The term *fake news* dates to the 19th century (Fallon, 2017) and has consistently featured in political discourse; for example, Nazi officials attempted to discredit critical media reports as “Lügenpresse,” which literally means “lying press” (Griffing, 2017). Still, accusations of fake news have spiked since the 2016 U.S. election. The perception of rampant fake news threatens the effective function of democracy by exacerbating media distrust (Jones, 2018), hostility toward political figures (Philippis, 2019), and political polarization. It is practically important, then, to understand the appeal of fake-news attributions.

Fake news can refer to content generated by sources with the goal of spreading disinformation. Researchers have made strides in studying why people believe such disinformation (Allcott & Gentzkow, 2017; Pennycook, Bear, Collins, & Rand, 2020; Pennycook & Rand, 2020) and who is likely to do so (Anthony & Moulding, 2019; Bronstein, Pennycook, Bear, & Cannon, 2019; Pennycook, Cannon, & Rand, 2018). Less studied is the use of the term to discredit news from reputable sources. Here, there is ambiguity about whether contested news is due to intentional deception or well-intentioned but erroneous reporting. For example, in 2017, Brian Ross of ABC News incorrectly reported that former National Security Advisor Michael Flynn made contact with Russian officials during the 2016 campaign. But after no other reporters could support the story, ABC News issued a correction. To some, like ABC News Chief James Goldston, the report was an honest (though serious) mistake (Levine, 2018). But in a departure from the conduct of prior U.S. presidents, President Trump claimed the “dishonest” media again intentionally spread false information (Wang, 2017). We explore the psychological processes related to this use of the term.
“fake news”—ascribing malevolent intent to reputable news sources whose intentions are ambiguous.

Fake-News Attributions and Need for Structure

In attempting to make sense of current events, people might assume the veracity of all reputedly sourced news stories, even those that disconfirm their existing beliefs and attitudes. Many studies show, however, that people are highly motivated to discredit information that does not fit their worldview (Kunda, 1990). Still, prior research may not fully explain why people occasionally choose to discredit disconfirming stories by viewing them as intentionally fabricated rather than merely wrong.

A complementary motivational account starts with people’s need to see the world as structured, consistent, and orderly (Heider, 1958; Kruglanski, 1989; Lerner, 1980). Viewing news organizations as prone to honest mistakes, or even as incompetent, implies a world in which important information can be distorted in any direction because of circumstances that are difficult to identify and predict. Conversely, viewing news organizations as deliberately conspiring to accomplish a sinister end implies a world in which important information is reliable. Put differently, attributing a news story that runs counter to one’s worldview to fake news not only discredits that story but also affords structure by suggesting that undesired information is reducible to a campaign on the part of identifiable agents to skew the news in a consistent direction.

Indirect support for this possibility comes from compensatory-control theory (Kay, Gaucher, Napier, Callan, & Laurin, 2008), which posits that people seek forms of structure to compensate for low or reduced perceptions of personal control. In several studies, people responded to threatened control by perceiving that they had enemies (in both the personal and political realm) who were intentionally scheming to undermine their well-being and goals (M. J. Landau, Kay, & Whitton, 2015). Although perceiving that one has powerful enemies is superficially aversive, it attributes intention to events that might otherwise appear mysterious and unpredictable (Sullivan, Landau, & Rothschild, 2010). Attributing malicious intent to identifiable agents affords structure, regardless of whether those agents actually act predictably or exist.

If, as we theorize, fake-news attributions afford structure, then they should be preferred by individuals who generally seek well-structured interpretations of information. Analysis of an existing data set—the DDB Needham Lifestyle Survey (accessed via Putnam, 2020)—offered preliminary support. Between 1993 and 1997, a sample of participants \( N = 17,913 \) responded to items related to need for structure (“Changes in routine disturb me”) and bias in the media (“You really can’t trust the news media to cover events and issues fairly”). There was a small but robust correlation; specifically, greater need for structure was associated with greater perceptions of media bias, \( r = .052, p < .001 \). Still, this evidence is limited because the distrust measure failed to distinguish between attributions of intentional deception versus incompetence. In the current studies, we made this choice explicit and operationalized structure seeking using the personal-need-for-structure scale (Thompson, Naccarato, Parker, & Moskowitz, 2001).

Asymmetries in Fake-News Attribution

Prior work suggests that there may be ideological asymmetries in the hypothesized effects; specifically, personal need for structure may differentially predict fake-news attributions for Republican and Democratic participants. Prior meta-analyses show that conservatism is associated with need for structure \( (r = .26; Jost, Glaser, Kruglanski, & Sulloway, 2003) \) and intolerance of ambiguity \( (r = .20; Jost, Sterling, & Stern, 2018) \). Also, conservatives are more likely than liberals to endorse conspiracy theories that simplify complex issues (Galliford & Furnham, 2017; Garrett & Weeks, 2017; van Prooijen, Krouwel & Pollet, 2015). Given recent evidence that conservatives report lower trust in the media than liberals (Jurkowitz, Mitchell, Shearer, & Walker, 2020), fake-news attributions may be a particularly appealing source of structure for conservatives. This finding would be consistent with compensatory-control theory, which posits that groups vary in the sources used for affirming a structured worldview (Kay & Sullivan, 2013).

Indeed, similar effects emerged in the archival study described above, which found associations between conservatism (or less liberalism) and the need-for-structure item \( (r = .135, p < .001) \) and between conservatism and media distrust \( (r = .104, p < .001) \). The study also found a stronger association between structure and distrust for Republican participants \( (r = .203, p < .001) \) than for Democratic participants \( (r = .075, p < .001) \), \( z = 5.56 \), \( p < .001 \).

We expected that the current studies would replicate the correlation between conservatism and preference for structure and that political affiliation would moderate the strength of the association between personal need for structure and perceptions of intentional deception. We tested these predictions in each study and provide meta-analytic estimates of the effects. Materials, data, and syntax for all studies are available on the Open Science Framework (https://osf.io/57kwr/), and information on additional measures collected is available in the Supplemental Material available online.
Participants in all studies were recruited from Mechanical Turk. Eligible participants needed to be U.S. citizens who initially reported identifying as Democratic or Republican.

### Studies 1a and 1b

#### Method

**Participants.** In Study 1a, 240 participants (age: $M = 36.1$ years, $SD = 10.8$; 45.8% female; 82.1% White) completed all study measures. This sample size provided 80% power for detecting an effect ($r$) as small as .18. In Study 1b, 269 participants (age: $M = 37.5$ years, $SD = 11.7$; 46.8% female; 79.2% White) completed all study materials and passed additional attention-check items (96.8% of participants passed the attention check; see the Supplemental Material for more information). This sample size provided 80% power for detecting an effect ($r$) as small as .17.

**Procedure.** In both studies, participants completed measures in the following order: a measure of personal need for structure, a measure of political identification, several vignettes related to perceptions of bias in the news media, and a demographics questionnaire.

**Personal need for structure.** Participants completed Thompson et al.’s (2001) 12-item personal-need-for-structure scale (sample items: “I enjoy having a clear and structured mode of life”; “It upsets me to go into a situation without knowing what I can expect from it”) using a 7-point response scale (1 = strongly disagree, 7 = strongly agree). Higher scores indicated greater personal need for structure. The measure showed high internal reliability across studies (Study 1a: $\alpha = .92$; Study 1b: $\alpha = .89$).

**Political identification.** Participants reported their political orientation (1 = very conservative, 7 = very liberal), followed by whether they identified as Republican, Democratic, or neither.

**Perceptions of intentional bias in the news media.** Next, participants responded to several vignettes describing recent errors in news reporting. Some of these vignettes described actual events (e.g., Fox News publishing an article speculating that the murder of Seth Rich was connected to the leaking of Hillary Clinton’s e-mails), whereas others were created for the purposes of the study. Each vignette made explicit that the news organization acknowledged that a reporting error had been made (e.g., by publishing a retraction or issuing an apology). Full wording for all vignettes is available at https://osf.io/57kvr/.

Participants viewed vignettes describing errors in news stories that negatively portrayed politicians in the party they claimed affiliation with. Participants who reported being neither Democratic nor Republican were randomly assigned to either set of vignettes. These unaffiliated participants were not included in primary analyses, but their responses are available at https://osf.io/57kvr/.

After each vignette, participants responded to five items that measured the degree to which they believed that the reporting error was due to an honest mistake versus an intentional effort to negatively depict members of one political party. Specifically, participants reported the extent to which the reporting error (a) was due to the news organization intentionally trying to spread false information; (b) was the result of sloppy reporting (reverse-scored); (c) would have been retracted if the news organization, but not the public, discovered it (vs. surreptitiously retained it for political purposes); (d) was more likely an honest mistake than an attempt to mislead the public; and (e) was more likely the result of insufficient attention than an intentional attempt to depict certain people negatively. Participants responded to items (a), (b), and (c) on a 7-point response scale (1 = very unlikely, 7 = very likely) and items (d) and (e) on a 6-point response scale (1 = extremely more likely to be an honest mistake, 6 = extremely more likely to be trying to mislead). See https://osf.io/57kvr/ for full item wording in both studies.

For analyses, responses to each item were standardized and averaged within vignette, and then a grand average was taken across vignettes. Responses were scored such that higher values indicated greater perception that the media were intentionally spreading false information (vs. making sloppy mistakes). Study 1a participants responded to five vignettes totaling 25 items, and the aggregate measure across all standardized items demonstrated acceptable internal reliability among all participants ($\alpha = .94$) as well as among Democratic ($\alpha = .93$) and Republican ($\alpha = .95$) participants separately.

In Study 1b, participants responded to two of the vignettes, totaling 10 items (total: $\alpha = .86$; Democratic: $\alpha = .82$; Republican: $\alpha = .92$). In addition, Study 1b participants responded to a more general item about perceived bias in the media. Specifically, participants read an (experimenter-created) essay describing a recent swell in retracted news stories. Democratic participants read that the retractions were more likely to come from the “conservative media,” whereas Republican participants read that the retractions were more likely to come from the “liberal media.” Otherwise, the text was identical. Participants then completed the same
five-item measure assessing their perception that these retractions were more likely due to incompetent reporting than to intentional attempts to deceive readers. Items on this general measure also showed acceptable internal reliability (total: α = .78; Democratic: α = .73; Republican: α = .84).

**Demographics.** Participants then completed a nine-item demographics questionnaire, reporting information such as age, gender, and race (all items are available at https://osf.io/57kvr/).

**Results**

In Study 1a, which used the vignettes with specific news stories, higher personal need for structure was positively associated with perceptions of intentional deception in the news media, though this analysis was not statistically significant (r = .109, 95% confidence interval, or CI = [−.02, .23], p = .093; see the Supplemental Material for correlation matrices for both studies).

To examine how analyses changed after controlling for strength of political identity, we recoded the political-orientation item to be a measure of strength of political identification (1 = slightly liberal or slightly conservative, 2 = moderately liberal or moderately conservative, etc.). A partial correlation controlling for strength of political identity was also positive but not statistically significant (r = .094, p = .147).

Both Republican (r = .175, p = .080) and Democratic (r = .081, p = .345) participants showed positive associations between personal need for structure and perceptions of intentional deception, though neither analysis was statistically significant, and the two correlations did not reliably differ (Fisher's z = 0.72, p = .472). Finally, conservatism was positively associated with personal need for structure (r = .098, p = .113), though this test was also not statistically significant.

In Study 1b, personal need for structure was again positively (and this time significantly) associated with perceptions of intentional deception, as assessed by both the individual news-story vignettes (r = .199, p = .001, 95% CI = [.08, .31]) and the item assessing perceptions of general media bias (r = .175, p = .005, 95% CI = [.06, .29]). This effect remained statistically significant in partial correlations controlling for strength of political identity (individual vignettes: r = .165, p = .008; general media-bias measure: r = .136, p = .026).

Analysis of the general media-bias measure further revealed that Republican participants (r = .238, p = .026) showed a reliable association between personal need for structure and perceptions of deception, whereas Democratic participants did not (r = .139, p = .061), though the two correlations did not reliably differ, Fisher's z = 0.78, p = .435 (conclusions did not differ when we used the individual-vignette measures). Conservatism was positively but not reliably associated with personal need for structure (r = .027, p = .654).

**Discussion**

One limitation of Studies 1a and 1b is that participants responded only to news stories that negatively portrayed preferred politicians, making it ambiguous whether attributions of bias reflected a preference for structure or efforts to disparage an ideological out-group. To be clear, attributions of fake news likely serve multiple purposes, one of which is to protect one's in-group. However, this work focused on the independent role of need for structure as another motive behind fake-news attributions.

We addressed this in Study 2 by testing whether personal need for structure predicts fake-news attributions when participants would not be otherwise motivated to discredit information, specifically when reading negative news stories about disliked figures (i.e., ideologically inconsistent information). If attributions of bias reflect only in-group favoritism, then personal need for structure should be positively correlated with claims of deception for ideologically consistent information, as in Studies 1a and 1b, but negatively correlated for ideologically inconsistent information. However, if attributions of bias also reflect a desire to preserve structure, then personal need for structure should be positively related to claims of intentional bias for both ideologically consistent and inconsistent information.

Finally, results from Studies 1a and 1b were inconsistent regarding whether the relationship between personal need for structure and attributions of bias holds after analyses account for strength of political identity. To address this limitation, we collected a larger sample in Study 2.

**Study 2**

**Method**

**Participants.** In total, 880 participants (age: M = 39.3 years, SD = 12.8; 59.6% female; 81.3% White) completed all study materials and passed the same attention check as in Study 1b (95.8% of participants). This sample size provided 80% power for detecting an effect (r) as small as .13 for participants reading both ideologically consistent and ideologically inconsistent information.

**Procedure.** Participants first completed the same measures of personal need for structure, political identification, and demographics as in Study 1b. To reduce the length of the study, we used only the five-item measure assessing perceptions that the media are generally engaging in
intentional deception (total: $\alpha = .81$; Democratic: $\alpha = .81$; Republican: $\alpha = .80$).

Unlike in Studies 1a and 1b, each participant was randomly assigned to read that either the liberal or conservative news media were found to be more likely to publish news stories that later required retractions. As a result, participants read information that was either ideologically consistent (e.g., Democratic participants reading the conservative media were more likely to publish stories requiring retractions) or ideologically inconsistent (e.g., Democratic participants reading that the liberal media were more likely to publish stories requiring retractions).

### Results

Unsurprisingly, participants exposed to ideologically consistent information thought the media were engaging in more intentional deception than participants exposed to ideologically inconsistent information, $t(879) = 19.73$, $p < .001$, $d = 1.33$.

Personal need for structure was positively associated with perceptions of intentional deception, both among participants evaluating ideologically consistent ($r = .195$, $p < .001$, 95% CI = [.10, .29]) and inconsistent ($r = .157$, $p = .001$, 95% CI = [.07, .24]) information. This finding replicates and extends those of Studies 1a and 1b by showing that individuals high, but not low, in personal need for structure prefer fake-news attributions even when doing so casts their political in-group in a negative light.

These effects remained statistically significant in partial correlations controlling for strength of political identity (consistent information: $r = .186$, $p < .001$, inconsistent information: $r = .157$, $p = .001$). On the other hand, and also as expected, strength of political identity was positively correlated with perceptions of intentional deception in the consistent-information condition ($r = .201$, $p < .001$) but was negatively correlated in the inconsistent-information condition ($r = -.341$, $p < .001$).

Across all participants, conservatism (or less liberalism) was positively and reliably associated with personal need for structure ($r = .106$, $p = .001$). For ideologically consistent information, Republican participants showed a positive and reliable association between personal need for structure and perceptions of deception ($r = .306$, $p < .001$), but Democratic participants did not ($r = .103$, $p = .098$), and these correlations were significantly different, Fisher’s $z = 2.10$, $p = .036$. For ideologically inconsistent information, both Republican participants ($r = .185$, $p = .013$) and Democratic participants ($r = .131$, $p = .029$) showed significant correlations between personal need for structure and perceptions of deception, and these correlations did not reliably differ (Fisher’s $z = 0.58$, $p = .562$).

Taken together, Studies 1a to 2 provided converging evidence for the independent role of personal need for structure in predicting beliefs that the news media engage in intentional deception. Still, these studies were limited in their focus on retracted news articles. Considering that relatively few articles are retracted, a more ecologically valid test of our hypothesis would be to examine whether similar effects emerge for articles that are merely criticized but never retracted. Studies 3a and 3b provided such a test.

### Studies 3a and 3b

#### Method

**Participants.** In total, 498 participants in Study 3a (age: $M = 38.9$ years, $SD = 12.8$; 56.8% female; 77.9% White) and 500 participants in Study 3b (age: $M = 37.0$ years, $SD = 11.7$; 56.8% female; 79.6% White) completed all study materials and passed relevant attention checks. In each study, the number of eligible participants included in analyses provided 80% power for detecting an effect ($r$) as small as .12.

**Procedure.** Participants completed the same measures as in Study 1b, with the exception of changes to vignettes about the news media. In Study 3a, the vignette did not mention retracted stories at all; instead, it mentioned only that an independent research team had found an “alarming number of potentially misleading or inaccurate stories.” Democratic participants read that the researchers found Fox News to be the source for these inaccurate stories, but Republican participants read that the source was CNN.

Study 3b used specific and timely examples of non-retracted news stories. Democratic participants read about a Fox News video segment regarding Hunter Biden’s possibly improper business ties to a Ukrainian oligarch. The vignette clarified that the coverage received criticism and left out important details, such as that the current Ukrainian prosecutor found no evidence of wrongdoing by Hunter Biden. Republican participants read about a Washington Post story detailing a whistleblower complaint about President Trump’s possibly inappropriate negotiations with Ukrainian President Volodymyr Zelensky. Participants then read that this reporting had also been criticized, such as for failing to note that the whistleblower’s lawyer had previously worked for two Democratic politicians. In both studies, the adapted items concerning perceptions of intentional deception showed acceptable internal reliability (Study 3a: $\alpha = .81$; Study 3b: $\alpha = .71$).
**Results**

Personal need for structure was positively associated with perceptions of intentional deception in Study 3a ($r = .087, p = .053, 95\% CI = [−.004, .173]$) and Study 3b ($r = .041, p = .557, 95\% CI = [−.05, .13]$), though neither effect was statistically significant. Results were largely similar in partial correlations controlling for strength of political identity (Study 3a: $r = .068, p = .127$; Study 3b: $r = .019, p = .668$).

In both studies, however, the association between personal need for structure and perceptions of deception was reliable for Republican participants (Study 3a: $r = .161, p = .029$; Study 3b: $r = .226, p = .002$), but not for Democratic participants (Study 3a: $r = .047, p = .409$; Study 3b: $r = −.045, p = .427$), and the difference between these correlations was not significantly different in Study 3a (Fisher’s $z = 1.23, p = .226$) but was in Study 3b (Fisher’s $z = 2.93, p = .003$). Finally, both studies found a positive association between conservatism (or less liberalism) and personal need for structure (Study 3a: $r = .142, p = .001$; Study 3b: $r = .137, p = .002$).

**Discussion**

One question following Studies 1a through 3b concerns the causal relationship between personal need for structure and media distrust. Because recent manipulations of structure have threatened feelings of control (M. J. Landau et al., 2015), Study 4 used a control-threat manipulation to heighten need for structure. Experiencing a control threat should increase attributions of news errors stemming from intentional deception. Also, by including personal need for structure at the end of the study, we tested whether fake-news attributions following control threats protect beliefs in structure.

**Study 4**

**Method**

**Participants.** In total, 465 participants (age: $M = 38.4$ years, $SD = 12.3$; 63.4\% female; 77.0\% White) completed all study materials and passed attention-check items (94.5\% of participants; see the Supplemental Material for more detail). This sample size provided 80\% power for detecting an effect ($d$) as small as 0.27.

**Procedure.** Participants first completed a writing task meant to manipulate feelings of personal control, followed by measures of political orientation, perceptions of intentional deception in the news media, personal need for structure, and demographics.

**Control-threat manipulation.** Each participant was randomly assigned to a control-threat condition or a no-threat condition, which involved writing about a recent event in one’s life that was either relatively uncontrollable or relatively controllable (see Kay et al., 2008). Participants read the following prompt:

> If you stop and think about it, many things in life are [quite controllable/not very controllable]. Please try and think of something that happened to you in the past few months [that you had control over/that you had absolutely no control over]. In the space below, please describe that [controllable/random] event. Write in enough detail to describe both what happened and how it made you feel.

In both conditions, participants were required to write for a minimum of 1 min and write at least 30 characters.

**Other measures.** For our dependent measure, participants responded to the vignette, described in Study 2, pointing to generally high levels of deception in the news media. Next was the measure of personal need for structure and the demographic items described in Study 2. Unlike in Study 2, participants were exposed to only the ideologically consistent vignette (e.g., Democratic participants read that the conservative media were more likely to publish stories later requiring a retraction). To preserve time, we used a shorter version of the personal-need-for-structure scale that included only the six highest-loading items from the Study 2 data. This shorter scale demonstrated good internal reliability ($\alpha = .86$).

To ensure the cleanest manipulation of structure, we opted not to have participants complete the measure of personal need for structure between the control-threat manipulation and the measure of perceived intentional deception. Including the personal-need-for-structure scale after the measure of perceived deception offered the opportunity to test whether participants who responded to the experimental threat by engaging in “fake-news” attributions would be buffered from threat—that is, would show no subsequent increase in personal need for structure. In other words, because the control-threat manipulation was expected to increase personal need for structure, but attributions of fake news should restore personal need for structure for participants under control threat, there may be no overall differences in personal need for structure by condition. Instead, we hypothesized that there would be an indirect effect; specifically, participants under a control threat who failed to make attributions of intentional deception would be the ones who showed increases in personal need for structure.
Results

Replicating Studies 1 and 2, results showed that personal need for structure was again positively correlated with the perception that the news media were engaging in intentional deception across all participants, $r = .148$, $p = .001$, 95% CI = [.06, .24]. The effect held in both the no-threat condition ($r = .132$, $p = .042$, 95% CI = [.01, .26]) and the control-threat condition ($r = .177$, $p = .007$, 95% CI = [.05, .30]), as well as in a partial correlation controlling for strength of political identity ($r = .144$, $p = .002$). Republican participants ($r = .206$, $p = .006$) showed a reliable association between personal need for structure and perceptions of deception, but Democratic participants did not ($r = .105$, $p = .076$), though the two correlations did not reliably differ (Fisher’s $z = 1.08$, $p = .280$). Conservatism was positively but not reliably associated with personal need for structure ($r = .057$, $p = .221$).

Our primary prediction in this study, however, concerned the between-condition effect of the experimental manipulation. Consistent with our hypothesis, results showed that participants in the control-threat condition reported higher perceptions than participants in the no-threat condition that the news media were engaging in intentional deception, $t(463) = 3.06$, $p = .002$, $d = 0.28$, 95% CI = [0.10, 0.47].

Next, as a follow-up analysis, we tested whether engaging in fake-news attributions following the threat also exerted a restorative effect on perceptions of structure. The threat and no-threat conditions did not reliably differ on personal need for structure, $t(463) = 0.48$, $p = .630$, which is consistent with this account. To directly test whether this lack of difference was indeed due to the intervening fake-news attributions for participants who experienced the threat, we examined whether, after covarying out the effects of the threat manipulation on perceptions of intentional deception, a reliable effect of control threat on personal need for structure would then emerge. This mediational analysis indeed found that, after we took into account the perceptions of intentional deception in the fake-news-attribution task, the relation between control threat and personal need for structure was significant, $b = -0.05$, $SE = 0.02$, 95% bias-corrected CI = [-0.098, -0.012], $t(463) = 2.18$, $p = .030$. That is, to the extent that participants who experienced control threat failed to view journalists as engaging in intentional deception (thereby missing an opportunity to restore a sense of structure), they then reported higher need for structure.

We followed up this experimental study twice with studies in which we sought to more directly manipulate personal need for structure via a more face-valid manipulation than personal control. In Study S1 ($N = 455$; see https://osf.io/57kvr/), participants were randomly assigned to complete a structure-affirmation exercise. Participants listed three aspects of their lives that provided structure (compared with a baseline condition in which participants did not complete a writing exercise). This was followed by the same measures of news-media bias used in Study 1b. The structure-affirmation manipulation did not reliably change perceptions of intentional deception in the news media ($d = -0.07$, $p = .496$). In Study S2 ($N = 422$; see https://osf.io/57kvr/), we presented participants with a summary of an academic conference suggesting that the world was inherently random and lacked structure. This structure threat also did not alter perceptions of intentional bias in the news media ($d = 0.006$, $p = .951$) on the same measures used in Study S1.

We did not include a measure of personal need for structure after these manipulations in either study because, with such face-valid manipulations, doing so would potentially have introduced demand effects. We also wanted to maximize the likelihood of finding an effect on our measures of media bias, and inserting a personal-need-for-structure measure directly after the manipulation could have obscured possible effects on our measures of media perceptions. Thus, we do not know whether these studies failed because the manipulations simply did not affect the need for structure or for some other reason. Nonetheless, we present these two studies for transparency, to help readers reach their own conclusions about our evidence and to help inform future researchers who follow up this work.

Meta-Analysis of Primary Findings

Association between personal need for structure and perceptions of media bias

Across studies in which participants read ideologically consistent information, personal need for structure was positively associated with perceptions of media bias ($r = .122$, 95% CI = [.073, .171], $p < .001$; see the Supplemental Material for a forest plot). This effect persisted in a meta-analysis of partial correlations controlling for strength of political identity ($r = .107$, 95% CI = [.054, .159], $p < .001$).

Ideological asymmetries in the association between personal need for structure and perceptions of media bias

The association between personal need for structure and perceptions of media bias was present when we looked only at Republican participants ($r = .221$, 95%
CI = [.158, .283], \( p < .001 \) and only at Democratic participants (\( r = .065, 95\% \text{CI} = [.007, .122], p = .027 \)). Wald-type tests (Viechtbauer, 2007) comparing the two meta-analytic estimates revealed a reliably stronger association among Republican than Democratic participants (\( z = 3.62, p < .001 \)).

**Association between personal need for structure and conservatism**

Across Studies 1a to 4, greater conservatism (or less liberalism) was positively associated with personal need for structure (\( r = .101, 95\% \text{CI} = [.066, .137], p < .001 \); see the Supplemental Material for a forest plot), a finding that replicates prior work (e.g., Jost et al., 2003).

**General Discussion**

We tested whether a desire to perceive the world as structured motivates fake-news attributions. Individuals higher in personal need for structure were more likely to view contested news stories as the result of intentional deception rather than incompetence. This effect persisted after we accounted for strength of political in-group identity and held for ideologically consistent and inconsistent stories. Consistent with past research showing a positive association between conservatism and need for structure (Jost et al., 2018), Republican/conservative participants showed stronger associations between personal need for structure and attributions of intentional bias, although effect sizes varied. A final study found that a control threat increased attributions of intentional deception and that biased attributions restored a sense of structure, though such findings should be treated as preliminary.

This work widens the scope of research testing compensatory-control theory. Whereas prior research explored how religion (Kay, Gaucher, McGregor, & Nash, 2010; Kay et al., 2008) or government can serve as sources of structure, the current data suggest that media perceptions can likewise support structure. Yet restoring feelings of structure via the media comes with a twist: Individuals maintained a sense of control by viewing the media as trying to intentionally deceive their audience.

This work also adds nuance to our understanding of out-group derogation. Past work highlighted how out-group derogation enhances self-esteem (Crocker, Thompson, McGraw, & Ingerman, 1987) or strengthens in-group identity (Noel, Wann, & Branscombe, 1995). Indeed, in-group affiliation consistently predicted attributions of bias; strength of political identity was positively associated with attributions of bias among participants reading ideologically consistent news (\( r = .286 \); see https://osf.io/57kvr/ for individual studies).

Still, our results suggest that derogation also affords structure (Stern, West, & Rule, 2015). Participants higher in personal need for structure were more likely to perceive political opponents as engaging in intentional deception, and this was in part to restore structure, as seen in Study 4.

Our findings help identify populations that may respond to claims of fake news. Prior literature has shown that low or reduced personal control heightens preference for structure, so groups that report lower levels of control should be especially attracted to portrayals of the media as conniving. These groups may include older individuals (Bradley & Webb, 1976), those lower in socioeconomic status (R. Landau, 1995), and those occupying low-status positions (Fiori, Brown, Cortina, & Antonucci, 2006).

Finally, we hope this work will lead to additional considerations for reducing the appeal of fake-news attributions. One possibility is to remove the desire to make such attributions by guiding people toward simply trusting all news sources. This is a laudable but perhaps unrealistic goal, given that people are highly motivated to discredit worldview-threatening information. Instead, more progress may be made by altering how the news media are perceived. For instance, benefits may arise from clarifying the distinction between reporting versus editorializing, as some consumers may conflate stories seeking only to report the facts with those seeking to persuade. In addition, reductions in fake-news attributions may come from changes in how the media discuss the reporting process. To many, journalism may seem like straightforward work; reporting the truth is easy, so a failure to tell the truth suggests an intention to mislead. To combat this view, it may be beneficial to illustrate that journalism is complicated work that requires a mix of detailed research and discussions with sources who often have differing explanations and motives.

Belief that the media engage in intentional deception may be due to more than defending in-group beliefs or political positions; instead, there is an additional role for epistemic motives. Personal need for structure provides insight into the appeal of labeling threatening information as fake news. A better understanding of the psychological foundations behind claims of fake news will be needed to combat their influence on the media and the democratic process.

**Transparency**

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*Editor:* D. Stephen Lindsay  
*Author Contributions*

All authors developed the concept of each study. J. R. Axt programmed and analyzed the data for each study. J. R. Axt drafted the manuscript, and M. J. Landau and A. C. Kay
provided critical revisions and edits. All authors approved the final version of the manuscript for submission.

Declaration of Conflicting Interests
The author(s) declared that there were no conflicts of interest with respect to the authorship or the publication of this article.

Open Practices
All data and materials have been made publicly available via the Open Science Framework and can be accessed at https://osf.io/r84uz/ and https://osf.io/2wudt/, respectively. The design and analysis plans for these studies were not preregistered. The complete Open Practices Disclosure for this article can be found at http://journals.sagepub.com/doi/suppl/10.1177/0956797620922785. This article has received the badges for Open Data and Open Materials. More information about the Open Practices badges can be found at http://www.psychologicalscience.org/publications/badges.

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Supplemental Material
Additional supporting information can be found at http://journals.sagepub.com/doi/suppl/10.1177/0956797620922785

Notes
1. Because Democratic and Republican participants judged different news sources, our studies are not well suited to comparing levels of belief in fake news. For most studies, Democratic participants evaluated stories from or about Fox News; Republican participants evaluated news stories from or about CNN or The Washington Post. Independent analysts find that these outlets differ in false reporting (e.g., Sharockman, 2014). Given these differences, it is problematic to compare Democratic and Republican participants’ mean-level belief in fake news. Nevertheless, we report such analyses at https://osf.io/57kvr/.
2. In all studies, participants were debriefed after completing the demographics questionnaire and specifically told which news stories were real and which had been created for that study.

References


