors to which they were exposed ($M = 1.23, SD = 1.21$). Respondents were also asked whether they believed each false rumor, and results indicate that, on average, belief was low ($M = .82, SD = 1.07$). Although exposure and belief were not high, interesting patterns emerge when looking at rumors about the two candidates’ tickets separately. Baseline levels of rumor exposure (but not rebuttal exposure) and belief initially appear dependent on party affiliation.

For example, Republicans ($M = 2.42, SD = 0.98$) heard significantly (all $p < .05$) more rumors about the Obama ticket than Democrats ($M = 1.78, SD = 0.91$) and believed more of them (Republicans, $M = 0.98, SD = 1.19$; Democrats, $M = 0.30, SD = 0.64$). Although Democrats and Republicans did not differ in exposure to McCain ticket rumors, there were significant
differences in belief (Democrats, $M = 0.30$, $SD = 0.56$; Republicans, $M = 0.14$, $SD = 0.38$, $p < .05$).

Two dummy variables were created as measures of party affiliation. The Democrat dummy consisted of respondents who self-identified as Democrats ($n = 183$ [30.5%], coded high) and the Republican dummy included self-identified Republicans ($n = 189$ [31.5%], coded high). There were also 228 (38%) Independents in the sample.

Candidate support was also measured. Respondents were first asked if they voted in the 2008 election (87%, $n = 522$ reported voting). As with most national surveys, this is an overreport (~65% of Americans voted in 2008) that likely reflects a social desirability response bias (Holbrook & Krosnick, 2010). Nonetheless, levels of support for each candidate among respondents who reported casting a vote are comparable with results from the election, as 43% ($n = 222$) voted for Obama and 40% ($n = 210$) voted for McCain. Those who did not vote were asked who they would have voted for were they able to. Based on both responses, a dichotomous dummy variable reflecting support for Obama was constructed ($n = 247$) and coded high. All others, including McCain supporters and those who preferred a third-party candidate, were identified as non-Obama supporters ($n = 353$) and coded low. By focusing on candidate support and including those who reported voting and those who did not, concerns about the influence of a possible social desirability response bias are attenuated.

Demographics were also assessed and included in all statistical models, including age ($M = 53.4$, $SD = 15.9$), gender (47.5% male), education (93.1% high school graduate or higher and 37.8% bachelor’s degree or higher), race (82.8% white, 9.0% black, 8.2% other) and political knowledge (based on the four-item NAES measure, $M = 1.9$, $SD = 1.0$). The models also account for online and off-line news use during the campaign, political participation, income, trust in government, and attention to the campaign.

Comparing survey respondents’ demographics to 2008 U.S. Census data suggests the sample is mostly representative of the larger population, although Whites are overrepresented here (75% of U.S. population) and Blacks are underrepresented (12.4% of U.S. population). The sample is also better educated than the U.S. population (census: 85% high school graduate or higher, and 27.7% bachelor’s degree or higher). In terms of political party affiliation, the sample is comparable with large national surveys like the 2008 National Annenberg Election Survey (Annenberg Public Policy Center, 2008) (NAES: 29.8%, Republican; 36.5% Democrat; 33.7% Independent/Other). In general, the sample provides a reasonable representation of the larger U.S. population. Although some characteristics differ slightly from census data, there is no reason to believe the makeup of the sample affects the hypothesized relationships in this study.
**Results**

H1 posited that Democrats exposed to false negative rumors about the Obama ticket will be less likely to believe the rumors than non-Democrats, and Republicans exposed to false rumors about the McCain ticket will be less likely to believe them than non-Republicans. Ordinary least squares (OLS) regression was used to test this prediction. The data strongly support this hypothesis (see Table 1, Models 1 & 3). For Obama ticket rumors, the coefficient for the interaction between the Democrat dummy variable and the number of Obama ticket rumors encountered is negative and significant, $b = -0.26$, $p < 0.001$, indicating the influence of Obama ticket rumor exposure on belief is smaller for Democrats than for non-Democrats. Similarly, the negative and significant coefficient for the interaction between the Republican dummy variable and McCain ticket rumors encountered, $b = -0.16$, $p < 0.001$, suggests the influence of McCain ticket rumor exposure on belief is smaller for Republicans than for non-Republicans.1

These significant interactions were probed for the conditional effects of the relationship between rumor exposure and belief at each of the two party affiliations, the moderating variable—party (Hayes & Matthes, 2009). Although the relationship between Obama ticket rumor exposure and belief for Democrats is statistically significant, $b = 0.31$, $t = 4.41$, $p < 0.001$, it is not as strong as the relationship for non-Democrats, $b = 0.57$, $t = 13.42$, $p < 0.001$, as evidenced by the significant interaction noted earlier in the text. Similarly, the relationship between McCain ticket rumor exposure and belief is statistically significant for Republicans, $b = 0.17$, $t = 3.99$, $p < 0.001$, but weaker than for non-Republicans, $b = 0.33$, $t = 13.08$, $p < 0.001$. These results indicate exposure to rumors about the candidates is positively related to belief for members of both parties, but the relationship is significantly stronger when the rumor is attitude-consistent. This is our first evidence that motivated reasoning may occur in the real world, and it has important implications for the influence of rumors during the election season, as we shall see.

The second hypothesis asserted that exposure to rebuttals of attitude-consistent rumors—rumors individuals “want” to believe—would do less to correct inaccurate beliefs than exposure to attitude-discrepant rumor rebuttals. First-stage regression models—models that did not account for a possible interaction between party affiliation and rebuttal exposure (not shown in Table 1)—indicate that corrections to rumors about both candidates are effective. For rumors about the Obama

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1 As noted earlier in the text, the analyses in these models use party identification dummy variables that combine Independents with the opposing party (e.g. Democrats are compared with Republicans/Independents). Although theoretically motivated, this operationalization does not allow for comparisons between Republicans and Democrats. To address this issue, we reran all analyses including both party affiliation dummies in the models. There is no difference between Democrats and Independents in the alternative model specification, but Republicans’ exposure to Obama ticket rumors still has more influence on their belief than exposure among Independents, the reference category, consistent with H1.
ticket, \( b = -0.34, p < 0.001 \), and McCain ticket, \( b = -0.20, p < 0.001 \), rebuttal exposure is associated with lower rumor belief. Adding the interaction terms, we find that this relationship is not dependent on party affiliation (see Table 1, Models 2 and 4). For Obama ticket rumors, the interaction between the Democrat dummy variable and rebuttals encountered is not significantly different from zero, indicating there is no difference in the effectiveness of Obama ticket rumor rebuttals between Democrats and non-Democrats. A similar pattern was found for McCain ticket rumors. The results indicate rebuttals are equally effective at reducing belief in both Obama and McCain ticket rumors regardless of political predispositions. Thus, H2 is not supported.

The lone research question examined whether exposure to attitude-discrepant rebuttals is associated with an increase in belief in the corresponding rumors among individuals at the ideological extremes. Two dummy variables were created for those who self-identified as either “very conservative” \((n = 48)\) or “very liberal” \((n = 24)\). Two analyses were conducted to test the interactions between (1) strong conservatives and Obama rebuttal exposure and (2) strong liberals and McCain rebuttal exposure. The evidence here does not suggest a backfire effect, even among the most passionate ideologues. Those who are strongly conservative do not demonstrate increased belief in Obama ticket rumors in response to Obama rumor rebuttals, as evidenced by the non-significant coefficient for the interaction, \( b = 0.01, p = 0.95 \). Similarly, the coefficient on the interaction between McCain rebuttal exposure and strong liberal identification, though positive, is still not significantly different from zero, \( b = 0.24, p = 0.12 \). Although a lack of significance cannot be taken as evidence that a relationship does not exist, these data fail to demonstrate a backfire effect outside the laboratory.

The final two hypotheses tested the link between rumor belief and vote choice. To establish a baseline for this relationship, we first constructed a logistic regression model predicting a vote for Obama using the political and demographic variables outlined earlier in the text but did not include the rumor belief items. The chi-square for this initial model \((n = 519)\) was 263.08, with a Nagelkerke \(R^2\) of 0.53 (coefficients not reported). We next ran an identical model but added belief in rumors about both candidates, which increased the variance explained to 0.61, a substantively important improvement in our ability to explain vote choice. Turning to the model coefficients, we find support for H3 (see Table 2). Obama rumor belief and a vote for Obama were negatively and significantly related, indicating that as the number

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\(^2\)The model specification that includes both Democratic and Republican party affiliation dummy variables does not support H2 either, but it does reveal something unexpected. The coefficients for the interactions between both party dummies and Obama rebuttal exposure were negative and significant. This suggests that rebuttals to Obama ticket rumors were less influential in forming beliefs for Democrats and Republicans than they were for Independents. This is not consistent with the logic of motivated reasoning, but it is an intriguing result.
Table 1
Influence of False Rumor and Rebuttal Exposure on Rumor Beliefs by Candidate Supported

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1: Obama rumors Believed</th>
<th>Model 2: Obama rumors believed</th>
<th>Model 3: McCain rumors believed</th>
<th>Model 4: McCain rumors believed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rumors encountered(^a)</td>
<td>.56*** (.04)</td>
<td>.66*** (.04)</td>
<td>.33*** (.03)</td>
<td>.40*** (.03)</td>
</tr>
<tr>
<td>Party affiliation(^b)</td>
<td>.41* (.17)</td>
<td>.33* (.16)</td>
<td>.03 (.05)</td>
<td>.03 (.05)</td>
</tr>
<tr>
<td>Party affiliation(^b) X Rumors encountered(^a)</td>
<td>-.26** (.08)</td>
<td>-.23** (.09)</td>
<td>-.16** (.05)</td>
<td>-.21*** (.06)</td>
</tr>
<tr>
<td>Rebuttals encountered(^a)</td>
<td></td>
<td>-.33*** (.05)</td>
<td></td>
<td>-.23*** (.05)</td>
</tr>
<tr>
<td>Party affiliation(^b) X Rebuttals encountered(^a)</td>
<td></td>
<td>.07 (.08)</td>
<td></td>
<td>.13 (.10)</td>
</tr>
<tr>
<td>Education</td>
<td>-.11* (.05)</td>
<td>-.08 (.05)</td>
<td>-.00 (.03)</td>
<td>.00 (.03)</td>
</tr>
<tr>
<td>African–American</td>
<td>-.35** (.13)</td>
<td>-.29* (.12)</td>
<td>.02 (.07)</td>
<td>.00 (.07)</td>
</tr>
<tr>
<td>Online news use</td>
<td>-.00 (.01)</td>
<td>.00 (.00)</td>
<td>.00 (.00)</td>
<td>.00 (.00)</td>
</tr>
<tr>
<td>Offline news use</td>
<td>-.01 (.01)</td>
<td>-.01 (.01)</td>
<td>.00 (.01)</td>
<td>.00 (.01)</td>
</tr>
<tr>
<td>Attention to the Campaign</td>
<td>-.00 (.05)</td>
<td>.04 (.04)</td>
<td>.04 (.03)</td>
<td>.05 (.02)</td>
</tr>
<tr>
<td>Age</td>
<td>-.01** (.00)</td>
<td>-.01* (.00)</td>
<td>-.00 (.00)</td>
<td>.00 (.00)</td>
</tr>
<tr>
<td>Political knowledge</td>
<td>-.04 (.03)</td>
<td>-.02 (.04)</td>
<td>.02 (.02)</td>
<td>.02 (.02)</td>
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<tr>
<td>Income</td>
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<td>-.01 (.00)</td>
<td>.01 (.01)</td>
<td>.01 (.01)</td>
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<tr>
<td>Gender (Male)</td>
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<td>-.07 (.06)</td>
<td>-.05 (.04)</td>
<td>-.06 (.04)</td>
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<tr>
<td>Political participation</td>
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<td>.01 (.02)</td>
<td>-.03* (.01)</td>
<td>-.03 (.01)</td>
</tr>
<tr>
<td>Trust in government</td>
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<td>-.03 (.02)</td>
<td>.01 (.01)</td>
<td>.01 (.01)</td>
</tr>
<tr>
<td>Constant</td>
<td>.67 (.23)</td>
<td>.31 (.22)</td>
<td>-.22 (.12)</td>
<td>-.28* (.11)</td>
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<tr>
<td>Observations (N)</td>
<td>519</td>
<td>519</td>
<td>519</td>
<td>519</td>
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</tbody>
</table>
| \(^a\)Rumors corresponding to candidate shown in column heading.  
\(^b\)Party affiliation corresponding to candidate shown in column heading such that Democrats coded high for Obama models and Republicans for McCain models.  
\(*p < 0.05; **p < 0.01; ***p < 0.001.\)
of rumors believed about the Obama ticket increased, the likelihood of voting for him decreased. There is also tentative evidence that McCain ticket rumor belief was related to vote choice. We hesitate to make too much of this, as the coefficient fell short of our cutoff for statistical significance ($p = .12$), but the relationship was in the anticipated direction.

This model demonstrates rumor belief and vote choice are related, and the effect is not simply a product of party affiliation as we control for party ID. However, an important remaining question is the extent to which rumor belief is linked with voting behavior (King, Tomz, & Wittenberg, 2000). Particularly, how much did a one-unit change in rumor belief correspond with the likelihood of voting for or against a candidate? Using the observed-value approach based on coefficients from the model in Table 2 (see Hanmer & Kalkan, 2013), we estimated the predicted probabilities of a vote for Obama across levels of rumor belief. The resulting probabilities add further support to the hypothesis that rumor belief is related to vote choice. For Democrats, the probability of voting for Obama drops from 89% at zero rumors believed, to 70% at one rumor believed, and 35% at two rumors. For Republicans, believing one rumor about Obama reduced the likelihood of voting for Obama to just 3% compared with 11% when no rumors were believed. McCain rumors believed were also related to support for Obama for some partisans. Democrats who

<table>
<thead>
<tr>
<th>Variable</th>
<th>$b$ (standard error)</th>
<th>Wald</th>
</tr>
</thead>
<tbody>
<tr>
<td>Republican</td>
<td>$-2.27 (.37)^{***}$</td>
<td>36.84</td>
</tr>
<tr>
<td>Democrat</td>
<td>$1.85 (.31)^{***}$</td>
<td>34.74</td>
</tr>
<tr>
<td>False rumors believed (Obama ticket)</td>
<td>$-1.38 (.23)^{***}$</td>
<td>35.79</td>
</tr>
<tr>
<td>False rumors believed (McCain ticket)</td>
<td>$.43 (.27)</td>
<td>2.48</td>
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<tr>
<td>Political knowledge</td>
<td>$.09 (.15)</td>
<td>.40</td>
</tr>
<tr>
<td>Attention to the campaign</td>
<td>$.60 (.19)^{***}</td>
<td>13.84</td>
</tr>
<tr>
<td>Political participation</td>
<td>$.04 (.10)</td>
<td>.14</td>
</tr>
<tr>
<td>Trust in government</td>
<td>$.06 (.06)</td>
<td>.98</td>
</tr>
<tr>
<td>Online news use</td>
<td>$.04 (.02)</td>
<td>3.74</td>
</tr>
<tr>
<td>Offline news use</td>
<td>$.04 (.04)</td>
<td>.66</td>
</tr>
<tr>
<td>Age</td>
<td>$-3.30 (.01)^{**}$</td>
<td>10.06</td>
</tr>
<tr>
<td>Income</td>
<td>$.00 (.07)</td>
<td>.00</td>
</tr>
<tr>
<td>Gender (Male)</td>
<td>$-3.33 (.26)</td>
<td>1.65</td>
</tr>
<tr>
<td>African–American</td>
<td>$1.41 (.61)^{*}$</td>
<td>5.34</td>
</tr>
<tr>
<td>Education</td>
<td>$-0.07 (.18)</td>
<td>.16</td>
</tr>
<tr>
<td>Intercept</td>
<td>$-1.01 (.82)</td>
<td>1.50</td>
</tr>
<tr>
<td>$N$</td>
<td>519</td>
<td></td>
</tr>
<tr>
<td>Chi-Square (degrees of freedom)</td>
<td>316.57 (15)^{***}</td>
<td></td>
</tr>
<tr>
<td>Nagelkerke $R^2$</td>
<td>.61</td>
<td></td>
</tr>
</tbody>
</table>

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

Table 2
Logistic Regression Predicting Obama Vote
believed none of the rumors about McCain had an 81% likelihood of voting for Obama. This percentage increases to 84% at one rumor believed and 96% at two rumors. McCain rumor belief had little association with Republicans’ votes, as those who believed either zero or one rumor about McCain supported Obama only 6% of the time.

H₄ predicted that party identification’s link to vote choice is mediated by rumor belief; party affiliation increases individuals’ acceptance of false negative claims about the other party’s candidate, and these beliefs in turn reinforce citizens’ tendency to vote for their preferred party’s candidate. Demonstrating a mediating relationship would confirm the correlation between rumor belief and vote choice is not just a side effect of the simultaneous influence of party affiliation on both variables. In other words, we conduct this test to determine whether the rumor-vote link is spurious.

Two mediation models tested the indirect effect of party affiliation on vote choice through rumor belief using the SPSS macro INDIRECT (Preacher & Hayes, 2008). INDIRECT uses logistic regression to construct bootstrap confidence intervals to estimate the indirect effect on a dichotomous outcome variable. The first model included the Republican dummy variable as the independent variable and electoral support for Obama as the dependent variable, with belief in false negative Obama rumors mediating the relationship. Belief in McCain ticket rumors was included as a control. In the second model, support for Obama remained the criterion variable, but the Democrat dummy variable now served as the predictor variable and McCain ticket rumor belief was the mediator. Obama ticket rumors believed were controlled for in the second model. Both models also included all demographic, political, and media use controls used in the other analyses.

The results show Republicans are less likely than non-Republicans to support Obama as evident by the direct effect of party affiliation on vote choice, $b = -2.97 \, (36), p < .001$. Republicans are also significantly more likely than non-Republicans to believe rumors about the Obama ticket, $b = .51 \, (.09), p < .001$. Regardless of party affiliation, as the number of rumors all respondents believe about Obama increases, their likelihood of supporting him significantly decreases, $b = -1.22 \, (.21), p < .001$, providing further evidence that vote choice is related to rumor belief. A slightly different pattern is found in the second model with Democrats’ beliefs. The direct effect illustrates Democrats were more likely than non-Democrats to support Obama, $b = 2.59 \, (.29), p < .001$, but were not significantly more likely to believe rumors about the McCain ticket, $b = .05 \, (.05), p = .36$. However, belief in McCain ticket rumors is also related to an increased likelihood of an Obama vote for all respondents, $b = .61 \, (.26), p < .05$.

The question remains whether rumor belief significantly and uniquely contributes to individuals’ vote choice, beyond the direct influence of party
affiliation. For Republicans, mediation tests using bootstrap confidence intervals provide strong evidence that belief in rumors about the Obama ticket is distinctly linked to vote choice. The indirect effect of being Republican on a vote for Obama through Obama rumor belief is $-0.62 (0.17)$, with a 95% bias-corrected confidence interval (based on 5,000 bootstrap samples) of $-0.96$ to $-0.31$. The confidence interval does not contain zero, indicating that relative to non-Republicans, Republicans’ decision to vote for Obama is uniquely related to the number of rumors they believe about Obama. Limited support for this hypothesis was found in the Democrat model, however. The indirect effect of party affiliation on a vote for Obama when mediated by McCain ticket rumors believed is $0.03 (0.04)$ but the confidence interval borders on zero ($-0.03$ to $0.15$), providing only tentative support that McCain ticket rumor belief is uniquely linked to Democrats’ vote for Obama.

**Discussion**

This study makes two primary contributions. First, it demonstrates that individuals’ responses to political rumors are shaped by partisan motivations. False negative rumors about a political candidate one opposes are more readily accepted than rumors about a candidate one supports. However, people do not respond more favorably when rumors about their preferred candidate are rebutted. Encountering rebuttals to both Obama and McCain ticket rumors was associated with a reduction in rumor belief among Republicans and Democrats alike. Contrary to some prior laboratory-based evidence, rebuttals also did not produce a backfire effect in the field, as exposure to rumor rebuttals was not associated with an increase in rumor belief about an opposed candidate, even among individuals with extreme ideologies.

The second contribution is that the study confirms the real-world electoral consequences of political rumors, showing belief in false negative rumors about a candidate is related to significant decreases in the likelihood of voting for that candidate. Belief in rumors about the Obama and McCain tickets was related to voters’ support, though to varying degrees. Further, we show rumor belief is uniquely linked to Republicans’ decision to vote for Obama, beyond their party affiliation. Simply put, partisans were more likely to believe rumors about an opposed candidate, and for Republicans these beliefs subsequently reinforced their vote preferences.

Democratic theorists have expressed concern over the potential impact of a public that holds incorrect beliefs about politics (Delli Carpini & Keeter, 1996; Luskin et al., 2002), and the results of this study suggest those fears are at least partially warranted. As political strategists have long known, evidence suggests that spreading rumors can be an effective political tactic. If supporters of one candidate are particularly adept at planting rumors about the
opposing candidate, this could have an important impact at the polls. This is alarming given the abundance of political rumors circulating and the ease and speed at which they can be transmitted today.

The idea that politically motivated reasoning affects rumor belief only makes the threat worse. It indicates that individuals tend to be more susceptible to negative rumors about an opposed candidate than one they support. This biased information processing strategy can produce harmful consequences for democracy because citizens allow their political predispositions to shape their perceptions of political reality. Political rumors—even those about an opposed candidate—are often wrong. The problem appears to be that partisan motivated reasoning biases people’s judgments and selectively discourages critical analysis of political information. Given the role party identification plays in shaping citizens’ political worlds in an environment characterized by high levels of misleading claims, it may become less likely that people accurately assess and understand those with whom they disagree ideologically. As a result, what constitutes ‘fact’ may be determined by one’s political beliefs (Winneg, Kenski, & Jamieson, 2005).

Despite these concerns, the data do provide some reasons for optimism. Rebuttals were associated with reduced rumor belief for Democrats and Republicans, hinting that motivated processes were not at play in response to rebuttals. Perhaps candidates can limit the effectiveness of rumors simply by offering a refutation so long as it is carefully constructed (see Nyhan & Reifler, 2012). Recent studies also highlight that motivated reasoning may reach a “tipping point” in which heavy doses of negative information about a preferred candidate can eventually lower one’s evaluation (Redlawsk et al., 2010), and a simpler dynamic might be found in assessments of political reality. Presented with enough corrective information, individuals might eventually give up on an attitude-consistent rumor. The data here do not allow for tests of the influence of repeated rebuttal exposure, but it appears that some level of rebuttal proved to be effective. Future research should strive to test a tipping point to determine the point at which rebuttals become effective.

The lack of evidence for a backfire effect in the wild should also encourage those concerned about political rumors. This, of course, does not mean a backfire effect does not occur for some individuals. Surely it does. The results here only suggest it does not happen frequently enough to overwhelm the positive effects of rumor rebuttals in aggregate. The absence of a backfire effect hints that it may be case or issue specific. The backfire effect is thought to occur because people aggressively counterargue any information that challenges their prior-held belief. Having a strong prior belief appears to be a prerequisite to this effect. For instance, the backfire effects found in Nyhan and Reifler’s (2010) study involved issues that people felt passionately about. It is possible people did not feel strongly enough about the rumors here to
necessitate counter arguing, though future research is needed to fully understand the conditions and mechanisms behind this effect.

This study has limitations that deserve mention. The survey-based study relies on respondents’ self-reported exposure to rumors and rebuttals. Asking respondents to estimate exposure post hoc raises concerns that they might overreport their encounters with rumors, as they do when reporting news media use (Prior, 2009). There are, however, several reasons that we judge these measures acceptable. First, exposure to the highest profile rumors (e.g. Obama’s religious identity) corresponds very closely to levels found in other surveys conducted over the course of the campaign (Hargrove & Stempel, 2008; Pew Research Center for the People & the Press, 2008). Thus, the post hoc reports are remarkably consistent with measurements taken during the campaign. Second, in stark contrast to the risk of overreporting, exposure to false rumors was low: Respondents reported hearing fewer than three of the eight rumors, which is surprising given the substantial media coverage they received during the election. Also, if respondents had reported hearing rumors they did not, in fact, previously encounter, simply because they reinforced preexisting attitudes, we would expect the level of rumor exposure (and belief) to be higher than it is. Together, this evidence leads us to believe that our measurement strategy is reasonably accurate. Furthermore, to the extent any inaccuracies exist in the data, we have no reason to expect systemic biases in the error. For example, we have no reason to suspect Democrats would be more likely to overreport their rumor exposure than Republicans, or vice versa. The consistent pattern of results across both parties provides added confidence that there are not biases in the error. Thus, the relationships observed here should be robust in the face of either overreporting or underreporting.

Our study is also bounded in terms of the valence of the rumors examined. Given our focus on the potentially harmful consequences of political rumorizing, our study included only negatively valenced rumors. It is important to note that positively valenced rumors about the candidates may also affect electoral behavior, a possibility that future research should address.

Another limitation concerns the cross-sectional nature of the data. We did not measure rumor exposure before the vote decision, so we cannot establish the direction of causality. It is possible vote choice influenced reported rumor exposure. Nevertheless, there are several factors supporting the interpretations offered. First, the models presented are theoretically motivated and grounded in prior empirical work: There is ample evidence that motivated reasoning occurs in the laboratory, that misinformation can influence decision making, and that negative information serves to lower evaluations of a candidate. These data provide a unique opportunity to test these relationships in the field, in the context of a real election. Second, although we measured the key variables...
in a single survey, there is strong evidence that party affiliation is stable over time, whereas vote choice—though often established early in elections—can be influenced by campaign information (Kogen & Gottfried, 2012). Reversing the causal ordering, such that rumor exposure or belief predicts party affiliation, is not sensible. Also, the timing of the survey, which was administered immediately after the election, reduces the risk that respondents were reporting post-election rumor exposure. In addition, the mediation model demonstrates that although rumor belief is influenced by party affiliation, its relationship to vote choice is not spurious.

Finally, the possibility that rumor belief is rationalized from vote choice must be addressed. Recall that belief in rumors about both candidates was remarkably low, even for an opposed candidate. Republicans, for example, believed on average less than one of the four false claims about Obama. Were rumor belief a rationalization of vote choice, we would expect Republicans and McCain supporters to report significantly higher belief in Obama rumors, perhaps as a way to “punish” Obama for winning. But that did not occur. Instead, we find our interpretation that rumor beliefs predict vote choice to be more plausible, especially given the evidence that negative campaign information (like unflattering rumors) can reduce candidate support (e.g. Zaller, 1992). Despite the inherent limitation of cross-sectional data, the findings here provide important insights into how rumors relate to democratic outcomes. Nonetheless, it will be important to extend this work through experiments isolating the impact of rumor belief on vote choice and panel designs in which rumors’ influence are examined over the course of a campaign.

Conclusion

This study reinforces concerns about political decisions based on inaccurate information by showing belief in false rumors about the U.S. presidential candidates in 2008 was uniquely related to citizens’ vote choice. One important implication of this work is that peoples’ ability to make deliberate political decisions may be compromised in an environment in which political rumors and misinformation are prevalent. Citizens are now exposed to misleading or false claims from a variety of sources including their online social networks (Garrett, 2011), the mass media (Weeks & Southwell, 2010), interest groups, and the presidential campaigns themselves (Winneg et al., 2005), making it more difficult to know what is true and what is not. If the line between fact and fiction becomes harder for people to distinguish, the results of this study lead us to expect that public opinion and political behaviors will be increasingly influenced by inaccurate information.
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Appendix

Rumor Question wording: “Now I’m going to read different statements people made about the candidates prior to the election. Please tell me how often you have heard or read each statement—many times, just once or twice, or never.” For each statement a respondent heard, there were two follow-up questions: “So you’ve heard people make that statement about [candidate]. Have you ever heard or read anything suggesting that the statement is false?” and “What do you think about the statement? Do you think that it is definitely true, probably true, probably false, definitely false, or have you not thought much about it?” The statements follow: “Barack Obama is a Muslim” (91% heard rumor, 55% heard refutation, 22% believed); “Barack Obama does not qualify as a natural-born citizen of the U.S.” (59%, 30%, 10%); “The bulk of donations to the Obama campaign came from a handful of wealthy foreign financiers” (41%, 11%, 20%); “Barack Obama said that the national anthem conveys a ‘war-like message’ and should be replaced with ‘I’d Like to Teach the World to Sing’” (15%, 3%, 6%); “Joe Biden said that wealthy Americans who pay higher taxes are being patriotic” ([true] 39%, 23%, 46%); “While serving as the Mayor of Wasilla, Alaska, Sarah Palin successfully banned several books from the local library” (40%, 15%, 13%); “While serving in the Navy, John McCain caused the 1967 fire aboard the USS Forrestal, resulting in the deaths of more than 100 sailors” (17%, 4%, 4%); “John McCain said during a 60 Minutes interview that he was a ‘war criminal’ who ‘bombed innocent women and children’” (11%, 3%, 3%); “Sarah Palin said that ‘God made dinosaurs 4,000 years ago,’ and called them ‘Lizards of Satan’” (9%, 2%, 3%); “In 1980, John McCain divorced his wife of almost 15 years and married 25-year-old Cindy five weeks later” ([true] 48%, 5%, 59%).

References


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