

Fake News and Freedom of Expression: An Iranian Perspective

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Abstract

After a brief description of what fake news is and how it has been developed historically, we have claimed that fake news as we know it is generally a social media phenomenon. Despite the fact that Iran is considered a developing country, and not still a developed one, one might think Iran is less likely to fall prey of complicated fake news industry that negatively affect prosperous and affluent countries. But the vice versa is correct. Doing an extensive survey on previous research on fake news in Iran, we have shown how fake news will hinder unprecedented facilities for freedom of expression and even will make people contemplate giving up their freedom of expression in order to avoid or get rid of fake news. A naïve view could see a bright future for unbiased and disinterested news gathering and publishing, but research has shown in a totally unregulated media sphere, it is fake news that is more radially available and more quickly becoming viral.

Keywords: COVID-19, fake news, freedom of expression, Iran, virality of news.

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Introduction

There are many reasons why some people and entities deliberately produce wrong information, and the history of lying can be tracked to the first humans on earth. The bible gives this story a metaphoric aspect and puts the origin of our species on the foundation of lies. Recently, even the evolution science has shown us that lying is in our DNA. Michael Tomasello (2010) proved our brains have the spectacular capacity to facilitate collaborative and cooperative communications. Collaborative communication happens when we engage in group work to get a better share of the reward, and cooperative communication happens when we help each other by providing information. Lying needs both; lying means providing wrong information and get the audience cooperate based on this wrong information. This is exactly what the fake news industry is master in.

Anyway, since fake news is a kind of *news* and news are known to have been around since the media came to being, we can track fake news industry back to Guttenberg's invention. The fake news of the colonial period, mainly the 15th through the 18th century, generally included rumors that had been passed by word of mouth or documented by colonial and religious figures. In this era continued development and dissemination of fake news stores paved the way for dehumanization of people and hence legitimization of acts of violence and murder. Dehumanizing people, particularly among those who could not get their voice heard, is a reoccurring theme in fake news stories (Higdon, 2020). Erin Steuter and Deborah Wills from Mount Allison University hold that dehumanization can be a strong weapon of violence and genocide because it authorizes us to present cruelty and violence as something else; hence, if an enemy occupies a damn down place on the evolutionary ladder and therefore cannot feel pain, then how can inflicting pain be unjust? Indians and other indigenous people have been one of the biggest groups who were victimized and dehumanized through fake news. Fake news can be blamed to have contributed to a 90 percent decline in their population between 14th to 20th centuries. For instance, newspapers frequently fabricated stories about the only survivor witnesses and posed them as sources for news stories about fierce battles such as Custer's Last Stand and the Fort Buford Massacre. Newspapers of this era continuously portrayed Native Americans as cowardly savages, thereby helped justify future attack against Native Americans (Ibid).

The *Sun's* story of the moon in 1835 is perhaps one of the most famous examples of fake news in history. In the first part of its 18,000-word serialized moon story, the *Sun* merely hinted at the earth-shaking

findings it would expose over the next 5 issues on its front page. The series began with the claim that one of the world's greatest astronomers named Sir John Herschel, had discovered planets in other solar systems, has acquired a distinct view of objects in the moon, fully similar to that in which the unarmed eye commands of common objects on our planet at the distance of one hundred yards, has finally settled the question of whether this satellite be inhabited and by other smart beings (Thornton, 2000). The *Sun* claimed Herschel's discoveries had been published in the Supplement to the *Edinburgh Journal of Science* and were received from a doctor from Scotland. They didn't tell the newspaper readers that this journal had ceased publication 2 years ago. On the second issue, the *Sun* claimed to have discovered even more exciting details that Herschel had found lunar vegetation and other wonderful creatures, and a blue unicorn. This story had been concluded with a promise to publish the next day a depiction of a creature who was like a man-bat because it resembled to humans, but had wings that was very similar to that of a bat (Ibid). The *Sun* claimed that Herschel used a massive 14,826-lb, telescope equipped with a 24-ft lens. They said Herschel found in moon many geographical places like mountains, lakes, and volcanos (Ibid). On Friday, August 28, 1835, the *Sun* went on to describe the bat-like people. The readers were told that the moon-dwelling bat-people were 4 ft tall, naked, with copper-colored curly hair and "wings that were made of a thin membrane. Like many sensational yams, the *Sun* series had a sex angle to accompany the exotic locale and exciting new creatures (Ibid).

During 1890s, rival American newspaper publishers William Hearst and Joseph Pulitzer tried to acquire more audience through sensationalism and reporting grapevines as though they were facts; more committed people at that time called this practice *yellow journalism*. Hearst and Pulitzer's incredulous news helped leading the US into the Spanish-American War of 1898. In the coming years, a backlash took shape against the lack of journalistic integrity. People wanted more objective and reliable news sources and this public demand created a vacuum that the *The New York Times* was established to fill at the early 20th century. Journalists tried to avoid being called Yellow (Cits, n.d.).

Fast forward to our time, fake news is now mainly considered as a social media phenomenon. After the election of Donald Trump as president of the United States, people in US and across large swaths of Latin America, Europe, and Australia witnessed tough discussions in modern times about falsehoods pronounced by public intellectuals and authorities alike. In US, shock and awe in the prevalence of "fake news", "alternative facts", "post truth era" and other similar terms and concepts such as disinformation,

misinformation, rumors, and lies became common in the media and daily average discussions. This trend was caused in part by the belief that pronouncements by Donald Trump and other people, challenged by the mainstream “trusted” media, represented a new trend in American life. History readers had known for a long time that less egregiously incorrect stories had been part of the rhetoric of politicians who sought to occupy public posts, particularly from radical candidates on the far right or far left. Yet, a careful study of the historical record reveals a very different story, one in which lies and disinformation are much more widespread (Cortada & Aspray, 2019).

America has the most vivid academic environment and therefore most extensive social and communication studies are designed, carried out and reported in this country. Over the past ten years we have witnessed a soar in publication of academic papers about fake news in the US and its effect on the general flow of information in this country. But what happens when fake news starts to spread in other countries. Does fake news share similar features across countries? In particular, what are the state and consequences of fake news in Iran?

Iran Goes Online

Internet came out of a military program but it became commercial soon and other countries started to adopt it. Iran was among pioneer nations in the third world who joined the Internet. As technology became more advanced, authorities have sought to maintain Iran’s capacity to control information and access. Connection to the Internet proliferated early and widely in cities and rural areas in Iran, and Farsi was one of the most widely used languages in the early blogosphere, due to the endeavors of the Iranian bloggers who translated the coding instructions from English. Though the Iranian authorities were an early promoter of Internet usage and top political figures were among Iran’s earliest users- the country’s first email message was sent in 1993 by Mohammad Javad Larijani, who is a famous conservative politician whose extended family members are holding important public offices- the telecommunications industry evolved quietly at the outset. Tehran saw the Internet as an ideal vehicle for a new era of disseminating the message of the revolution, and state educational institutions helped spread the technology with Iran’s mainly young population (Wiseman, 2020). Iranians were fast in adopting Internet and everything seemed well for some Iranian officials but soon it turned out that Internet is double-edge sword that can spread “unwanted” information too. In response, the officials turned to filtering solutions.

In 2005, A report issued by global advocacy group OpenNet Initiative (ONI) showed that Iran's filtering system was one of the most effective censorship regimes. ONI claimed that the Iranian government relied upon commercial software developed by for-profit US corporations to carry out its filtering regime. The Iranian filtering system targeted SmartFilter, a filtering package manufactured by the US-based corporation Secure Computing and claimed that it was prepared as part of the Iranian filtering system to ban access to both internationally-hosted sites in English and locally hosted sites in Farsi. ONI tested many sites and came to the conclusion that 34% of them were blocked, including those which their contents were taken to be immoral, some politically sensitive material, women's rights outlets and many blogs. Websites which mainly provided content in Farsi were far more likely to be blocked than comparable content in other languages including English. ONI claimed in its report that by providing filtering to the Iranian regime, Secure Computing was complicit in the government's breaches of the UN Declaration of Human Rights. ONI repeated the tests in 2007 just to find that the situation had only worsened (Loewenstein, 2016).

As more websites turned on the Iranian government and the Iranian officials could see there was a plot against the regime, the situation even worsened and Iran clearly moved towards becoming a closed network. In 2012, Iran decided to literally cut itself off from the global Internet and make its national information network, claiming that foreign powers were intentionally trying to hinder its closed network development, mentioning the reality that in 2010 there was a computer program that caused Iran's centrifuges to break up at its main uranium enrichment facility. It is likely that this computer worm had been planted by Israel and the United States and it seemed for many regular people in Iran that there were some logical grounds for regulating the Internet. However, despite Iran's best efforts to develop a national network, *Al Jazeera* has reported that Iran's proposal may in fact find proponents in some rather odd corners because limitations on access might actually ban pro-government forces to communication their ideas to the Iranians and wider world (Schell, 2014). It is not surprising, then that some of the most critics of filtering in Iran are pro-government activists on social media.

Fake News and Internet in Iran

Parallel with the seemingly "unfavorable" information that can be accessible on the Internet, the Iranian government was confronted with a new problem: Fake news. Despite the fact that most fake news could be identified and ignored by a majority of people in the society, there are

some that people believe because of different social, cultural, political etc. reasons and pass over to other people. This phenomenon has been largely augmented on social media. In fact, it seems many people take fake news more important than the real news. A very interesting study published in *Science* has revealed that fake news spreads faster on the internet and social networks than real news. After analyzing a data set of rumor cascades on Twitter from 2006 to 2017 (about 126,000 rumors were diffused by 3 million people), the researchers came to the conclusion that fake news diffused significantly farther, faster, deeper, and more broadly than the truth in all walks of information, and the effects were more powerful for false political news than for false news about terrorism, natural disasters, science, urban legends, or financial data. Researchers revealed that false news was more novel than true news, which tells us why people were more likely to share novel information. While false stories inspired replies that showed fear, disgust, and surprise, true stories inspired anticipation, sadness, joy, and trust. The researchers suggested that contrary to conventional wisdom, robots accelerated the diffusion of true and false news at the same rate, which shows that false news spreads more than the truth news since humans, not robots, are more likely to spread it (Elías, 2019). Fake news seems to have been underestimated by both people and governments.

The issue of fake news in Iran has many traits and consequences that fake news has all over the world, except for complicated issues that are particular to Iran. As we saw above, the Iranian government which is large, slow and sensitive about “unfavorable” information, takes punitive actions towards fake news. But, the state tv is itself has been frequently accused of producing and spreading fake news (see for example Samii, 2013). Also, there are some news agencies that are not inside the state but are linked to the government and they, too, are accused of producing fake news. For example, sometimes Western media publish satirical news that are odd and unbelievable, but if someone with no knowledge of the satirical context were to take any of the fake news at face value, as Iran’s *Fars news* agency did in 2012, when it published with all seriousness a report by *The Onion* that rural white Americans would rather vote for Iranian President Mahmoud Ahmadinejad than the incumbent president Barack Obama, they would certainly be deceived, and not by accident. Nevertheless, some people would say this does not render *The Onion’s* original report an example of fake news (in the revised contemporary sense at issue in our general discourse). Instead, the latter remains an example of political satire not the most delicate one, but seemingly one that is still too subtle for some people who are misled by it (Gelfert, 2018).

Assuming this story became widespread in Iran, it would now count as fake news in Iran by the contemporary standards. This brings out another interesting aspect in our modern attitude: professionally speaking, it is possible for a story simultaneously to count as fake news (relative to some region) and not to count as fake news (relative to some other region). Given that the general understanding of what it is to be fake news is essentially relational in nature as opposed to its rival, more essentialized accounts, it is no surprise (Pepp et al., 2019).

One of the major sources for fake news in the last four years in Iran, has been the pandemic COVID-19. During health crises, such as Coronavirus pandemic, the spread of fake news and rumors makes it hard to distinguish real news from wrong or fake ones. Moreover, despite dangers, some people avoided vaccination due to negative information they continuously got about vaccines. It is not clear to what extent people understood the dangers, and were influenced by the fake news. To elucidate the causes of this risky behavior, Torabi and Sotudeh (2022) examined the role of fake news detection and risk perception in vaccine acceptance rate among students of a public university in Iran. They used a survey, and combined combined electronic questionnaire, including vaccine acceptance questionnaire of Montagni et al., developed a fake news detection instrument, and the risk perception questionnaire of Champion. 382 students from Shiraz University volunteered to answer the questionnaire. Torabi & Sotudeh found that 72.0% of students were vaccine acceptant, and 62.8% had a moderate risk perception regarding COVID-19. Researchers found that participants with higher fake news detection scores were 0.8 times less likely to be categorized in the vaccine hesitant group, compared to the vaccine acceptant ones. They concluded that acceptance of fake news about COVID-19 vaccine could reduce the rate of vaccine acceptance. They linked their finding with the key role of fake news detection literacy in controlling the behavior of individuals, and thus the safety of society (Torabi & Sotudeh, 2022).

Given that governments and other national and international entities are unable to control the distribution of news and stop the spread of fake news from going viral (Sabbar & Matheson, 2019), it can be argued that increased media literacy among the general public is the only hope for society to have some form of defense against false information. However, research has revealed that a significant portion of university students, who are expected to be among the most informed members of society, tend to believe the information they come across on social media without applying sufficient media literacy skills (Sabbar et al., 2021).

One issue regarding fake news about COVID-19 has been the elevated use of social media during the pandemic. we have known since ancient

times that rumor is more effective than the truth. The book *Fama, la historia del rumor* by the German writer Hans-Joachim Neubauer, the role and power of rumor throughout history explains how rumors can spread more correctly. It would seem that a technological and scientific society is immune from rumor, but Neubauer warns that wrong information has found shelter in new forms of communication. These tools facilitate its dissemination, understanding it as a voice as relevant as it is impossible to corroborate which disseminates the content rapidly and autonomously (Elías, 2019). This issue of virality of fake news about the pandemic in Iran has been picked up by many scholars.

Parvizmosaed et al. (2022) concentrated on “infodemic” during the pandemic in Iran. They collected and released a labeled dataset of 7,000 social media posts in Farsi. Covid 19 fake news had been detected in other languages such as Arabic, English, Chinese, and Hindi previously and Parvizmosaed and his colleagues wanted to execute a multi-label task (actual vs. fictitious) on the labeled dataset and compare it to six machine learning baselines: Logistic Regression, Support Vector Machine, K-Nearest Neighbors, Decision Tree, Naive Bayes, x, and Random Forest. On the test set, they claimed they had acquired an 89 percent accuracy rate (Parvizmosaed et al., 2022).

As we mentioned earlier, fake news on pandemic in Iran has its own peculiarities. One of these issues is fake news about using alcoholic drinks as cure to COVID-19 or a way to avoid it. The Iranian government and the formal media largely failed to provide reliable information and public education at the beginning of COVID-19. Fake news about the efficacy of various substances for treating or preventing COVID-19 rapidly spread on social media. Recommendations were made on the use of vitamins, traditional medicines, trace elements, spices, herbal or animal products, opium, and alcohol for controlling or preventing the disease. It was even recommended that gargling or drinking alcoholic beverages would disinfect the mouth or inside the body and kills the virus. These factors altogether led to numerous methanol poisoning deaths or life-long damages (Delirrad & Mohammadi, 2020). Iran is an Islamic country with a Shiite majority and a highly religious government in which there are severe punishments for drinking alcoholic beverages. Various processes of political, scientific, and cultural communication are systematically controlled by the peculiar imperatives of the officials. The precarious and distorted scientific communication coexists with beliefs and many religious interdictions in a context of widespread unawareness of basic biological concepts. Iranians, therefore, are not confident about the state media, particularly as they first brushed off the COVID-19 epidemic that

now dominated the country, while the government now insisted that the epidemic was under control (Vasconcellos-Silva & Castiel, 2020).

A story published in a tabloid about a British professor who claimed he could cure COVID-19 with whiskey and honey swept the Iranian social media rapidly. The imminence of the end of time spawned symbolic evils well known to historians of the Black Plague. The sleep of communicative reason instrumentalized by rumors of ethanol's purifying powers led thousands of people to take its toxic methyl byproduct, given the hazardous analogy with the antiseptic strength of ethyl alcohol, which is unavailable in an Islamic country 11. Since early March, when the COVID-19 became publicly visible, hundreds of people died because of methanol poisoning; a five-year-old boy who went blind after being forced to drink poisonous alcohol. The fake news on the purported remedy's effectiveness swept the country's social networks, and the fear of COVID-19, combined with mistrust and misinformation, led thousands of people to suffer methanol poisoning. The official narrative on alcohol-based disinfectants as a hygienic measure was mingled with the fake narrative on drinking methanol (with ethanol itself unavailable on the market in Iran). Iranian medical officials lamented that they were simultaneously fighting COVID-19 and alcohol poisoning (Vasconcellos-Silva, & Castiel, 2020). Fake news on usefulness of drinking any kind of alcohol on multiple social media channels, caused more than 3000 cases of poisoning and more than 700 deaths associated with drinking fake alcohol until mid 2020 (Salimi et al., 2020).

Now that COVID-19 is under control in Iran, Iranians are still victim to fake news on other fronts. Fake news has become a serious problem in marketing and consumers' behavior, which caused harm to brands and companies in Iran. In some cases, such fake news comes through a video or an image, which is being reproduced at a very large scale with the maximum speed conceivable. On the other hand, the general popularity of social networks and online information along with lack of knowledge on the part of users or consumers has made it a critical issue in Iran. Based upon a constructivist-interpretive and postmodern paradigm, Rahmanian (2021) carried out a qualitative and foundational study in which the data were collected through semi-structured field interviews. He found five kinds of fake news in the Iranian context. However, two of them (pseudoscience and fake political news) had already been identified in the political literature. Fake health news, fake denial news, and fake governmental news were presented for the first time in Rahmanian's work. These findings were based on the meaning map extracted from the interviewees and indicated how they relate to the minds of consumers. Rahmanian concluded that marketers should be aware that official

sources of information may be detrimental to their brands. moreover, any close relationship with the Iranian government could negatively affect brand images. Consumers prefer informal information channels and besides, lack of awareness and illusion of knowledge are two critical issues that marketers take into account in the interpretation of fake news on the Iranian social networks (Rahmanian, 2021).

The distribution of fake news in the Iranian society also has been studied in other realms. Bastani et al. (2021) examined the validity of the source in the most visited news channels on the messaging platform of Telegram. They employed a descriptive- analytical methodology and carried out a content analysis. Their statistical population included all news posts on Telegram news channels from October 2017 to March 2018. They collected 3160 news items from five news channels using stratified sampling method. Their findings showed that some unreliable news channels had a large number of visitors and a high forwarding rate. Also, they found that audience of Farsi news channels had visited and forwarded fake news frequently. Fake news, with an average rate of more than 97000 views and forwarding, had been circulating more than true news. The prevalence of low-validity of most visited news was seen as a sign of a chronic anomaly in the Iranian media ecology that will have social, economic, cultural and security effects on the society (Bastani et al., 2021).

Sport, and particularly soccer, is very popular in the Iranian society, and here we have the problem of fake news as well. The distribution of fake sport news sometimes please sport people, sport clubs and sport fans, but in generally, in a chaotic sphere that currently could be seen in the Iranian sport society, detecting and supporting the truth can be hard sometimes and this is not for the same people who sometimes benefit from fake news. Dastlan et al. (2022) has done research on this topic using a framework of computational linguistics. Their linguistic data were based on a corpus of sports news from ISNA website and Instagram platform. In the procedure, they downloaded sports news from ISNA's website and also, they collected news from Instagram. They employed N-gram method and long and short-term memory (LSTM) method to distinguish fake news from non-fake ones. The methodology Dastlan et al. (2022) proposed was implemented on four valid and existing datasets and has been compared with the previous six methods. They showed how fake news could spread more quickly and effectively in comparison with regular news (Dastlan et al., 2022).

Most studies on fake news in Iran show that the lack of means and knowledge to distinguish between fake and true news play a major role in making fake news effective. Esmaeili et al. (2019) used a structural

equation model to examine the relationship between information literacy and the ability of users of public libraries in Kermanshah to detect fake news based on IFLA infographic components. They used a descriptive-correlation methodology. Their statistical population included 22787 members of public libraries in the city of Kermanshah. 377 people were selected using cluster sampling and they filled up a questionnaire that was designed to detect fake news based on eight components of IFLA infographic and the Qassemi information literacy standard questionnaire. They found that the level of information literacy and the ability to detect fake news among users was slightly higher than the average. Their findings showed that there was a relationship between information literacy and the ability to detect fake news (Esmaeili et al., 2019).

Dehghan and Glazunova (2021) used a mixed-methods approach grounded in social network analysis and discourse theory to study the strategic use of 'fake news' discourses in non-democratic contexts. In contexts like Russia and Iran, where the opposition generally does not have unrestricted access to the political public sphere, social media platforms play an important role to influence discourses. Given the prevalence of fake news discourses, previous studies have already focused extensively on the political elite and their use of this discourse within Western or Anglo-American cultures, and on the typologies of fake news. Their findings tried to fill this research gap and suggested that ordinary users in non-Western and non-democratic settings can less frequently differentiate between fake news types. Rather, they employ the discourse as a means to strategically delegitimize and discredit their opponents (Dehghan & Glazunova, 2021). This is in accordance with other findings about necessities of living in the Iranian -and generally in a Middle Eastern- life context (see for example Shahghasemi & Prosser, 2019; Shahghasemi, 2020).

Nazari et al. (2022) tried to understand young Iranian adults' attitudes towards news and news resources they consume, and how they encounter the fake news phenomenon. With a qualitative approach, they designed and carried out semi-structured interviews with 41 young adults (aged 20-30) in Tehran. Their findings revealed that about half of their participants favored social media, and a smaller group used traditional media and only a few declared that traditional and modern media should be used together. News quality was seen to be lower on social media than in traditional news sources. Moreover, young adults usually followed the news related to the issues which had impact on their daily life, and they typically tended to share news more frequently. To determine if a news is fake news, they checked several media to compare the information; and profit-seeking and attracting audiences' attention with all means available

were seen as the most important reasons for determining that a news is fake news (Nazari et al., 2022).

A review on the studies that explored fake news in Iran clearly shows that interest groups of all kinds are very active in producing and disseminating fake news, while try hard to avoid being negatively affected by the corrupt media environment polluted by fake news. It seems while all active parties theoretically denigrate fake news, practically see that there might be benefits in them. This tell us that at least in the near future, fake news will be a big problem in Iran and will take even more complicated shapes to become more convincing and therefore, more destructive.

Discussion

Despite the fact that Iran is considered a developing country, and not still a developed one, one might think Iran is less likely to fall prey of complicated fake news industry that negatively affect prosperous and affluent countries. But the vice versa is correct.

Molina et al. (2021) believe that as fake news continues to plague today's information environment, attention has turned toward finding new ways to define and detect problematic online content. Therefore, they conducted an explication of "fake news" that, as a concept, decided to include more than simply false information, with partisans weaponizing it to cast aspersions on the facticity of claims made by those who are politically disturbed. They identified seven different types of online content that could be defined as "fake news" (false news, polarized content, satire, misreporting, commentary, persuasive information, and citizen journalism) and compare them with "real news" by introducing a taxonomy of operational indicators in four domains—message, source, structure, and network.

With this pessimistic view, we can see the sheer number of news in the Iranian information sphere that can be considered "fake", the country's news-sphere is literally "plagued" by fake news.

This phenomenon will have many consequences in different areas of social, political or cultural life, but as far as freedom of expression is concerned, its effect will be negative. Democracy is something that blossom and flourish in a safe and clear information sphere. Without enough clarity and certainty, societies will fall into chaos. And along with other byproducts of social networks like flaming (see for example Shahghasemi, 2021) and economic instability, the freedom of expression as is implemented currently on the Iranian social media, will not be that helpful.

References

- Bastani, G.; Nasrollhi, A. & Saadipour, E. (2021). "Low Credibility Media Syndrome; a Study on the Source Credibility in the Most Visited News Channels of Telegram". *Communication Research*, 28(105): 67-91.
- Cits (n.d). "A Brief History of Fake News". Retrieved January 23, 2023 from <https://www.cits.ucsb.edu/fake-news/brief-history>
- Cortada, J.W. & Aspray, W. (2019). *Fake news nation: the long history of lies and misinterpretations in America*. Rowman & Littlefield.
- Dastlan, M.; Dehbozorgi, M.; Moridi, B. & Emami, M. (2022). "Detection of Fake Sport News Published in Instagram Social Network based on ISNA News Website: A Study on the Basis of Mining Algorithm in Persian Language". *Journal of Sociolinguistics*. 4(3): 91-104. magiran.com/p2394013.
- Dehghan, E. & Glazunova, S. (2021). "'Fake news' discourses: An exploration of Russian and Persian Tweets". *Journal of Language and Politics*. 20(5): 741-760.
- Delirrad, M. & Mohammadi, A.B. (2020). "New methanol poisoning outbreaks in Iran following COVID-19 pandemic". *Alcohol and Alcoholism*. 55(4): 347-348.
- Elías, C. (2019). *Science on the Ropes: Decline of Scientific Culture in the Era of Fake News*. Germany: Springer International Publishing.
- Esmaeili, A.; Rahimi, S. & Moradi, M. (2019). "The relationship between information literacy and the ability of library users to spot fake news based on the components of IFLA infographic". *Librarianship and Informaion Organization Studies*. 30(1): 7-26.
- Gelfert, A. (2018). "Fake news: A definition". *Informal logic*. 38(1): 84-117.
- Higdon, N. (2020). *The anatomy of fake news: A critical news literacy education*. University of California Press.
- Loewenstein A. (2016). *The blogging revolution*. Amazon Distribution.
- Molina, M.D.; Sundar, S.S.; Le, T. & Lee, D. (2021). "'Fake news' is not simply false information: A concept explication and taxonomy of online content". *American behavioral scientist*. 65(2): 180-212.
- Nazari, Z.; Oruji, M. & Jamali, H.R. (2022). "News Consumption and Behavior of Young Adults and the Issue of Fake News". *Journal of Information Science Theory and Practice*. 10(2): 1-16.
- Parvizimosaed, M.; Esnaashari, M.; Damia, A. & Bahmanyar, R. (2022). "Using Supervised Learning Models for Creating a New Fake News Analysis and Classification of a COVID-19 Dataset: A case study on Covid-19 in Iran". *8th International Conference on Web Research (ICWR)*. IEEE: 152-155.

- Pepp, J.; Michaelson, E. & Sterken, R.K. (2019). "What's new about fake news". *J. Ethics & Soc. Phil.* 16, 67.
- Rahmanian, E. (2021). "Typology of Fake Social Media News in the Context of Iran: An Ethnographic Approach". *Journal of Business Management.* 13(3): 814-844.
- Sabbar, S.; Abdollahinezhad, A.; Heidari, A. & Mohammadi, F. (2021). "Knowledge Management in the Age of Unreliable Messages. Do University Students Trust Online Messages? (A Survey from the Middle East)". *AD-Minister.* 39: 143-162. doi:<https://doi.org/10.17230/Ad-minister.39.7>.
- Sabbar, S. & Matheson, D. (2019). "Mass media vs. the mass of media: a study on the human nodes in a social network and their chosen messages". *Journal of Cyberspace Studies.* 3(1): 23-42. <https://doi.org/10.22059/jcss.2019.271467.1031>.
- Salimi, R.; Gomar, R. & Heshmati, B. (2020). "The COVID-19 outbreak in Iran". *Journal of Global Health.* 10(1).
- Samii, A. (2013). "The Internal Struggle over Iran's Future". In *Crises in the Contemporary Persian Gulf*. Routledge.
- Schell, B.H. (2014). *Internet censorship: a reference handbook*. ABC-CLIO.
- Shahghasemi, E. (2021). "Social media, flaming, and freedom of speech: An Iranian riddle". *International Paris Conference on Social Sciences-VI*. Paris, France.
- Shahghasemi, E. (2020). "Iranian Celebrities on the Internet". *Journal of Cyberspace Studies.* 4(1): 77-80. doi: 10.22059/jcss.2020.74782.
- Shahghasemi, E. & Prosser, M. (2019). "The Middle East: Social Media Revolution in Public and Private Communication". *International Conference on Future of Social Sciences and Humanities*, Warsaw.
- Thornton, B. (2000). "The moon hoax: Debates about ethics in 1835 New York newspapers". *Journal of Mass Media Ethics.* 15(2): 89-100.
- Tomasello, M. (2010). *Origins of human communication*. MIT press.
- Torabi, M. & Sotudeh, H. (2022). "The Role of Risk Perception and Ability to Detect Fake News in Acceptance of COVID-19 Vaccine among Students of Shiraz University, Iran". *Health Information Management.* 18(6): 265-271.
- Vasconcellos-Silva, P.R. & Castiel, L.D. (2020). "COVID-19, fake news, and the sleep of communicative reason producing monsters: the narrative of risks and the risks of narratives". *Cadernos de Saúde Pública.* 36.
- Wiseman G. (2020). *Isolate or engage: adversarial states us foreign policy and public diplomacy*. Stanford University Press. <https://doi.org/10.1515/9780804795555>.