Doi: 01.0006/j.Interdisciplinary.2023.06.001

An analysis of how motivated reasoning and confirmation bias affect people to accept "true news" through social media selectively

Jingshu Peng

Abstract

In recent years, with the development of technology, social media has started to appear in people's lives, rapidly entering people's lives along with the progress of the Internet. However, with the rise of social media, self-publishing has gradually proliferated on the Internet, with all kinds of news being sent without verification, causing much distress to people. It is, therefore, essential to understand why people selectively accept "true news" through social media. This study examines why people believe in fake news from the perspective of different "Emotional" Tendencies through a content analysis of four posts from different social media applications. The findings show that the public relies on theories related to motivated reasoning and confirmation bias when selectively accepting fake news. In particular, confirmation bias is a case where people, keen to believe in claims that are consistent with their beliefs or their lack of knowledge, are often attracted to the words and texts of the poster and unconsciously believe their story, thus contributing to their agenda. This research studies some of the main factors that have contributed to the public's selective belief in fake news in recent years and helps to understand more about how people perceive and recognize fake news.

1. Introduction

In the last few years, with the development of new media, fake news has gone from being a phenomenon to a term, with different types of ,real news' flooding people's lives on different social media platforms, making it difficult for them to distinguish between the real and the fake. Fake news, as defined by Collins Dictionary, is "false and sensational information spread under the guise of a news report," the lexicographer said the use of the term has increased by 365% since 2016. CNN, BBC, and some media outlets believe the year's buzzword is related to President Donald Trump. "Given the erosion of society's trust in media reporting, it was inevitable that ,fake news' would become the year's buzzword in 2017."

Moreover, the news that 'fake news' has been selected as word of the year is authentic." (Collins Dictionary 2017 Buzzword of the Year: "Fake News," Xinhua, 2017)

When surfing different social media, people are inevitably pushed by algorithms to various posts or videos they dabble in and are interested in, and in the absence of relevant software to censor their authenticity, the masses are invariably subjected to all kinds of fake news as well as fake news. As each person has a different view of events, their level of trust in the news varies. At the same time, with the outbreak of the new coronavirus epidemic in late 2019 and policy restrictions, people's sphere of activity rapidly shrank from offline face-to-face to online communication on the Internet. During this period, people's use of social media increased

dramatically in frequency and time. According to the "2020 China Mobile Live Broadcast Industry "War Epidemic" Special Report" released by QuestMobile Research Institute, since the outbreak of the epidemic, the daily time spent on mobile Internet by each netizen has increased by 21.5% compared with the beginning of the year, especially for video applications and their reliance on social media for information access deepened, leading to a significant increase in the number of fake news stories and the frequency with which they begin to appear. As social media expanded and extended online, self-published media appeared in people's lives, mostly in public or video numbers in mainstream social software for Chinese people, such as WeChat and QQ. Self-media is a way of attracting views and gaining recognition by writing articles for publication or uploading videos that are distributed through group chats and spread through people's social circles. However, the authenticity and credibility of the information are not guaranteed, leaving some people vulnerable to online fraud and financial loss. While a great deal of research has shown that some of the ,real news' in social media is not real news, not much is known about why people choose to accept it - so it is essential to understand the factors that make people believe it. Through an analysis of posts on several mainstream Chinese social media platforms, this study analyses people's reactions to and trust in different types of ,real news,' as well as the main factors that prevent them from distinguishing between real and fake news.

2. Literature Review

People selectively accepting mixed information have been studied extensively in the current academic field of motivated reasoning and confirmation bias. Motivated reasoning is a form of implicit emotion regulation in which the brain converges on judgments that minimize negative and maximize positive affect states associated with threat to or attainment of motives. Confirmation bias is the tendency to interpret, search for, recall, and favor information in a way that confirms one's pre-existing beliefs or hypotheses, resulting in polarised views about an issue or event (Westerwick et al., 2017). The emergence of the echo chamber effect explains motivated reasoning; echo chambers refer to the situation where people ,hear their voice' (Boutyline & Willer, 2017; Flaxman et al., 2016). Social media refers to situations where users consume content expressing the same viewpoint that users hold themselves (Bessi, 2016; Geschke et al., 2019). It is well known that social media uses big data to accurately calculate and push users, which on the other hand, tends to encourage groups of like-minded people to come together and form organizations and exacerbate the echo chamber effect. Like-minded people are more likely to meet online as the Internet brings people closer together and makes it easier for them to communicate. Because of ideological biases in beliefs, people are more inclined to accept information that is consistent with their prior beliefs. Therefore many people cannot detect when fake news is consistent with their political views. (Jonas & Joseph, 2022) It is easy to see how people rely more on sources of information they know or trust in their lives, which leads to biases in their confirmation of the truth of information —people believe in-group members more than out-group members, tend to weigh opinions equally regardless of the competence of those expressing them and overestimate how much their beliefs overlap with other people's, which can lead to the perception of a false consensus. (Ecker et al., 2022) When in a group, people's herd mentality expands, and they trust the sources of information within the group, thus forgoing the need to distinguish between truth and falsehood, thus influencing them to accept the so-called "real news" subconsciously. Because of this, too, online access to news and increased diversity of viewpoints may encourage like-minded individuals to form 'echo chambers' or 'filter bubbles' where they are not exposed to opposing viewpoints (Sunstein, 2001; Pariser, 2011; Del Vicario et al., 2017). An echo chamber or filter bubble is a figurative description of an environment in which information reinforces and amplifies the reader's worldview without refutation (Jamieson & Cappella, 2008). While talking about confirmation bias, familiar biases are Self-Serving Bias, Sunk-Cost Bias, and Knowledge Bias.

Moreover, people's perceptions of what confirmation bias means as the tendency to interpret, search, recall, and favor information that confirms one's pre-existing beliefs or assumptions that leads to a polarised view of an issue or event (Westerwick et al., 2017; Gupta et al., 2021). Confirmation bias not only affects the way we think but also how we use information; there are four main reasons why we fall for fake news (Jonas & Joseph, 2022). Firstly, we tend to pay attention to headlines and hashtags rather than read related articles. Secondly, social media buzz signals influence our attention to and acceptance of information. Thirdly, fake news takes advantage of partisanship, which is a very strong conditioned reflex. Fourth, persistence - disinformation has a strange tendency to persist even after it has been corrected. To examine the motivational processes implicated in fake news detection, scholars tested two competing predictions, the results suggested that deliberation should reinforce ideological belief bias because reasoning about politics is primarily about defending and rationalizing one's position. An opposing view, based on dual process theory, describes the interactions between intuitive and deliberate thinking and suggests that deliberation diminishes ideological belief bias because deliberation facilitates an unbiased assessment of new information. An online experiment (N = 497), on the other hand, tested these competing claims. Participants were induced into a deliberative/executive mindset prior to rating the veracity of (true/false) news headlines, and the findings suggest that participants more often rated real consistent news as accurate than inconsistent news and that they were more likely to fail to detect favorable fake news. From this, the researchers concluded that mindfulness did not moderate ideological belief bias but showed an exciting relationship with cognitive reflection and dishonest behavior. (Jonas & Joseph, 2022)

In order to gain insight into the reasons for people's selective acceptance of ,real news,' it is not enough to have theoretical knowledge of the subject. We also need to know more about how Internet users react to different types of fake news. This study will examine the factors that influence Internet users' selective belief in certain types of ,real news" from the audience's perspective.

3. Research Method

Due to the wide variety of mainstream social networking software the Chinese public uses and the different focus of social groups on different platforms. Therefore, three of the more mainstream social platforms were selected for this study: Weibo, Bilibili, Douyin and Xiaohongshu. Four bloggers or individuals of different genders with their accounts on the respective social media platforms were selected according to the different audience groups and the category of "real news." They were then selected

for one of the posts or statements they had made in the Table 1 and Fig. 1). past month to six months about spreading ,real news.' (see

Table 1: Basic information and data of influencers and pictures

Name	Gender	Followers	Post Subject	Published Date	Likes	Comments
Super Photo YangYang	Male	0.30m	Fake Entertainment News	9/2/2023	12k	1278
Gong Wenxiang	Male	4.31m	Rumors of an entrepreneur	26/2/2023	Not shown	Not shown
A place for international students in the UK	Female	124	Chat about IELTS results	24/2/2023	176	210
Yan Jiusuo	Male	0.30m	Combating exposure to poor-quality products	5/8/2021	8892	625

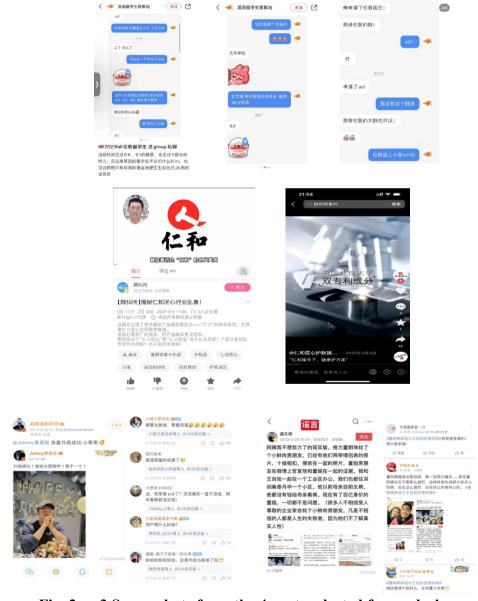


Fig. 2 or 3 Screenshots from the 4 posts selected for analysis

Select the iconic content and comments for the above posts or videos from different social media platforms on different topics. For the data analysis, the main concerns of the posts are read and analyzed one by one using the relevant theoretical knowledge and corresponding case studies, and the reasons for the selective acceptance of these fake news are explained.

4. Findings

From this analysis, the following two main trends are the ones that people follow the most when believing fake news.

4.. Motivated Reasoning

When selecting sources of information to trust, people rely more on decisions made through motivated reasoning. More specifically, our biases lead us to draw conclusions based on their desirability (whether they match our preferences) rather than on what the evidence suggests. As in the first case, the blogger's occupation is that of a paparazzo, and his statements on social media platforms are mainly based on breaking news about the true and false entertainment gossip of various celebrities. In the picture, he is retweeting another male celebrity and writing text that suggests he is the male lead in his gossip blast. The comments underneath included 'Blessings on becoming a father' and 'Is this a promotion to fatherhood,' although there was no hard evidence to prove the veracity of his comments. However, the rumor was later confirmed as pure fiction by another party, and the blogger deleted the original post. It is easy to see that when specific influential celebrities post on social media platforms that they are not sure if they are real or not, their fans tend to believe them immediately rather than checking the authenticity first. In the second case, the blogger, a male entrepreneur in the e-commerce industry, posted about a false relationship between another female entrepreneur and the vice president of her group, causing a public outcry. The post was followed by "I hope it is true! I hope it's true! I wish you luck! I hope it's true!" and "It's good to believe in love; I support it. I hope it's true! Some social studies with known results show: Most people psychologically ignore conflicting information rather than change their minds. People are unconsciously guided by motivated reasoning rather than stepping out of their comfort zone and using logic to judge the so-called 'real news.'

4.. Confirmation bias

Confirmation bias is pervasive in people's everyday lives because our psyche tends to interpret what we are told in terms of confirmation of our pre-existing partisan beliefs and prejudices. It also makes us aware of elements of memory that justify our position, and we accept new information that is consistent with it while rejecting information that contradicts it. The cognitive bias of confirmation bias is also called the Dunning-Kruger effect. The two examples above, from the Little Red Book and Bilibili, respectively, are good illustrations of the existence of knowledge bias. The former is about people on Xiaohongbook chatting with bloggers about their fake grades and school records in order to gain access to specific groups of people for their purposes. At the same time, the latter is about false advertising through pre-emptive trademarking or overpaying for title rights in order to gain consumer trust for profit. The former mentioned in the chat that she had a total IELTS score of 9.1 because she did not know about language tests related to studying abroad, when in fact, she only had a total IELTS score of 9. The blogger's accompanying article also contains unpublished information and generalizations in the text, such as international students in the UK needing to learn about CVs, IELTS listening with five sections, and referring to 2-week language courses as 25week language courses, etc. As the knowledge bias says, if you know a little about something, you tend to know a lot about it. When you know a little about something, you tend to see it in simpler terms - leading you to believe that the subject is easier to understand than it actually is. However, if you know more, you are more likely to realize that it is much more complex than it appears. The latter used the purchase of copyrights to create false propaganda to sell their products. They undoubtedly took advantage of consumers' lack of knowledge and thus blind trust in the falsely created group of highly knowledgeable people to consume. This shows that when people are confronted with a message that appears to be accurate but is not, they are more likely to believe it than to question its authenticity because it is in their blind spot of knowledge.

Reference

- [1] Modgil, S., Singh, R. K., Gupta, S., & Dennehy, D. . (2021). A confirmation bias view on social media induced polarisation during covid-19. Retrieved from: https://link.springer.com/article/10.1007/s10796-021-10222-9
- [2] Collins Dictionary 2017 Buzzword of the Year: "fake news." (2017) Retrieved from: http://www.xinhuanet.com/world/2017-11/03/c_129732619.htm
- [3] Ecker, U.K.H., Lewandowsky, S., Cook, J. *et al. The psychological drivers of misinformation belief and its resistance to correction. Nat Rev Psychol* 1, 13–29 (2022). Retrieved from: https://www.nature.com/articles/s44159-021-00006-y
- [4] Ludwig, Jonas & Sommer, Joseph. (2022). Preprint: Mindsets and Politically Motivated Reasoning about Fake News. Retrieved from: https://www.researchgate.

- net/publication/364226350_Preprint_Mindsets_and_ Politically_Motivated_Reasoning_about_Fake_News [5] Why We Fall for Fake News. Retrieved from: https://wwww.cits.ucsb.edu/fake-news/why-we-fall
- [6] Westerwick, A., Johnson, B. K., & Knobloch-Westerwick, S. (2017). Confirmation biases in selective exposure to online political information: Source bias vs. content bias. Communication Monographs, 84(3), 343–
- 364. Retrieved from: https://onlinelibrary.wiley.com/doi/epdf/10.1111/jcc4.12105
- [7] Drew Westen , Pavel S Blagov, Keith Harenski, Clint Kilts, Stephan Hamann. (2006). Neural bases of motivated reasoning: an FMRI study of emotional constraints on the partisan political judgment in the 2004 US Presidential election. Retrieved from: https://pubmed.ncbi.nlm.nih.gov/17069484/