# Factors associated with belief or disbelief in false news: From the perspective of elaboration likelihood and moderating effect model

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## Abstract

Based on the elaboration likelihood model, this study examines the impact of central and peripheral cues to determine the relative influence of each cue on user's belief or disbelief in false news, and to investigate whether information literacy acts as a moderator to the cues. Results indicate that argument quality influences users to recognize the falsehood of messages delivered by either social media groups or news website groups. The impact of peripheral cues on social media tends to make users vulnerable to believing in false news (BFN), but not on news websites. Information literacy has no moderating effect on any cues, but has a direct effect on BFN from news website groups but not from social media groups.

**Keywords:** fake news, misinformation, information literacy, elaboration likelihood model

## Background

Fake news is nothing new, in fact it has been with us since the development of the earliest writing systems (Marcus 1993); but this form of false information has become prominent recently due to its global implications. The widespread dissemination of false information can have negative consequences at both individual and societal levels; such as can be seen in stock price fluctuations (Rapoza, 2017), health emergencies and crises during an outbreak of Ebola (Oyeyemi et al., 2014), and political ramifications during the 2016 US presidential election (Allcott & Gentzkow, 2017).

Misinformation may also be understood in the context of fake news. Misinformation is defined as "cases in which people's beliefs about factual matters are not supported by clear evidence and expert opinion" (Nyhan & Reifler, 2010). Fake news is further defined with two key features; authenticity and misleading intent (Allcott & Gentzkow, 2017). That is, fake news contains false information created with some deceptive intention to mislead readers for ideological or financial gain (Lazer et al., 2018). Misinformation can instantly become viral when it is shared and re-shared by human behaviors or technologies. For example, studies have shown that social bots greatly misled online discussions during the 2016 U.S. presidential election (Bessi & Ferrara, 2016). In the week running up to election day around nineteen million bot accounts tweeted in support of a specific candidate, thus disturbing online communities and aggravating the public into an emotional response (Oxford Internet Institute, 2016). Furthermore, an artificial intelligence (AI) based technology 'Deepfake', that can combine and superimpose existing images and videos onto source images or videos, has been used to create convincing but inauthentic content. The fake videos created by Deepfake depict a person doing or saying something that never occurred in reality, but the actions are portrayed so vividly that it is no longer possible to differentiate genuine content from false (Meetup, 2018).