

Fake news or true lies? Reflections about problematic contents in marketing

International Journal of
Market Research
1–9

© The Author(s) 2020

Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/1470785320934719

journals.sagepub.com/home/mre



Giandomenico Di Domenico 

University of Portsmouth, UK

Marco Visentin

University of Bologna, Italy

Abstract

Scholars in different scientific fields and practitioners are analyzing the rise of production and diffusion of fake news and problematic information that is rapidly contaminating the digital world. Although problematic information might seriously affect brands, marketing and consumer behavior research is surprisingly limited. This article aims to provide a research agenda for marketing by analyzing the previous literature and identifying relevant insights suggested by different disciplines. Based on the review of 86 interdisciplinary scientific papers and 5 managerial reports, we speculate on future avenues for consumer behavior, marketing strategy, and marketing ethics research about fake news and problematic information.

Keywords

fake news, hoaxes, literature review, marketing, problematic information, social media

Introduction

Fake news, defined as “news articles that are intentionally and verifiably false, and could mislead readers” (Allcott & Gentzkow, 2017, p. 213), has just recently gained scholarly attention predominantly in the fields of journalism, psychology, and political sciences. Less is done empirically in the marketing and consumer behavior literature, with some recent and few exceptions (e.g., Chen & Cheng, 2019; Peterson, 2019; Talwar et al., 2019; Visentin et al., 2019).

Fake news represents only one aspect of the ongoing crisis of *problematic information*, that is, “inaccurate, misleading, inappropriately attributed, or altogether fabricated information” (Jack,

Corresponding author:

Giandomenico Di Domenico, Faculty of Business and Law, University of Portsmouth, Office 3.09, Portland Building, Portsmouth PO1 3DE, UK.

Email: giandomenico.didomenico@myport.ac.uk

2017, p. 2). Problematic information includes also hoaxes, conspiracy theories, propaganda, and true specialist information presented in distorted ways to support one's viewpoint (our "true lies"). Conspiracy theories about vaccines, palm oil, and Coronavirus are just the most recent examples of true lies, of how it is possible to cause harm and have a strong negative impact on consumers, companies, and democracy at large. All these concepts describe the inaccuracy of media contents and take on different shades of meaning. Such differences may seem small, but they are important for getting a thorough understanding of the issue (Jack, 2017). The different shades of disinformation seem to appear along a continuum concerning the truthfulness (Berthon et al., 2019) and intent (Levi, 2017). At one extreme of the continuum, there is disinformation entirely created without a factual basis (i.e., fake news) but able to amplify and reinforce previous beliefs. At the other extreme, there is disinformation rooted in a truthful reality but distorted to the point that the core facts are no longer factual (i.e., conspiracy theories; Levi, 2017). The scientific literature still lacks in providing a convincing explanation of the determinants of creating and sharing problematic contents on social media and their consequences from a marketing point of view. Relatedly, extensive interaction with practice might shed light on the issue (e.g., Gu et al., 2017).

Does it really matter?

To understand the relevance of the problem for brands, we provide a sketch of three real illustrative cases. First, from a recent conceptual paper (Obadã, 2019) we know that "Pepsi Co. stock fell around 4% just prior the 2016 US presidential election when a fake news story about Pepsi's CEO, Indra Nooyi, telling Trump supporters to 'take their business elsewhere' spread in social media" (p. 151). This is a case when *fake news* directly affects a brand. In the case of *New Balance*, a "fake news spreader misquoted the New Balance spokesman and repackaged the message with the headline 'New Balance offers a wholesale endorsement of the Trump revolution'" (p. 153) causing anti-Trump groups burning *New Balance shoes* and sharing the video online. This is a case when *fake news* has an indirect impact negatively affecting the brand image. Third, Cova and D'Antone (2016) illustrate the contrasted reaction of consumers to a hoax, rooted in a real point raised by Greenpeace Italy in 2008, on the negative effects of palm oil, an ingredient of the iconic *Nutella* brand. Based on the strong attachment of consumer to the brand, some of them

co-created and spread discourses that give any Nutella lover the possibility to relinquishing the new tension and support the idea that the brand should be kept as it is. As such, they ultimately reinforce the overall devotion to the brand. (Cova & D'Antone, 2016, p. 182)

A negative hoax added more brand content for Nutella in this case, showing an unexpected positive effect in terms of branding by boosting brand's mythology (see also Red Bull; see Allen et al., 2008; Starbucks, see Thompson & Arsel, 2004).

These examples clearly show how disinformation can greatly undermine brand equity (Berthon & Pitt, 2018), especially when consumers collectively exhibit brand-dissociative behaviors, after being exposed to fake news (Ferreira et al., 2019). However, they also suggest that this topic deserves attention, as companies can turn a possible threat into an advantage by keeping primary control of their marketing agenda and avoiding to ceding it to outsiders.

State of the art

Two important and unexpected political outcomes encouraged the proliferation of academic interest on the possible impact of misinformation after 2016: the U.S. Presidential Elections and the

Brexit Referendum (e.g., Allcott & Gentzkow, 2017). One of the main drivers of problematic information sharing on social media is confirmation bias (i.e., the individuals' tendency to select only information consistent with their vision of the world; Kim & Dennis, 2019). Some people choose their personal truth or rely on their own authorities (e.g.,: *scriptural inference* in the work of Tripodi, 2018), preferring to hold on inaccurate beliefs (Zollo & Quattrociocchi, 2018). Consequently, people may keep on sharing problematic information even if it is known as false as they "care more about the point of view being advocated than the legitimacy of the [content]" (Newhoff, 2018). IT and computer science research subsequently proposed new techniques to automatically detect misinformation on social media (e.g., Zhang & Ghorbani, 2019). Because fake news, as we today define it, started targeting politicians and political organizations, marketing interest in the phenomenon came later when some multinational companies faced a boycott wave after falling victims of fake news (Obadã, 2019).

To date, few marketing studies focus on the negative effect of social media misinformation on brands (e.g., Berduygina et al., 2019; Berthon & Pitt, 2018). Recent research evaluated the possible consequences of fake news on brands, proposing different response strategies for companies (Mills & Robson, 2019; Vafeiadis et al., 2019). Some authors suggest the need to provide tools to improve fact-checking, assuming that individuals might change their mind when confronted with the evidence of facts (Talwar et al., 2019; Wang, 2017). Other scholars focus on possible cues that support sharing behavior, like media trust, self-efficacy, amount, and convergence of the information available (e.g.,: Chen & Cheng, 2019; Munzel, 2016; Stueckemann, 2019). In the attempt to determine the effect of coupling fake news to a brand ad, Visentin and colleagues (2019) supported that deception detection self-perceived efficacy does not affect the formation of attitudes toward the brand.

Given the initial phase of marketing studies around these topics, a question arises: How can marketing advance the knowledge on problematic information? To answer this question, we have reviewed the literature on *fake news* and *problematic information*, published in the past 3 years (2017 – 2020), finding 86 articles that mention one combination of the following keywords: "fake news," "consequences," "consumer behavior," "social media," "problematic information." We also collected five reports from the managerial practice. The selected papers come from different scientific fields: 14 from psychology (e.g., Pennycook & Rand, 2019; Roets, 2017), 19 from computer science and IT (e.g., Del Vicario et al., 2019; Kim & Dennis, 2019), 15 from political sciences (e.g., Allcott et al., 2019; Clayton et al., 2019), 14 from journalism (e.g., Bakir & McStay, 2018; Tandoc et al., 2018), 13 from sociology and philosophy (e.g., Giglietto et al., 2019; Marwick, 2018), 8 from business and management (e.g., Baccarella et al., 2018; Chelliah & Swamy, 2018), and 13 from marketing. Table 1 provides an overview of marketing studies. Interestingly, 9 out of the 13 marketing studies were published in a 2019 Special Issue of the *Journal of Product and Brand Management*.

Future agenda and challenges

Previous interdisciplinary research on fake news and reports coming from the practice may help marketing scholars in taking a step beyond in analyzing fake news and problematic information.

Future research in consumer behavior

Qualitative research and reports from practice suggest that we should reconsider classic models, assuming that individuals rationally evaluate their actions to achieve their goals. Individuals' prior beliefs, attitudes, and the emotions aroused by reading misinformation might play a more

Table 1. Marketing contribution to fake news and problematic contents.

| Main focus | Citation | Method | Main findings |
|-----------------------------------|-------------------------|------------------------------|--|
| Brand communication | Berthon et al. (2019) | Conceptual | Authors propose a typology of fake news that can be reconceptualized as dimensions and brand communications |
| | Paschen (2019) | Database analysis through AI | The author analyzes how emotional appeal in fake news content is consumed, shedding light on the differences between fake news and true brand communications |
| | Flostrand et al. (2019) | Delphi study | Results from interviews with 42 brand managers about fake news are discussed. Service brands are most at risk |
| Brand management | Peterson (2019) | Conceptual | The author proposes several strategies to preserve brands' integrity in the age of fake news |
| Brand reputation | Berthon & Pitt (2018) | Conceptual | Authors analyze different situations in which brands come in touch with fake news and the potential negative outcomes of such relationships |
| Brand strategy | de Regt et al. (2019) | Case studies | Authors identified seven denialistic marketing tactics that contribute to the diffusion of fake news in the health and beauty industry |
| | Weidner et al. (2019) | Conceptual | Authors present a framework to examine the different impact of fake news, taking consumers' confirmation bias into account |
| Brand response to fake news | Mills & Robson (2019) | Conceptual | Authors suggest that authenticity and emotional engagement are keys to effective brands' storytelling in response to fake news |
| | Vafeiadis et al. (2019) | Experiment | Consumer's involvement in the fake news issue determines the effectiveness of the crisis response strategy |
| Brand trust | Visentin et al. (2019) | Experiment | Fake news can produce different negative consequences that spill over to the brand advertised alongside the fake news |
| Consumers' sharing behavior | Talwar et al. (2019) | Model testing | Authors suggest that online trust, self-disclosure, fear of missing out, and social media fatigue are positively associated with the sharing of fake news |
| Consumers' information processing | Nyilasy (2019) | Conceptual | The author discusses how consumers process fake news and its relevance to marketing communications. |
| Consumers' response to fake news | Chen & Cheng (2019) | Structural Equation Modeling | Antecedents and outcomes and persuasion knowledge toward a fake news post regarding a brand are proposed |

AI: artificial intelligence.

significant role in shaping attitudes and behaviors toward the news, the source, and the object of the news (e.g., a brand, a company, a product category, a celebrity, and an idea; Bakir & McStay, 2018). Relatedly, do prior beliefs and attitudes moderate/mediate the relationship between source credibility and news credibility? And, in turn, what impact on brand attitudes? It would not be surprising, then, that negative emotions can affect the formation of brand attitudes—both negative and positive—when individuals are confronted with problematic information regarding a brand, inevitably affecting brands' reputation. Marketing research should assess to what extent problematic information can tarnish the brand reputation and, more importantly, is problematic information something that has just short-term consequences or, as Van Duyn and Collier (2019) argue, does it prime individuals' minds, affecting the subsequent evaluation of new information?

Further research should investigate how psychological differences might attenuate or exacerbate the effects of disinformation. Construal-level theory (Trope & Liberman, 2010) could provide the framework to identify the psychological elements that determine individuals' construal level of fake news and how it influences the dissemination process.

Furthermore, even though IT scholars' hard focus is on data and algorithms, they provide explanations that deserve further analysis to unveil the psychological and sociological processes behind the formation, the diffusion, and the effects of problematic information. Are there any sociodemographics that affect individuals' susceptibility to fake news? As social media and websites rely on algorithms to maximize their ability to reach the right target and improve click rates, scholars should analyze more in-depth the relationship between behaviors, as they emerge from data, and the other levels (i.e., affective and cognitive) of an individual's response. In doing this, qualitative research methods based on human agents might provide valuable support to automatic pattern-matching machines.

In addition, the concept of *echo chamber* provides several research opportunities (Del Vicario et al., 2019) as digital environments allow individuals to construct a particular image of the self, altering, in some cases, their self-representation. The challenge for marketing scholars is to identify elements of behavior mismatching in online and offline contexts, to analyze the different motivations behind disinformation sharing online, and the real impact on consumers in everyday life. It is also needed to better understand how social media users gain legitimacy and recognition within an *echo chamber*. What is the role of the frequency and tone of social media engagements (i.e., likes, comments, shares, followers, and friends) in shaping users' influence?

Future research for marketing strategy

Oftentimes, fake news exposes brands to opponents' attacks. However, as suggested by the palm oil case, companies can turn a threat into an advantage by carefully managing their stakeholders (Cova & D'Antone, 2016). Consistent with Berman and colleagues (2019), we suggest that managing the interaction and feedback in the brand community could make the difference in determining fake news' outcomes. In particular, companies' responses might trigger supportive comments from the brand community and discourage contribution from the opponents. Further research should expand the crisis management literature in the context of fake news (e.g., Vafeiadis et al., 2019), attempting to find what best practices companies can adopt to cope with the reputational threat and recover consumers' trust.

Finally, collective strategies could be effective in fighting the spreading of disinformation. To date, companies in different industries agree on pulling their advertisements from fake news websites, even though the impact of fake news is detrimental to the brand regardless of the website where the ad is displayed (Visentin et al., 2019). It is possible that joining efforts to limit the spread and educate individuals about the risks of disinformation could result in setting new standards for information transparency and correctness. As in the case of Corporate Sustainability reporting (Fernandez-Feijoo et al., 2014), stakeholders' pressures to adopt such standards would improve the overall quality of information.

Future research for marketing ethics

The proliferation of false and misleading contents poses serious issues for academic research on social media. Will research still be reliable even though conducted on social media data that are not authentic? In times when the trust in institutional authorities is at its lowest, academics must ensure that their research is conducted on validated data: What is the role that social media platforms play

in this process, as they struggle to find a balanced compromise between giving the full freedom of speech to their users and fighting misinformation (Facebook, 2020)? Further research could help policymakers define this border. Another issue is represented by the easy access to users' data that social media platforms provide companies, among them the so-called "Black PR," to find out more about potential targets of their information operations through fake news (Silverman et al., 2020). Would it be "more ethical" to restrict access to such information just to universities and research centers? Finally, fake news spreading poses ethical problems for news outlets as well. In the case news outlets inadvertently publish fake news, are they obliged to remove that information and correct it? To what extent policymakers can find a balance between limiting the press' freedom and the necessity of having well-informed citizens?

New dangers on the horizon

New forms of misleading contents have started spreading on social media, potentially more dangerous than other forms of problematic information. They are called "cheap fake" and "deep fake." Cheap fakes employ a simple "selective editing" technique to change videos in ways that they do not show what really happened. Deep fakes, instead, use artificial intelligence to create entirely fictional videos, images, or audio. To date, these new techniques are utilized predominantly in politics, to discredit politicians or political organizations ("What are Deep Fake and How can You Spot Them," 2019). What is the level of individuals' susceptibility to these new techniques? And, what are the effects in term of attitudes and behavior?

Finally, it is inevitable to mention the opportunity for research in the wake of the Coronavirus emergency. Unfortunately, COVID-19 has triggered a massive spreading of disinformation. For example, fake news linking the spread of the virus to the development of 5G technology caused the vandalization of many cell phone masts in the United Kingdom, physical attacks to telecom engineers (BBC, 2020), and threatened the reputation of specific mobile communications (e.g., Vodafone) or technology (e.g., Huawei) companies. Many conspiracy theories—that center around the virus as a bioweapon created in Wuhan—are creating a climate of distrust where the public is treating official sources of information with growing skepticism (Oxford Analytica, 2020). For this reason, traditional media outlets are now facing severe problems of brand reputation, especially for what concerns the trustworthiness and credibility dimensions. Unlike previous outbreaks, the spreading of disinformation about COVID-19 has been dramatically amplified by social media to the extent that "We're not just fighting an epidemic; we're fighting an infodemic," said World Health Organization (WHO) Director Ghebreyesus. Social media platforms (Larson, 2020), as well as Google and the WHO (Zarocostas, 2020), have taken actions for fighting the infodemic, intensifying collaborations with fact-checking organizations and promoting the sharing of reliable health information from acknowledged experts in the attempt to alleviating the risk of a strong negative impact on people's trust in scientific data. However, given the overwhelming amount of information that flows in digital environments, and the fast "rise and decline" rates of trend topics on social media timelines, the empowerment of fact-checking organizations might be not sufficient. Accordingly, social media platforms, traditional media, and institutions should adopt a more "human-focused" approach, by instilling in people the necessity of spending more time and cognitive efforts confronting various legitimate sources before accepting information as true.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Giandomenico Di Domenico  <https://orcid.org/0000-0002-5420-8750>

References

- Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, 31(2), 211–236. <https://doi.org/10.1257/jep.31.2.211>
- Allcott, H., Gentzkow, M., & Yu, C. (2019). Trends in the diffusion of misinformation on social media. *Research and Politics*, 6(2), 1–8.
- Allen, C. T., Fournier, S., & Miller, F. (2008). Brands and their meaning makers. In C. P. Haugtvedt, P. M. Herr, & F. R. Kardes (Eds.), *Handbook of consumer psychology* (pp. 781–822). Lawrence Erlbaum.
- Baccarella, C. V., Wagner, T. F., Kietzmann, J. H., & McCarthy, I. P. (2018). Social media? It's serious! Understanding the dark side of social media. *European Management Journal*, 36(4), 431–438.
- Bakir, V., & McStay, A. (2018). Fake news and the economy of emotions: Problems, causes, solutions. *Digital Journalism*, 6(2), 154–175.
- BBC. (2020, April 23). *Coronavirus: "Murder threats" to telecoms engineers over 5G*. <https://www.bbc.co.uk/news/newsbeat-52395771>
- Berduygina, O. N., Vladimirova, T. N., & Chernyaeva, E. V. (2019). Trends in the spread of fake news in mass media. *Media Watch*, 10(1), 122–132.
- Berman, R., Melumad, S., Humphrey, C., & Meyer, R. (2019). A tale of two Twitterspheres: Political micro-blogging during and after the 2016 primary and presidential debates. *Journal of Marketing Research*, 56(6), 895–917.
- Berthon, P. R., Pehlivan, E., Yalcin, T., & Rabinovich, T. (2019). True, fake and alternative: A topology of news and its implications for brands. *Journal of Product and Brand Management*, 29, 144–149.
- Berthon, P. R., & Pitt, L. F. (2018). Brands, truthiness and post-fact: Managing brands in a post-rational world. *Journal of Macromarketing*, 38, 218–227.
- Chelliah, J., & Swamy, Y. (2018). Deception and lies in business strategy. *Journal of Business Strategy*, 39, 36–42.
- Chen, Z. F., & Cheng, Y. (2019). Consumer response to fake news about brands on social media: The effects of self-efficacy, media trust, and persuasion knowledge on brand trust. *Journal of Product and Brand Management*, 29, 188–198.
- Clayton, K., Blair, S., Busam, J. A., Forstner, S., Gance, J., Green, G., . . . Sandhu, M. (2019). Real solutions for fake news? Measuring the effectiveness of general warnings and fact-check tags in reducing belief in false stories on social media. *Political Behavior*, 1–23. <https://doi.org/10.1007/s11109-019-09533-0>
- Cova, B., & D'Antone, S. (2016). Brand iconicity vs. anti-consumption well-being concerns: The Nutella palm oil conflict. *Journal of Consumer Affairs*, 50(1), 166–192.
- de Regt, A., Montecchi, M., & Ferguson, S. L. (2019). A false image of health: How fake news and pseudo-facts spread in the health and beauty industry. *Journal of Product and Brand Management*, 29, 168–179.
- Del Vicario, M. D., Quattrociocchi, W., Scala, A., & Zollo, F. (2019). Polarization and fake news: Early warning of potential misinformation targets. *ACM Transactions on the Web (TWEB)*, 13(2), 1–22.
- Facebook. (2020, February 17). *Charting a way forward online content regulation* [White paper]. <https://about.fb.com/news/2020/02/online-content-regulation/>
- Fernandez-Feijoo, B., Romero, S., & Ruiz, S. (2014). Effect of stakeholders' pressure on transparency of sustainability reports within the GRI framework. *Journal of Business Ethics*, 122(1), 53–63.
- Ferreira, C. C., Robertson, J., & Kirsten, M. (2019). The truth (as I see it): Philosophical considerations influencing a typology of fake news. *Journal of Product and Brand Management*, 29, 150–158.
- Flostrand, A., Pitt, L., & Kietzmann, J. (2019). Fake news and brand management: A Delphi study of impact, vulnerability and mitigation. *Journal of Product and Brand Management*, 29, 246–254.

- Giglietto, F., Iannelli, L., Valeriani, A., & Rossi, L. (2019). "Fake news" is the invention of a liar: How false information circulates within the hybrid news system. *Current Sociology*, 67(4), 625–642.
- Gu, L., Kropotov, V., & Yarochkin, F. (2017). *The fake news machine: How propagandists abuse the internet and manipulate the public*. Trend Micro.
- Jack, C. (2017). *Lexicon of lies: Terms for problematic information*. Data and Society.
- Kim, A., & Dennis, A. R. (2019). Says who? The effects of presentation format and source rating on fake news in social media. *MIS Quarterly*, 43(3), 1025–1039.
- Larson, H. J. (2020). Blocking information on COVID-19 can fuel the spread of misinformation. *Nature*, 580(7803), 306.
- Levi, L. (2017). Real fake news and fake fake news. *First Amendment Law Review*, 16, 232.
- Marwick, A. E. (2018). Why do people share fake news? A sociotechnical model of media effects. *Georgetown Law Technology Review*, 2(2), 474–512.
- Mills, A. J., & Robson, K. (2019). Brand management in the era of fake news: Narrative response as a strategy to insulate brand value. *Journal of Product and Brand Management*, 29, 159–167.
- Munzel, A. (2016). Assisting consumers in detecting fake reviews: The role of identity information disclosure and consensus. *Journal of Retailing and Consumer Services*, 32, 96–108.
- Newhoff, D. (2018, August 6). *Why do we share fake news?* <https://illusionofmore.com/why-do-we-share-fake-news/>
- Nyilasy, G. (2019). Fake news: When the dark side of persuasion takes over. *International Journal of Advertising*, 38(2), 336–342.
- Obadā, R. (2019). Sharing fake news about brands on social media: A new conceptual model based on flow theory. *Journal of the Seminar of Discursive Logic, Argumentation Theory and Rhetoric*, 17, 144–166.
- Oxford Analytica. (2020). *Misinformation will undermine coronavirus responses* [Expert briefings]. Emerald.
- Paschen, J. (2019). Investigating the emotional appeal of fake news using artificial intelligence and human contributions. *Journal of Product and Brand Management*, 29, 223–233.
- Pennycook, G., & Rand, D. G. (2019). Who falls for fake news? The roles of bullshit receptivity, overclaiming, familiarity, and analytic thinking. *Journal of Personality*, 88, 185–200. <https://doi.org/10.1111/jopy.12476>
- Peterson, M. (2019). A high-speed world with fake news: Brand managers take warning. *Journal of Product and Brand Management*, 29, 234–245.
- Roets, A. (2017). 'Fake news': Incorrect, but hard to correct. The role of cognitive ability on the impact of false information on social impressions. *Intelligence*, 65, 107–110.
- Silverman, C., Lytvynenko, J., & Kung, W. (2020). *Disinformation for hire: How a new breed of PR firms is selling lies online*. <https://www.buzzfeednews.com/article/craigsilverman/disinformation-for-hire-black-pr-firms>
- Stueckemann, E. (2019). Examining the role of source credibility in the vaccination debate: An experimental study of the influence of heuristic cues on source credibility assessments and attitude change [Masters' thesis]. Jönköping University.
- Talwar, S., Dhir, A., Kaur, P., Zafar, N., & Alrasheedy, M. (2019). Why do people share fake news? Associations between the dark side of social media use and fake news sharing behavior. *Journal of Retailing and Consumer Services*, 51, 72–82.
- Tandoc, E. C., Jr, Lim, Z. W., & Ling, R. (2018). Defining "fake news" A typology of scholarly definitions. *Digital Journalism*, 6(2), 137–153.
- Thompson, C. J., & Arsel, Z. (2004). The Starbucks brandscape and consumers' (anticorporate) experiences of globalization. *Journal of Consumer Research*, 31(3), 631–642.
- Tripodi, F. (2018). *Searching for alternative facts: Analyzing scriptural inference in conservative news practices*. <https://datasociety.net/output/searching-for-alternative-facts/>
- Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review*, 117(2), 440–463.
- Vafeiadis, M., Bortree, D. S., Buckley, C., Diddi, P., & Xiao, A. (2019). Refuting fake news on social media: Nonprofits, crisis response strategies and issue involvement. *Journal of Product and Brand Management*, 29, 209–222.

- Van Duyn, E., & Collier, J. (2019). Priming and Fake news: The effects of elite discourse on evaluations of news media. *Mass Communication and Society*, 22(1), 29–48. <https://doi.org/10.1080/15205436.2018.1511807>
- Visentin, M., Pizzi, G., & Pichierri, M. (2019). Fake news, real problems for brands: The impact of content truthfulness and source credibility on consumers' behavioral intentions toward the advertised brands. *Journal of Interactive Marketing*, 45, 99–112.
- Wang, W. Y. (2017). "liar, liar pants on fire": A new benchmark dataset for fake news detection. *arXiv*1705.00648. <https://arxiv.org/abs/1705.00648#:~:text=%22Liar%2C%20Liar%20Pants%20on%20Fire%22%3A%20A%20New%20Benchmark, Dataset%20for%20Fake%20News%20Detection&text=Automatic%20fake%20news%20detection%20is,world%20political%20and%20social%20impacts>
- Weidner, K., Beuk, F., & Bal, A. (2019). Fake news and the willingness to share: A schemer schema and confirmatory bias perspective. *Journal of Product and Brand Management*, 29, 180–187.
- What are Deep fake and how can you spot them? (2020, January 13). *The Guardian*. <https://www.theguardian.com/technology/2020/jan/13/what-are-deepfakes-and-how-can-you-spot-them>
- Zarocostas, J. (2020). How to fight an infodemic. *The Lancet*, 395(10225), 676.
- Zhang, X., & Ghorbani, A. A. (2019). An overview of online fake news: Characterization, detection, and discussion. *Information Processing and Management*, 57, Article 102025.
- Zollo, F., & Quattrocioni, W. (2018). Misinformation spreading on Facebook. In S. Lehmann & Y. Y. Ahn (Eds.), *Complex spreading phenomena in social systems* (pp. 177–196). Springer.