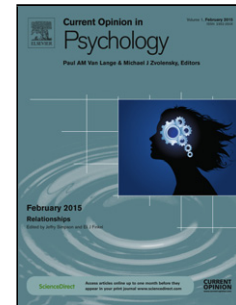


# Journal Pre-proof

A short Review on Susceptibility to Falling for Fake Political News

Cornelia Sindermann (Conceptualization) (Investigation) (Methodology) (Project administration) (Validation) (Writing - original draft) (Writing - review and editing), Andrew Cooper (Validation) (Writing - review and editing), Christian Montag (Project administration) (Supervision) (Writing - review and editing)



PII: S2352-250X(20)30043-9

DOI: <https://doi.org/10.1016/j.copsyc.2020.03.014>

Reference: COPSYC 996

To appear in: *Current Opinion in Psychology*

Please cite this article as: Sindermann C, Cooper A, Montag C, A short Review on Susceptibility to Falling for Fake Political News, *Current Opinion in Psychology* (2020), doi: <https://doi.org/10.1016/j.copsyc.2020.03.014>

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# **A short Review on Susceptibility to Falling for Fake Political News**

**Cornelia Sindermann<sup>1\*</sup>, Andrew Cooper<sup>2</sup>, Christian Montag<sup>1</sup>**

<sup>1</sup> Department of Molecular Psychology, Institute of Psychology and Education, Ulm University, 89081 Ulm, Germany

<sup>2</sup> Department of Psychology, Goldsmiths University of London, London, United Kingdom

\* Correspondence concerning this article should be addressed to Cornelia Sindermann, Department of Molecular Psychology, Ulm University, Helmholtzstraße 8/1, 89081 Ulm, E-mail: [cornelia.sindermann@uni-ulm.de](mailto:cornelia.sindermann@uni-ulm.de)

## Highlights:

- Accuracy of true and fake news consistent with own political attitudes is overrated

- Analytical thinking and susceptibility to falling for fake news are negatively related
- Deliberation reduces susceptibility to falling for fake news
- News consumption habits should be investigated in future studies
- External validity of fake news tests need to be considered

**Abstract:**

This review discusses recent findings on individuals' susceptibility to falling for fake news in the political context. Considering political attitudes and analytical thinking, we find that individuals tend to overrate the accuracy of true and fake political news that are consistent with their own political attitudes. This tendency, however, cannot be explained by motivated reasoning. This is supported by findings showing that analytical thinking is negatively related to susceptibility to falling for fake news, regardless of whether they are consistent or inconsistent with one's political attitudes.

We suggest that future works should aim at i) examining how, for example, news consumption habits relate to susceptibility to falling for fake news and ii) implementing other, more external valid fake news tests.

**Keywords:** Fake News, Disinformation, Susceptibility, Analytical Thinking, Political Attitudes

## 1. Introduction

*Fake news* is a widely known catchphrase, appearing in the media almost every day in recent times. Despite the popularity of the phrase, however, a consensus on its exact definition is lacking [1–5]. The widespread use of the term, also for example in politics, makes it difficult to specify a precise definition for the concept. A review of various definitions of fake news, misinformation, disinformation, and similarly related terms, and a discussion on their common characteristics, is beyond the scope of the present review. Instead, in the present review we will utilize a recent definition of *fake news as genre*. This definition includes three criteria that need to be fulfilled to categorize information as fake news: low facticity, creation with the intention to deceive, and a journalistic format [6].

A large amount of research has been conducted on the general topic of fake news in recent years: searching for the term “fake news” on google scholar leads to around 18,900 results published between 2010 and 2020 (2020.02.13). Broadly speaking, the topics of interest are among others the detection [7] and spread of fake news [8], understanding why people spread fake news [9], and helping people avoid falling for fake news [10,11]<sup>1</sup>.

For the purpose of this review, we suggest that fake news would not be such an important topic, if individuals were able to correctly identify fake news, and thus correctly discern true from fake news. If individuals were able to do this, they would be able to form their beliefs and opinions based on true facts and events, despite the existence of fake news. Research shows, however, that there are individual differences in beliefs about the accuracy of (certain) fake news, dependent on a range of circumstances. We therefore regard it as particularly important to review the crucial question: “Who falls for fake news?”. Developing an answer to this question necessitates addressing the key risk and resilience factors for susceptibility to falling for fake news. On that note, despite environmental factors (e.g. warnings, source credibility) also playing an important role in understanding susceptibility to falling for fake news, this review will mainly focus on individual characteristics.

The other important point to note is that fake news can be seen as a highly politicized topic. This is due to the fact that fake news often covers political topics, either supporting or denouncing particular political opinions. As such, fake news is likely to be used in the course of political campaigns and can influence voting decisions [12] (please also see works on politically oriented news and polarization [13,14]). A prominent example of this is the discussion on the spread of fake news during the US presidential elections in 2016, which may, or may not, have influenced the election results [1,15,16]. Against this background, we decided to focus this review on the associations between political attitudes, cognitions likely associated with these attitudes, and susceptibility to falling for fake news.

## 2. Review: Who falls for fake news?

### 2.1 Political attitudes

According to classic cognitive dissonance theory, (cognitive) inconsistencies are deemed uncomfortable [17]. Based on this theory, individuals might tend to rate

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<sup>1</sup> Please note that these studies use different definitions and operationalizations of fake / false news, disinformation, and misinformation; the cited studies should be seen as examples.

news items which include content that opposes their political attitudes as fake news, to reduce or prevent potential dissonance. Moreover, based on coherent accounts of thought, one can assume that information which is coherent with one's knowledge and beliefs is processed more fluently, and is therefore perceived more positively [18]. In the context of the news, this might indicate that news content which fits with one's political attitudes is processed more fluently and, therefore, perceived as more accurate. Similarly, some authors argue that individuals are likely to decide on the perceived accuracy of information, i.e. news, based on their existing values or partisanship [19,20]. Taken together, this indicates that individuals tend to overrate the accuracy of news items which are consistent with their political attitudes, whereas they underrate the accuracy of news items which are inconsistent with their political attitudes.

Empirical work on this topic mostly operationalizes political attitudes as the participant's opinion on Hillary Clinton versus Donald Trump. For example, one study investigating fake news among others found that the more individuals were pro Trump/Republican, the more they rated fake news headlines with negative content about Hillary Clinton as accurate. The more pro Clinton/Democrat participants were, the more they rated fake news headlines with negative content about Donald Trump as accurate [21]. Results of other studies reporting effects on the perceived accuracy of true and fake news headlines support the notion that individuals tend to overrate the accuracy of all news items that fit more closely with their political beliefs and attitudes compared to non-fitting news items [1,22]. In one particular study, this effect was found both before and after a period of deliberation time [22]. However most importantly, it was also found in this study that after time to deliberate, participants tended to correct their response as compared to a quicker response. This correction was independent of whether the content of the news headline was consistent or not with their political attitudes [22]. This contradicts the notion of motivated, perhaps even conscious, reasoning in the judgment of news headlines based on one's political attitudes; because if this were the case, more time to consider information (i.e. news) would lead to more overrating of the accuracy of news items that were consistent with one's political attitudes. At the same time, it would lead to more underrating of the accuracy of news items that were inconsistent with one's political attitudes.

In line with these findings on deliberation, results from a further study and two large samples indicate that individuals may be particularly good at discerning between true and true fake news headlines (average rating of accuracy of true minus average rating of accuracy of fake news headlines) for items which fit with their political attitudes. In addition, analytical thinking (see further discussion in paragraph 2.2) was negatively related to the perceived accuracy of fake news headlines, regardless of whether they were consistent or not with one's own political attitudes. Again, this argues against motivated reasoning in the judgment of the accuracy of news items [3].

In conclusion, the recent literature suggests that political attitudes alone do not explain whether or not people fall for fake news. There might be a general tendency to overrate the accuracy of news items which are consistent with one's political attitudes. However, there is limited evidence that individuals use motivated reasoning to intentionally discredit news items that are inconsistent with their own attitudes. The same might also be true for overrating the accuracy of news items which are consistent with one's political attitudes. Instead, deliberation and analytical thinking seem to positively influence the ability to detect fake news.

## 2.2 Cognition

Therefore, the next factor we review here is analytical thinking, which is often operationalized in the study of fake news using a Cognitive Reflection Test (CRT). In CRTs, (mathematical) problems must be solved, in which the intuitive answer is incorrect [23,24]<sup>2</sup>. CRTs therefore measure the extent to which individuals engage in analytical versus intuitive thinking. While analytical thinking is controlled and conscious, intuitive thinking reflects an automatic and unconscious style of thinking [25,26]. As mentioned above, if motivated reasoning was important in explaining the susceptibility to falling for fake news, analytical thinking as well as deliberation should be positively related to falling for fake news in line with one's political attitudes. This does not, however, seem to be the case (please see discussion in paragraph 2.1).

More specifically, analytical thinking has been negatively associated with the perceived accuracy of fake news headlines in several studies and across a number of different samples [3,22,27,28]. Importantly, whereas analytical thinking seems to be only slightly positively related to the perceived accuracy of true news, it has repeatedly been positively associated with discernment of true and fake news [3,22,27,28]. Hence, thinking analytically, rather than relying on intuition, seems to be a resilience factor against falling for fake news regardless of consistency with one's political attitudes. Analytical thinking, however, does not seem to be associated with an overall skepticism towards news.

It has also been found that analytical thinking, as measured with the CRT, was negatively related to the perceived accuracy of implausible news headlines, but positively related to the perceived accuracy of plausible news headlines [3]. In one of the studies mentioned above, fake news headlines were also rated as more implausible compared to true news headlines. This might therefore explain the negative associations found between analytical thinking and perceived accuracy of fake news headlines [3]. However, it raises the question about what would happen if fake news items were highly plausible: Would individuals who think more analytically tend to believe such fake news items more than individuals who do not think very analytically?

Consistent with the findings on the CRT, deliberation also seems to be an important factor protecting people against falling for fake news. It has been found that deliberation reduces the (false) accuracy rating of fake news headlines. Specifically, participants responded more correctly (i.e., the perceived accuracy of fake news was lower) after deliberation, compared to a quicker response which was given under time pressure and alongside participating in a load task [22]. As already mentioned above, this was true for fake news regardless of consistency with one's own political attitudes.

Summing up the findings regarding analytical thinking and deliberation reveals that both are negatively related to the perceived accuracy of fake news headlines, potentially via the implausibility of fake news headlines in the studies.

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<sup>2</sup> Please note that a thorough discussion on the use of the CRT as measure of analytical thinking is beyond the scope of this review. Instead, we mention the operationalizations used by the authors of the original studies.

### 3. Conclusions, Outlook and Future Research

This short review has provided an overview of the recent literature on susceptibility to falling for fake news in political contexts, with a focus on personal characteristics. Overall there appears to be a bias towards overrating the accuracy of true and fake news which are consistent with one's preexisting political attitudes. However, the literature also suggests that rather than motivated reasoning leading to an overrating of news consistent with one's attitudes and underrating of news inconsistent with one's attitudes, analytical thinking and deliberation improve the discernment between true and fake news, and reduce susceptibility to falling for fake news. This overview suggests that also in everyday life, individuals should more deliberately and analytically think about news items they are confronted with.

Moreover, we deem it important to also consume more different news sources. By viewing various news sources, one is able to compare information derived from different sources and, potentially, better detect fake news, and, hence, not fall for it. Of course, this does not help if all news sources consumed are unreliable, or support the same political attitudes via being part of an "echo chamber" or "filter bubble" [29,30]. This emphasizes the importance of traditional, offline news media outlets in today's digital society, in contrast to social media. In contrast to traditional media, on social media news can be spread by both professional and non-professional sources without fact checking (at least in the first instance). A potentially novel and important line of research that follows from this would be examining the associations between news consumption and susceptibility to falling for fake news.

Moreover, it seems somewhat surprising that in the existing literature on susceptibility to falling for fake news, both classic personality traits, such as the Five Factor Model, and intelligence measures have not yet been investigated. For example, one might expect that conscientiousness and openness to experience would act as buffers against falling for fake news. These personality traits have been associated with consuming news offline (versus via social media only; conscientiousness), and consuming a higher number of news sources (openness to experience) [31]. Moreover, higher intelligence, both fluid and crystallized, should also be negatively related to falling for fake news. For example, fluid intelligence might positively influence the detection of implausible information in fake news.

Next, it should be noted that all of the studies reviewed above explicitly asked for the perceived accuracy of fake (and true) news headlines before the participants saw the news items. On that basis, the external validity of these fake news tests is somewhat questionable. In everyday life, individuals potentially do not think too deeply about the accuracy of all news headlines, for example those which are presented to them via social media. As fake news is very much a "real world" problem, it is important for future studies to create experimental settings that are more realistic and that will allow us to draw conclusions that are more valid in everyday contexts.

Finally, it is worth emphasizing that more constructs potentially related to fake news need to be explored in future research. For example, according to Schwarz, Newman, and Leach [32], five key criteria are used by individuals when judging on the accuracy of information: Acceptance by others, amount of supporting evidence, compatibility with one's beliefs, general coherence of the information, and credibility of the source. A study from Germany found that trust in traditional news media and the political system both negatively related to susceptibility to falling for fake news [12]. In line with the findings discussed earlier on analytical thinking, the construct of

need for cognition might be negatively related to the perceived accuracy of fake news (but see Pennycook and Rand [28] for a discussion on this topic). Additionally, it might be interesting to investigate the role of emotions in susceptibility to falling for fake news [33,34]. Lastly, while the prior exposure effect [35] was not discussed in this review due to the focus on individual characteristics, it is, nevertheless, of critical importance in understanding susceptibility to falling for fake news, particularly in conjunction with cognitive abilities.

In conclusion, an integration of the aforementioned variables to help explain more variance in susceptibility to fake news, as well as the use of more realistic experimental settings in empirical studies, would be of tremendous importance in future work in this area.

Credit Author Statement:

Cornelia Sindermann: Conceptualization; Investigation; Methodology; Project administration; Validation; Roles/Writing - original draft; Writing - review & editing.

Andrew Cooper: Validation; Writing - review & editing.

Christian Montag: Project administration; Supervision; Writing - review & editing.

Funding:

This work was funded by a Heisenberg grant awarded to Christian Montag by the German Research Foundation (DFG, MO2363/3-2). The funding source did not influence study design; collection, analysis and interpretation of data; writing of the report; the decision to submit the article for publication.

Competing interests:

None.

Acknowledgements:

None.

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